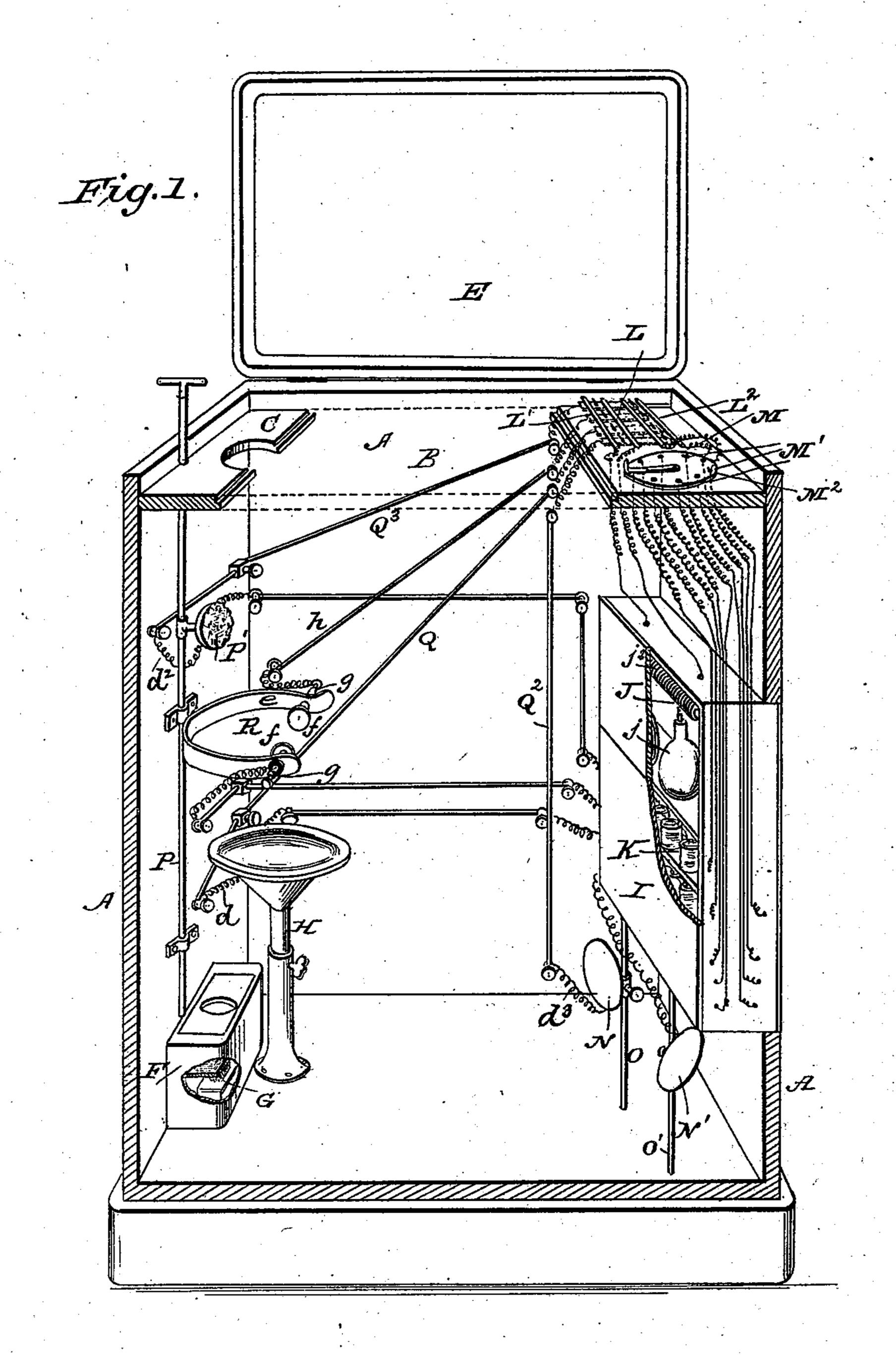
(No Model.)

2 Sheets—Sheet 1.

## R. F. JACKSON & W. R. POPE. ELECTRIC VAPOR BATH.

No. 380,261.

