# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN ELECTRO-VAPOR BATHS.

Specification forming part of Letters Patent No. 198,152, dated December 11, 1877; application filed August 24, 1877.

To all whom it may concern:

part of this specification, in which—

Fig. 4, an inside end view with the case in vertical section; Fig. 5, a vertical longitudinal section.

The object of my invention is to provide an improved electro-vapor bath, designed for the application of the electric current to the human system for the cure of diseases.

The improvements consist in the means for accommodating the patient, and applying the current either in reclining or sitting posture to the various parts of the body, as hereinaf- mounted upon a standard, c, which moves ter more fully described.

case or cabinet, which is provided with a hinged lid or cover, Y, which shuts in the top of the case, a door, X, through which the pa- is held to its adjustment by a spring, e, carrytient gains access to the interior, and a thermometer, N, for indicating the temperature | the spring into one of a series of recesses in within. In the upper portion of the case is | the standard'c of the seat. The said seat is arranged the reclining-bath, which is con- | detached from the cabinet and movable therestructed as follows: A head-support, B, is | in, as is also the foot-rest K. This latter confixed in cleats a a in the sides of the case, and | sists of a series of steps having metal conto the inner edges of the same are hooked the front ends of a wire hammock, I, the foot of which is attached to a supporting-bar, W. To the edges of the head-support B, and the sides of the case is also removably fitted a vertical board, F, which at its junction with the head-support is cut out, to admit the passage of the head and receive the neck of the patient lying upon the hammock.

The space above the patient's head is open for access of fresh air, but above his body the |g|h|ij|k|l, which operate in conjunction as case is closed by boards C and D, which rest | follows: Connection 6 and wire g transmit in slightly inclined position, with their front | the current to the hammock, and connection and higher ends upon the edge of the vertical | 5 and wire h conduct the current to an elecboard F, and with their rear ends upon a permanent shelf, A. Instead of having the patient recline upon the hammock with his head | the hammock or sitting upon the seat. Con-

upon the support B, he may occupy a sitting Be it known that I, Calvin S. Powers, of posture with his head projecting through an Fountain, in the county of Fillmore and State | opening closed by the hinged door G in the of Minnesota, have invented a new and Im- | top boards C D of the case. Each of these proved Electro-Vapor Bath; and I do hereby | several parts B F C D are removably held in declare that the following is a full, clear, and | place by hooks, or other suitable fastenings, exact description of the same, reference being | and when the hammock is not in use they are had to the accompanying drawing, forming | to be partially removed and partially changed in location to make room for the sitting-bath. Figure 1 is a side elevation from the front | In changing the reclining bath to a sittingor entering side; Fig. 2, a plan view with the bath the head-support B and board F are recover raised; Fig. 3, an outside end view; moved with cover C and D. B is then placed upon the upper cleats a' a', F and G dispensed with, and the cover C and D supported and arranged upon the permanent shelf A and edge of B, while the opening which was formerly closed by G is adapted to receive the head of the patient, as shown in dotted lines in Fig. 5.

The support for the patient in the sittingbath consists of a seat, J, wholly or partially covered with a sheet-metal electrode, b, and vertically in a hollow socket of a base, d. In the drawing, Z represents an inclosed | The seat is thus made vertically adjustable for different patients, (which is necessitated by reason of the fixed position of the head;) and ing a locking-bolt, f, which latter is forced by ducting-surfaces, the bottom step of which is formed into a receptacle for water or a medicated liquid, into which the feet may be placed. The foot-rest is graduated with steps to adapt it to the adjustment of the seat.

> In applying the current the battery (not shown) is placed upon the stationary shelf A, and is attached to such of the connections 1 23456 as may be necessary. These connections have attached, respectively, the wires trode, L, terminating in a sponge, with which the patient treats himself when lying upon

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nection 4 and wire i lead to the foot-rest K, i into a waste-room. It is also used for changand connection 3 and wire j lead to the electrode upon the seat J. Connection 2 and wire k, and connection 1 and wire l lead, respectively, to a special set of electrodes, m | mock, I would state that, although I have and n, either one of which may operate in shown and described it as made of wire, I do connection with the electrode on seat J, or any other electrode. These special electrodes of canvas or cloth will do. are in the nature of arms, terminating in | When I use a wire hammock, I paint the sponges, and rotated from the outside of the case by cranks m' n'. The upper one of these sponges applies, with a rotary motion, the current to the neck, shoulders, and upper portion of the back above the kidneys, while the at the feet or other suitable position. lower one treats the kidneys, the lower por- A modification which I sometimes make in tion of the back, and hips. Both these elec- | the head-support B is to cut the hole for the trodes are made vertically adjustable by their arrangement in a sliding bearing, P, which is | just enough to permit the neck to be inserted guided in keepers o, and is flanged upon the inside of the cabinet, so that in its adjustment the slot in the case is not uncovered, and the vapor is, consequently, not allowed to escape.

Instead of two of these revolving electrodes, one, by an increased adjustment, may be made

to perform the function of both.

O O are openings, closed by pivoted doors, through which the patient may insert his D, made removable, substantially as and for arms to be treated; and R is a removable the purpose described. door, through which the lamp may be inserted | 2. The foot-rest K, made in the form of which generates the steam. The upper portion of the door R, (designated by the letter Q,) is cut or sectioned in such a manner as to correspond to the seat and thighs, so as to receive the lower extremities when they are to be treated. M is an opening in the door X, closed by a pivoted cover, which opening is | purpose described. the patient's head may rest, or which may be placed about his neck and under his chin, described. when the patient is in sitting-bath, to prevent the vapor from escaping through the opening for the head. S represents a small pipe or tube, with stop-cock, which conducts the steam or medicated vapor outdoors or

ing the air in the bath and lowering the temperature.

