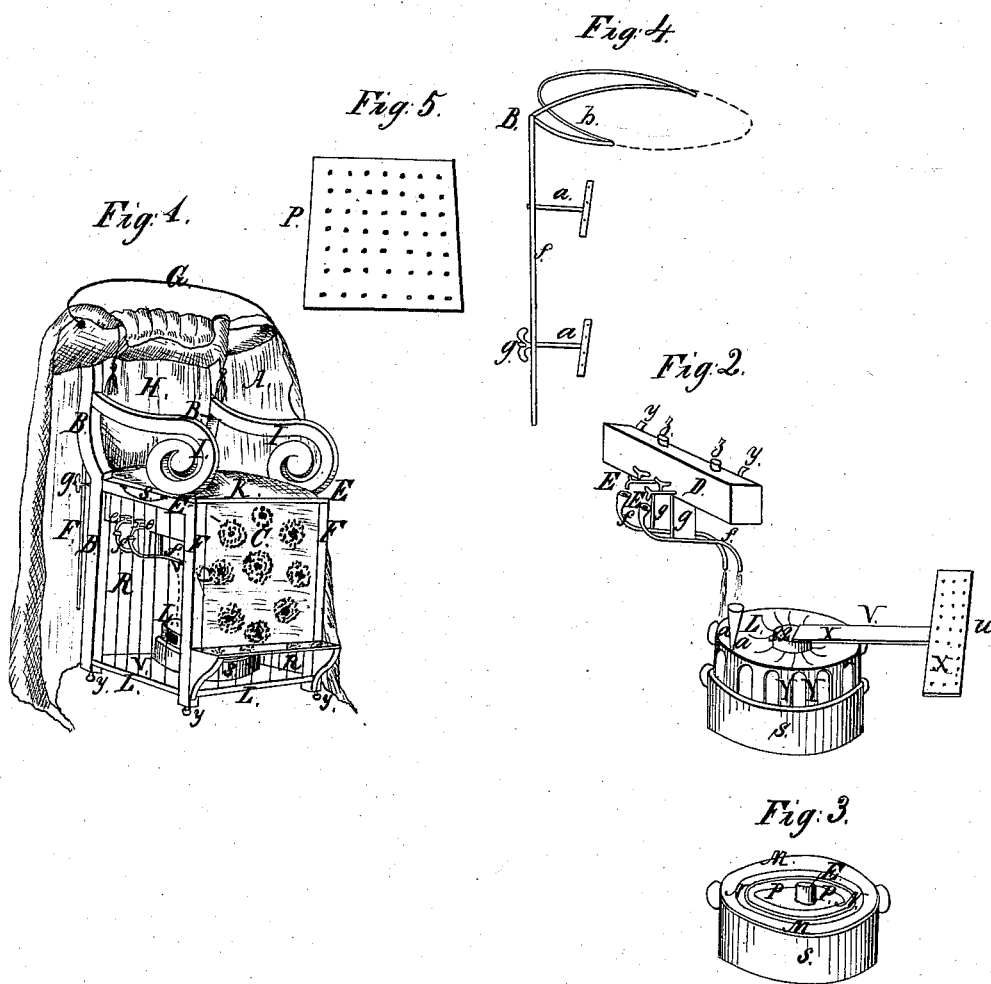


*Hicks & Miner,*  
*Vapor Bath,*  
*No. 2,775, Patented Sept. 17, 1842.*



# UNITED STATES PATENT OFFICE.

LUCIEN E. HICKS AND THOMAS MINER, OF MIDDLETOWN, CONNECTICUT.

## MEDICATED VAPOR-BATH.

Specification of Letters Patent No. 2,775, dated September 17, 1842.

*To all whom it may concern:*

Be it known that we, LUCIEN E. HICKS and THOMAS MINER, of Middletown, in the county of Middlesex and State of Connecticut, have jointly invented a new and Improved Portable Bath, called "Hick's Portable Medicated Vapor-Bath;" and we do hereby declare that the following is a full and exact description thereof.

The nature of our invention consists in constructing a portable bath, for the purpose of creating and applying to any part of, or to the whole surface of the body, the vapor, made from the articles and in the manner hereafter mentioned.

The heat by which the vapor is made is caused by burning alcohol or spirits of wine or other inflammable liquid, in a vessel or dish so constructed as to govern the blaze by means of stop cocks and tubes, without a wick. The spirits of wine may be used either alone or mixed or combined with any of the said articles, viz: Chlorin ether, chlorid of lime, chlorid of soda, or chlorin in any form; also sulfuret of soda, sulfuret of potash, sulfuret of iodine or sulfur in any of its combinations; also the essential oils of vegetables, which mix with or impart their properties to alcohol; also those medicines which dissolve in water, or impart to it their properties at any temperature, which in this bath in either of the above solvents, can be converted into vapor and applied in that form, to the skin or body, for the relief or cure of disease, either of which may be used separately or united, so that one or more of these gases can be applied in the above mentioned form and manner, to the skin or body, as remedies in eruptive and other disordered or diseased conditions of the skin or body.