Patented Mar. 27, 1888.



Fred J. Dieterich CharRunght

INVENTOR:
W.R. Jackson,
BY Munifo.
ATTORNEYS.

(No Model.)

2 Sheets-Sheet 2.

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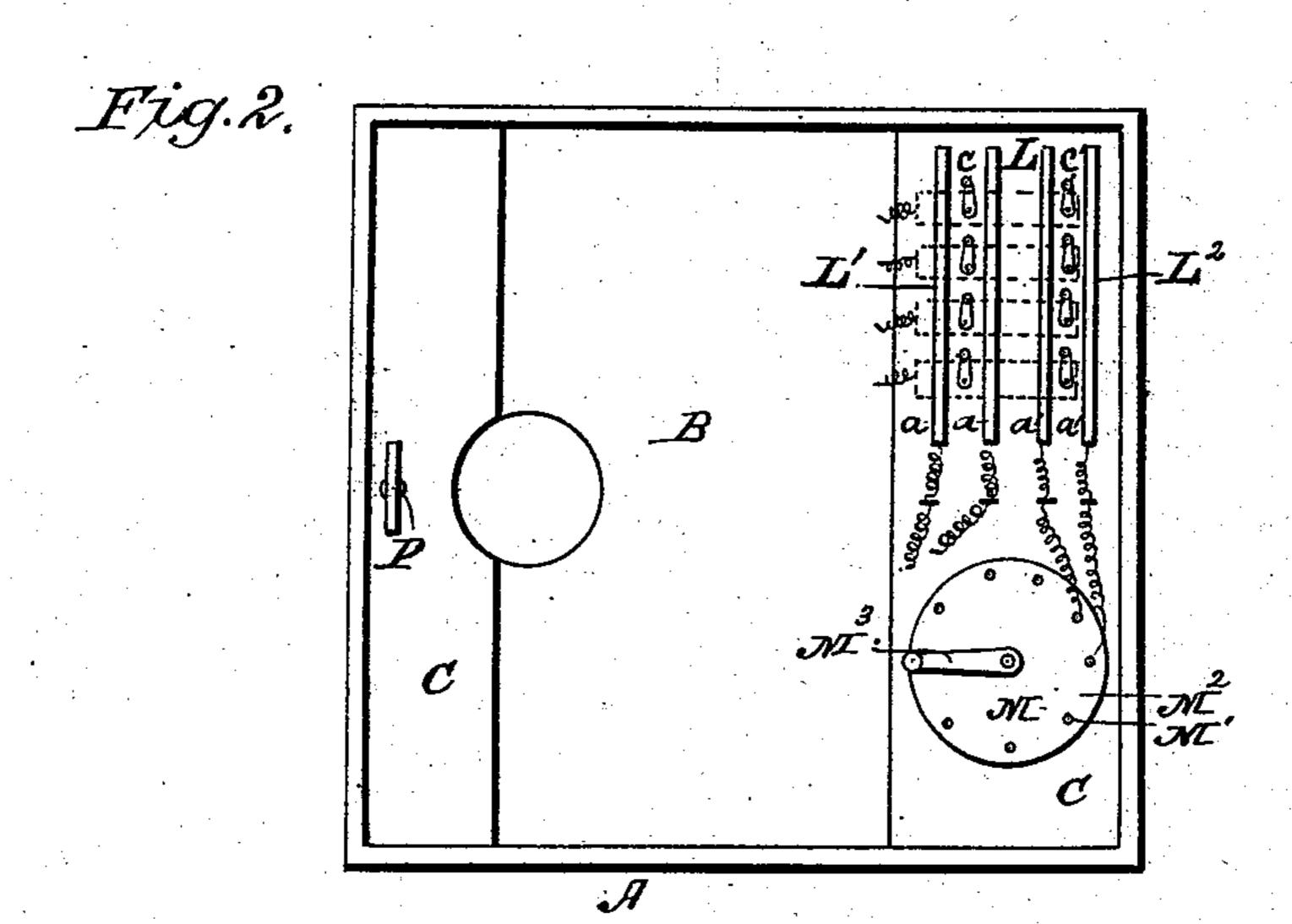


Fig. 3.