With respect to the feature of the wire hamnot confine myself to the same, as one made

same, so as to render it a non-conductor, the current being directed through the body of the patient from an electrode in his or the practitioner's hand, to another electrode placed

head entirely in the same, opening at the edge laterally. This construction dispenses with the hinged cover G and the necessity of cutting out the covers C and D.

Having thus described my invention, what

I claim as new is—

1. The combination with the case or cabinet Z, having permanent shelf A, of the removable head-support B, hammock I, vertical board F, having door G, and the cover C and

steps, with conducting-surfaces, and having the lower step formed into a receptacle for

fluids, for the purpose described.

3. The revolving electrodes m and n, arranged in a sliding and flanged bearing, P, and combined with the slotted case Z, for the

designed to admit the hand of the physician | 4. The case Z, having door R, with section when treating the patient on the hammock or | Q, formed to fit the lower extremities, and seat. Tis a semicircular cushion, upon which | having also openings O O for the arms, provided with pivoted covers, for the purpose

CALVIN 8. POWERS.

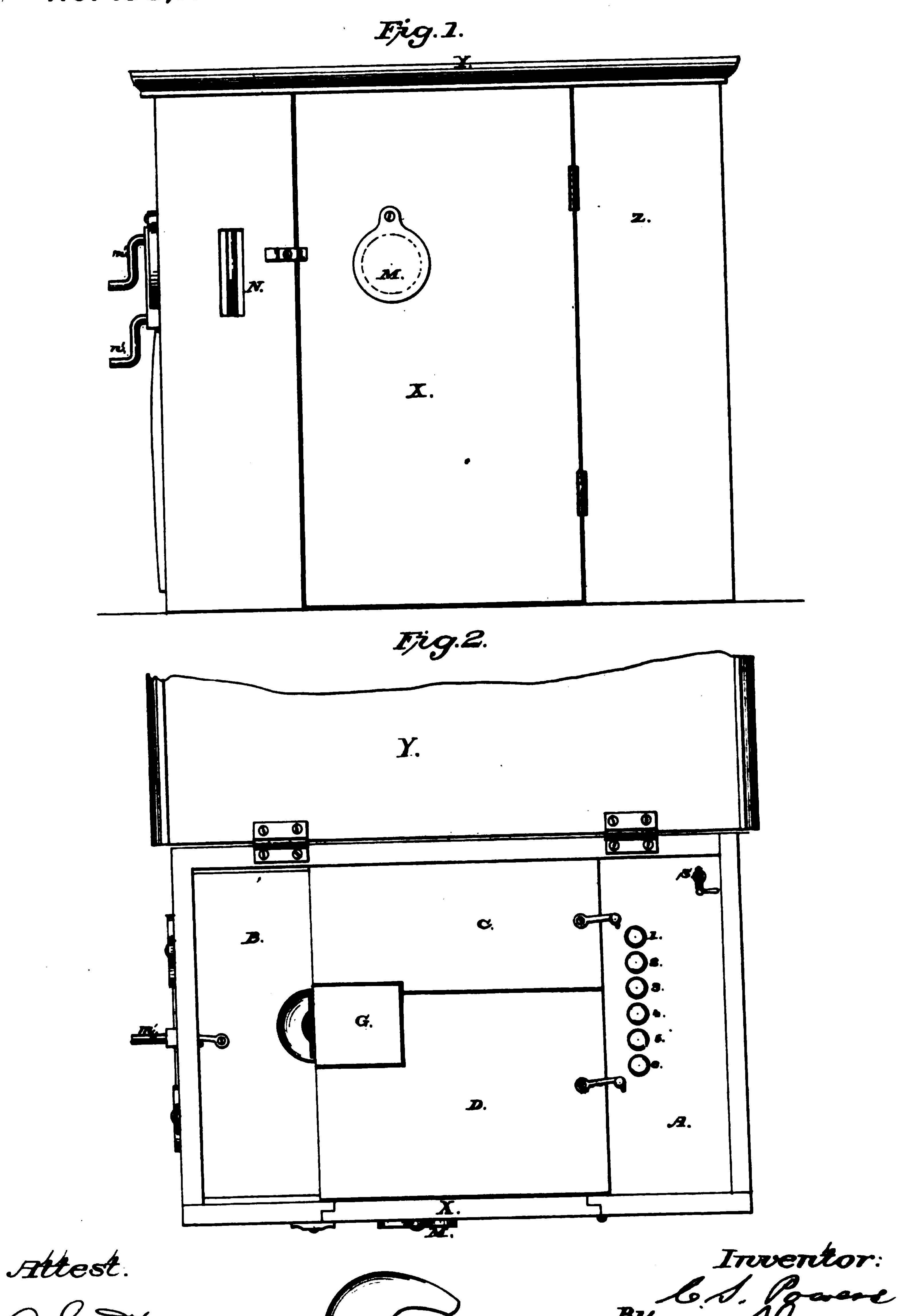
Witnesses:

A. W. POWERS, JOHN HALVERSON.

C. S. POWERS. Electro Vapor-Bath.

No. 198,152.

Patented Dec. 11, 1877.



M. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

#### SPECIFICATIONS AND DRAWINGS

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#### PATENTS

RELATING TO

### ELECTRICITY

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