To enable others skilled in the art, to make and use our invention we proceed to describe its construction and operation.

The bath is constructed in a portable and convenient form, adapted to the purposes above set forth.

In the accompanying drawings we have shown our improved bath, of which—

Figure 1 is a perspective view of the whole. Figs. 2, 3 and 4 are sectional parts of the same.

We construct that part constituting the frame work of the chair of strong durable wood, B B the back legs and constituting a part of the back; F F, the front legs; I I,

the arms; E E, the rails; L L the girts or lower rails; V, the platform or floor; T, the step; K, the seat (upholstered); H, the back (upholstered). Thus B B, the back legs constituting a part of the back are four feet long symmetrically proportioned; F F, the front legs, two feet and two inches long and two inches square. The back and arms are made in the usual manner and in due proportion with the other parts; E E the upper rails are framed into the legs in the usual manner, and are of a length and size sufficient to admit a movable seat two feet in diameter, measured cornerwise; L L the lower rails, four in number, are placed about two inches from the bottom of the legs; V, the platform or floor, upon which are placed the vessels shown in Fig. 3 measures two feet and one inch cornerwise, and is secured by screws, to the lower rails L L; T the step attached to the front legs by brackets, eighteen inches below the seat, is ten inches wide, three fourths of an inch thick perforated with half inch holes one inch apart, to let the heat escape through it to the feet; K the seat is movable and upholstered. To the under side of this seat is a tin or metallic reflector P. Fig. 5 the same size of the seat, and attached by screws to its frame. This reflector is perforated with half inch holes, two inches apart and prevents any blaze from ascending, or exposure of a person in the bath to injury or the cushion of the seat to flame; at the same time admitting part of the heat and vapor to rise through its openings, and causing a portion of the same to be diverged to other parts of the bath.

On the left side of the chair (not shown in the figure) we have a framed door, for adjusting the fixtures on the platform. Into this frame are inserted iron rods, two inches apart, running perpendicularly. This door occupies the entire space between the legs from the rails E E to the platform V.

R, R, are small iron rods two inches apart, extending from the upper to the lower rails on three sides of the chair.

C is a carpet, extending from the seat to the step and covering the same, for the purpose of intercepting the heat.

Y Y are large casters.

S S are large handles for conveniently moving the bath.

B, Fig. 4, is an iron frame for supporting,

and on which is regulated the curtain A A, *f* being a straight perpendicular rod, three feet long, three fourths of an inch in diameter.

5 *a, a,* are reaches, the lower one seven inches and the upper one six inches long, three fourths of an inch in diameter, with an eye at the outer end through which the perpendicular rod moves freely; at the other  
10 end it has a flange, and is attached one to the center of the back rail, and the other to the middle of the back of the chair by screws.

*g, g,* is a thumb screw that works in the end of the lower reach, for securing the rod.

15 *b b* is a circular hoop for sustaining and adjusting the curtain. It is three feet in diameter, made of half inch round iron, with joints in the middle, by which it may  
20 be thrown into a semi-circle.

A A is a curtain made of india rubber or other cloth, impervious to vapor. It is two and one fourth yards long and four and a half yards wide, having a cord in the hem  
25 at the top, for the purpose of gathering it up. This curtain is attached to the hoop by means of small iron rings.

Fig. 2, D is a metallic fountain, to contain the liquid to be burned or evaporated, made  
30 of brass or copper having a partition running crosswise through the center, making two divisions, each of which will hold one quart. This fountain when in its place, is attached with metallic straps to the inside  
35 of the rail, on the right side of the chair.

*z z* are apertures for filling the fountain; *y y,* straps by which it is attached to the chair; E E, brass cocks, one inserted into  
40 each division near the bottom of the fountain, for drawing out the fluid and regulating its quantity.

*f f* are two metallic tubes made of copper or lead, and are attached to the under side of the fountain by means of metallic straps  
45 *g, g.* One of these tubes serves to carry simple water or medicated fluid to the vessel L, the other conducts spirits of wine or medicated inflammable liquid to the depression or groove N made in the disk M M in  
50 Fig. 3.

Fig. 3, S is a circular reservoir made of brass or copper twelve inches in diameter, three inches high and will hold four quarts of water.