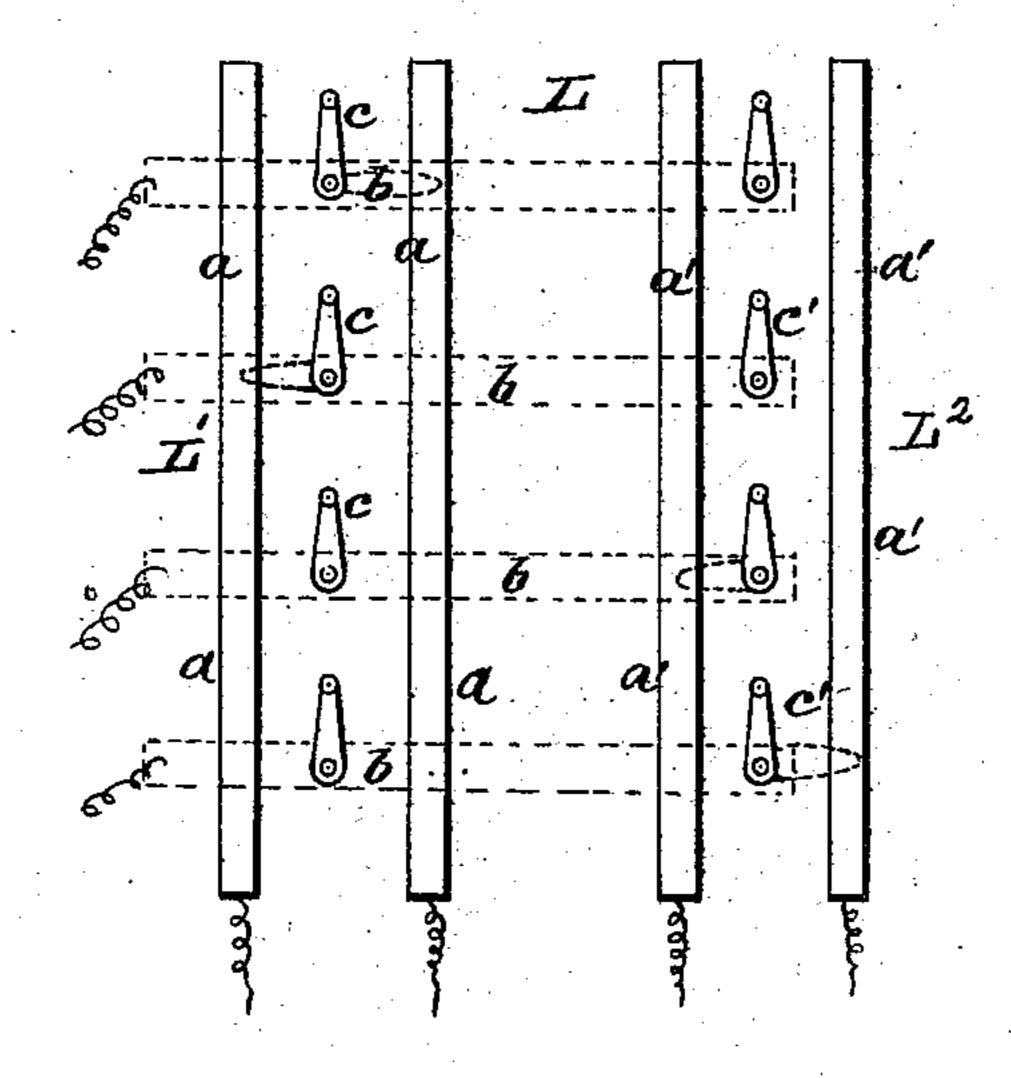
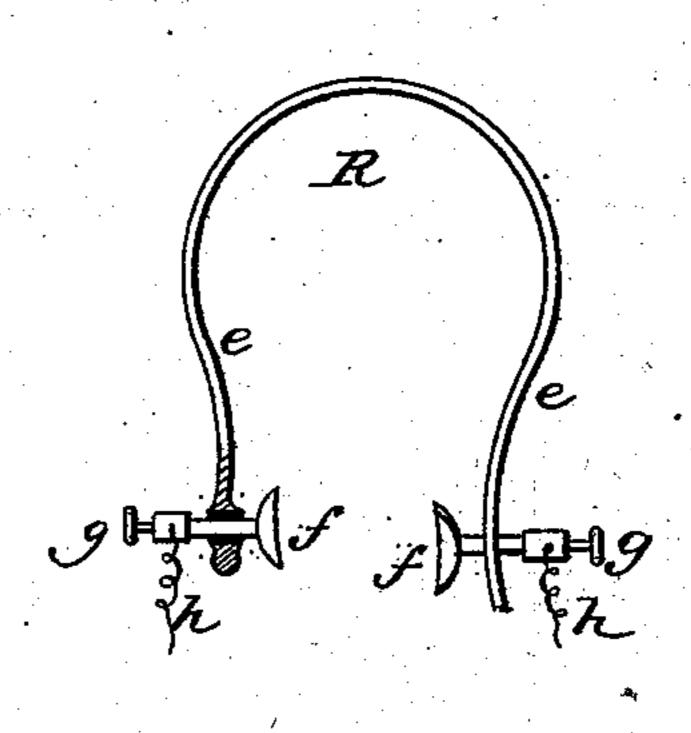


Fig.4.



Fred G. Dieterich Char RWight R. F. Jackson.
W. R. Jope
BY
Munn Le

## United States Patent Office.

ROBERT F. JACKSON AND WILLIAM R. POPE, OF BALTIMORE, MARYLAND.

## ELECTRIC VAPOR-BATH.

SPECIFICATION forming part of Letters Patent No. 380,261, dated March 27, 1888.

Application filed October 13, 1887. Serial No. 252,276. (No model.)

To all whom it may concern:

Be it known that we, Robert F. Jackson and William R. Pope, of Baltimore city, in the State of Maryland, have invented a new and useful Improvement in Electric Vapor-Baths, of which the following is a specification.

The object of the present invention is to provide an improved electric vapor-bath in which the electric current from either a Far10 adic coil or from a galvanic battery, or both, can be applied to the human system for the treatment of diseases.

The invention consists in the construction and combination of parts, as hereinafter fully described, and pointed out in the claims.

Figure 1 is a perspective view, with the front removed and partly in section, of our improvement. Fig. 2 is a plan view of the same. Fig. 3 is a plan view of the switch, partly 20 broken away. Fig. 4 is a plan view of an electrode for clamping on the body.

Referring to the drawings, A represents a cabinet or closet for the reception of the patient, and provided with a front door (not shown) and a removable top board, B, having a semicircular recess in its edge, which, in connection with a similar recess in the permanent top board, C, forms an opening for the reception of the neck of the patient.

cabinet when not in use. The interior of the cabinet is to be provided, as usual, with a lining of suitable composition or substance, so as to render the same vapor and air proof. In the bottom of the cabinet is arranged the furnace F, having a top opening for the reception of the vessel G, for containing a medicated liquid for vaporization.

Immediately above the furnace is arranged the seat or stool H. The seat proper is dished or made concave, and is secured to a shank projecting downward and adjustably secured in a tubular base by a set-screw. The seat proper is insulated from the shank by means of hard rubber or other insulating material, and is dished or made concave, so that it may contain a liquid for the treatment of piles.

I is a closet projecting into the cabinet A and closed by a door, which is flush with the 50 side of the cabinet. The closet is divided into two compartments, and in the upper compart-

ment is placed the Faradic apparatus J, consisting of the battery j and the coil  $j^2$ , and in the lower one a series of galvanic batteries, K. The Faradaic apparatus J is connected to the 55 part L' of the switch L, and the galvanic batteries K are each connected to one of the projections M' of the switch M, which is connected to the part L<sup>2</sup> of the switch L. The switch L is composed of the two series of parallel bars a 60 a', the cross-bars b, insulated from the bars a a', and the switch-levers c c', pivoted to the bars b and adapted to be turned to rest upon the bars a a', respectively. The switch M is composed of the board M2, having projections M', 65 and the switch lever M<sup>3</sup>. On the inside of the cabinet A, next to the closet I, are arranged the foot-rests N N'. The foot-rests N N' are each adjustably secured to the supporting-rods O O' by set-screws, so that they can be independ- 70 ently adjusted as may be desired. The supporting-rods O O' are secured to the closet I and to the bottom of the cabinet.