55 M M is a thin cast iron vessel or dish firmly attached to and serving as a cover to the reservoir S. This vessel has two circular divisions. The outer one, for receiving and in which is burned spirits of wine  
60 or other inflammable liquids, the inner one, for receiving such medicines as require to be volatilized or sublimed by heat. They are shaped as follows. The outer one is a circular groove extending around the vessel  
65 like a ring, two inches from its outer edge;

the depth of this crease or ring is one and a half inches. The width at the top is two inches, running down to a point like the letter V shown at N N. This construction  
70 when immersed in cold water contained in the reservoir S in connection with the stop cocks and tubes above described, regulate the blaze of the burning fluid without the necessity of a wick; P, P, the inner division  
75 is in the shape of a bowl and extends from the inner edge of the crease N, N, to the aperture in the center of the vessel or dish. It is six inches wide at the top and one inch deep. In the center of this bowl or dish  
80 we have a small aperture E which rises one and a half inches for the purpose of filling and emptying the reservoir S, and this aperture has a metallic cap or stopper.

Fig. 2, L, is another thin cast iron vessel supported upon flat legs, three inches long,  
85 one inch wide and one inch apart, as shown, Y, Y. The vessel L is eleven inches in diameter at the top, two and a half inches deep, and is for containing simple or medicated water or other liquid, and serves as  
90 an evaporating pan by which its contents are converted into vapor. It will hold two quarts. It has an aperture in the center *g, g,* three inches in diameter which aids the combustion of the inflammable liquid in the  
95 crease or groove N N Fig. 3. This aperture concentrates the heat. This vessel has a small perpendicular stem or tube *d, d,* three inches long, three fourths of an inch in diameter, partly on one side, through which  
100 the inflammable liquid is conducted to the crease or groove N N Fig. 3.

X X is a flat sheet iron conductor, for the purpose of conveying warmth and vapor to the feet. The anterior part U Fig. 2 is  
105 fourteen inches by ten and one inch thick, perforated with small holes on the upper side to allow the heat and vapor to escape.

V is the posterior part, eleven inches long, and one inch thick, made in two parts one  
110 acting within the other, for varying its length, thereby regulating the heat which it conveys from the aperture in the dish L to the under side of the perforated step T to which it extends and is attached.  
115

In using the above described bath, it is necessary first to fill the reservoir S, Fig. 3, with cold water, which is intended to keep the cast iron cover M, M, from becoming  
120 heated during the burning of the inflammable liquid. If a chlorin bath is desired we mix an ounce of chlorid of lime or chlorid of soda with water about the thickness of cream. We put this into the groove or  
125 crease N N. We then draw from the fountain D by a cock E, alcohol or spirits of wine or other inflammable liquid which is thereto conducted by the tube *f*. Or with the spirits of wine in the fountain D we mix chlorin ether of the shops in the pro-  
130

portion of an ounce to the pint, and draw as aforesaid, and when ignited, chlorin ether in the form of vapor is produced.

When this vapor requires to be diluted or mixed with other vapor, we draw from the fountain D by the other cock, water or other liquid sufficient to answer this purpose, which falls into the vessel L and is there converted into vapor by the heat below it, and mixes with that which arises in the form of vapor made from chlorin. If sulfuret of soda, or potash, or sulfuret of iodine is used, we dissolve them in water in the fountain D division marked water, or in the vessel L Fig. 3, they may be dissolved in water and converted into vapor as above described. In using the essential oils we mix them with the alcohol in the proportion of an ounce to the pint, and they may be converted into vapor as aforesaid.

When this bath is prepared the person wishing to use it, in an undress sits in the chair. The hoop *b b* Fig. 4 is brought down, and the curtain *A A* is drawn and secured close around the neck, unless the person wishes to inhale the vapor. He should remain in the bath, from five to fifteen minutes, and the skin should be rubbed dry before coming out of it.

The advantage which this bath possesses over every other, is its portable construction, the certainty and the ease by which medicines or water may be converted into vapor, without the aid of flues, which are necessary in the other and usual method of creating

and applying vapor to the skin or body. Also it may be conveniently managed by the person in the bath, and the convenience by which it may be prepared for use, requiring only from five to fifteen minutes from the time of commencing to complete the process of bathing in ordinary cases.

What we claim as our invention and desire to secure by Letters Patent is—

The covered chair, constructed with a circular iron hoop, having attached to it joints for adjusting the curtain, and with iron rods inclosing the sides of the chair, there being a door on one side opening to the heating apparatus; also a perforated metallic plate P Fig. 5, beneath the seat, thereto attached for the purpose of admitting and for reflecting the product of the heating apparatus and likewise a conductor X to the feet in combination with the metallic fountain D and tubes F for distributing the fluids, with the heating and evaporating apparatus constructed with a reservoir S, for cold water, and a cover containing two divisions N and P one for burning alcohol and the other for containing materials to be volatilized or sublimed with an evaporating pan above these; the whole being constructed and operating as above described.

LUCIEN E. HICKS.  
THOMAS MINER.

Witnesses:

CHS. C. TYLER,  
WILLIAM L. STORRS.