On the side of the cabinet back of the seat H is arranged the sliding rod P, carrying an 75 electrode, P', for treating the back of the patient. The rod P slides in bearings on the inside of the cabinet, and its upper end is bent outward and passed through an opening in the cabinet, so that the said rod can be conveniently operated from the outside.

Conducting-wires Q  $Q^2$   $Q^3$  are arranged on the inside of the cabinet, and are connected at one end to the plates b of the switch L, and have their other ends connected by the wires  $85 d d^2 d^3$  to the seat H, the electrode P', and the foot-rest N, respectively.

R is a body-electrode, consisting of an approximately **U**-shaped spring, e, carrying electrodes proper, f, and binding-posts g on its 90 ends. One of the arms carrying the electrode and binding-post is shown as being provided with insulated material in the aperture through which the shank of the electrode passes. The electrode R, when in use, is clamped upon the 95 body of the patient by the elasticity of the spring, and is connected to one of the bars b of the switch L by the wire h. The electrodes f and P' may be of any improved construction.

By adjusting the switch-lever M³ of the roo switch M the strength of the current from the galvanic batteries can be regulated.

The operation is as follows: If a current is to be sent from the galvanic battery through a patient seated on the seat H, with his feet on the foot-rests N N', two of the switch-levers c'5 will be turned in opposite directions, so as to rest upon the bars a', as shown in dotted lines, Fig. 3, when the current will pass from the battery through the switches ML, through the wire Q to the seat H, through the patient to the to foot-rests, from the foot-rests through the wire Q³ to the switch L, to the switch M, and back to the battery. Now, if it is desired to send a current from the Faradic coil at the same time through the patient being treated, two of 15 the switch levers c will be turned in opposite directions, so as to rest upon the bars a, as shown in dotted lines in Fig. 3, when the current will pass from the Faradic coil to the switch L, through the wire Q3 to electrode P'. 20 through the patient to the body-electrode R. through the wire h to the switch L, and back again to the coil. While we have described the two currents when employed at the same time as passing through different electrodes 25 to the patient, yet it is evident that they

rent as passing through the patient by means of the seat and foot electrodes and the Far30 adic current by means of the back and body electrode, yet either current can be sent through the patient by means of any two of the electrodes. It will thus be seen that by operating the switch-lever c c' of the switch L a current from either the Faradic coil or

may be sent through the same electrode; and

while we have only described the galvanic cur-

from the galvanic battery, or from both, may be applied to the patient being treated, as may be desired.

It will also be seen that by our construction we produce a cheap and compact apparatus. Having thus described our invention, what

we claim, and desire to secure by Letters Patent, is—

1. In an electric vapor-bath, the combination, with a Faradic coil and a galvanic battery or batteries, of a switch or switches for conveying a current from either or both to the patient being treated, substantially as herein shown and described.

2. In an electric vapor-bath, the combination, with a Faradic coil and a galvanic battery or batteries, of the switch L, connected to the Faradic coil, and the switch M, connected with the galvanic battery or batteries and to the switch L, substantially as herein shown 55 and described.

3. In a vapor electric bath, the combination, with a cabinet, A, of the closet I, projecting into the cabinet, divided into two compartments, and provided with a door, substantially 60 as shown and described.

4. In an electric vapor-bath, the combination, with the cabinet A, provided with the inwardly-projecting closet I, of the rods O O', secured to the closet and to the bottom of the 65 cabinet, and the foot-rests N N', adjustably secured to the said rods, substantially as herein shown and described.

5. In an electric vapor-bath, the seat or stool H, having its upper surface dished or made 70 concave, substantially as herein shown and described.

6. A body-electrode consisting of an approximately U-shaped spring carrying an electrode and a binding-post at each end, substantially as herein shown and described.

ROBERT F. JACKSON. WILLIAM R. POPE.

Witnesses:

J. FRANK ELINE, SAML. H. JACKSON.