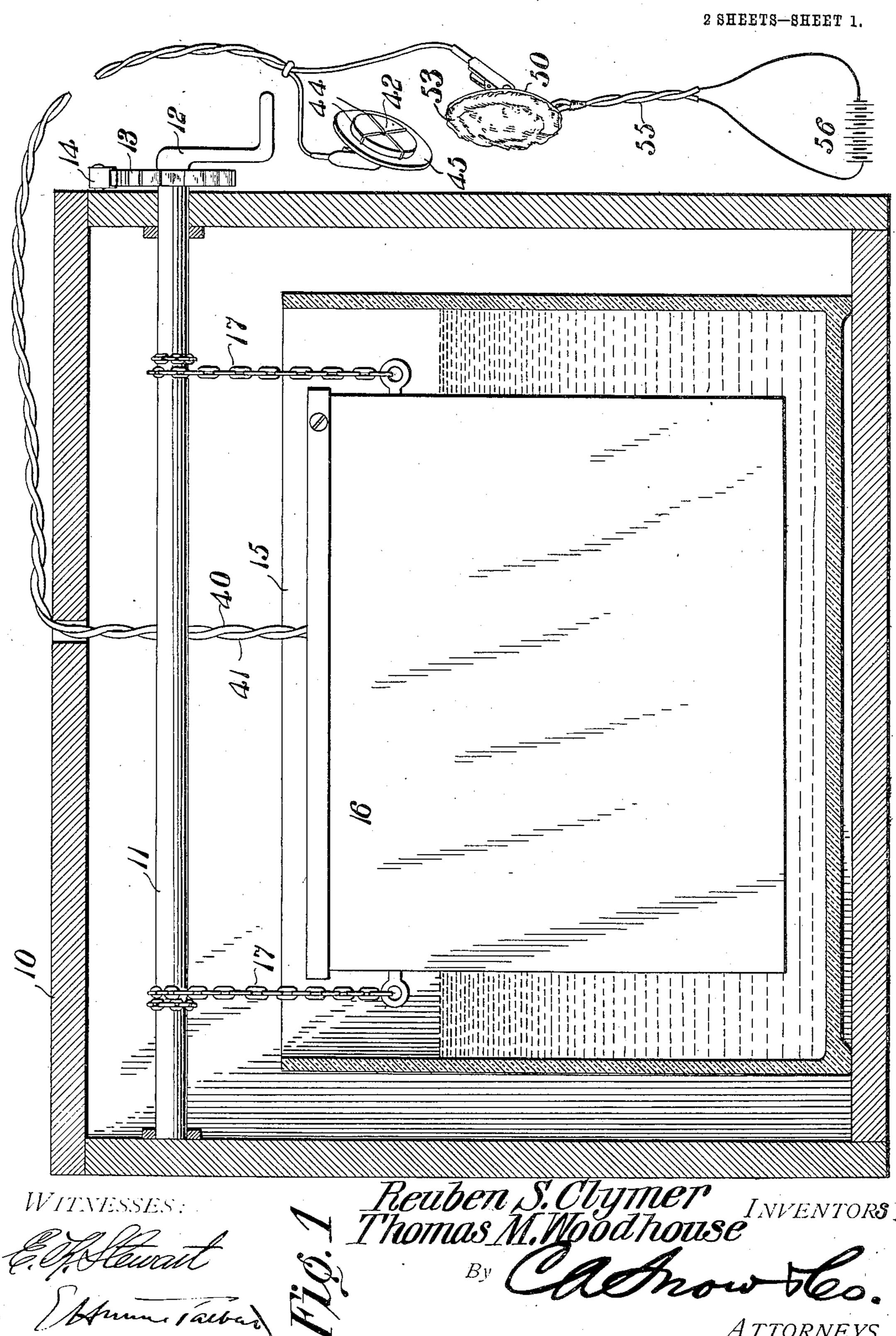
No. 865,330.

PATENTED SEPT. 3, 1907.

R. S. CLYMER & T. M. WOODHOUSE.

BATTERY.

APPLICATION FILED NOV. 7, 1906.

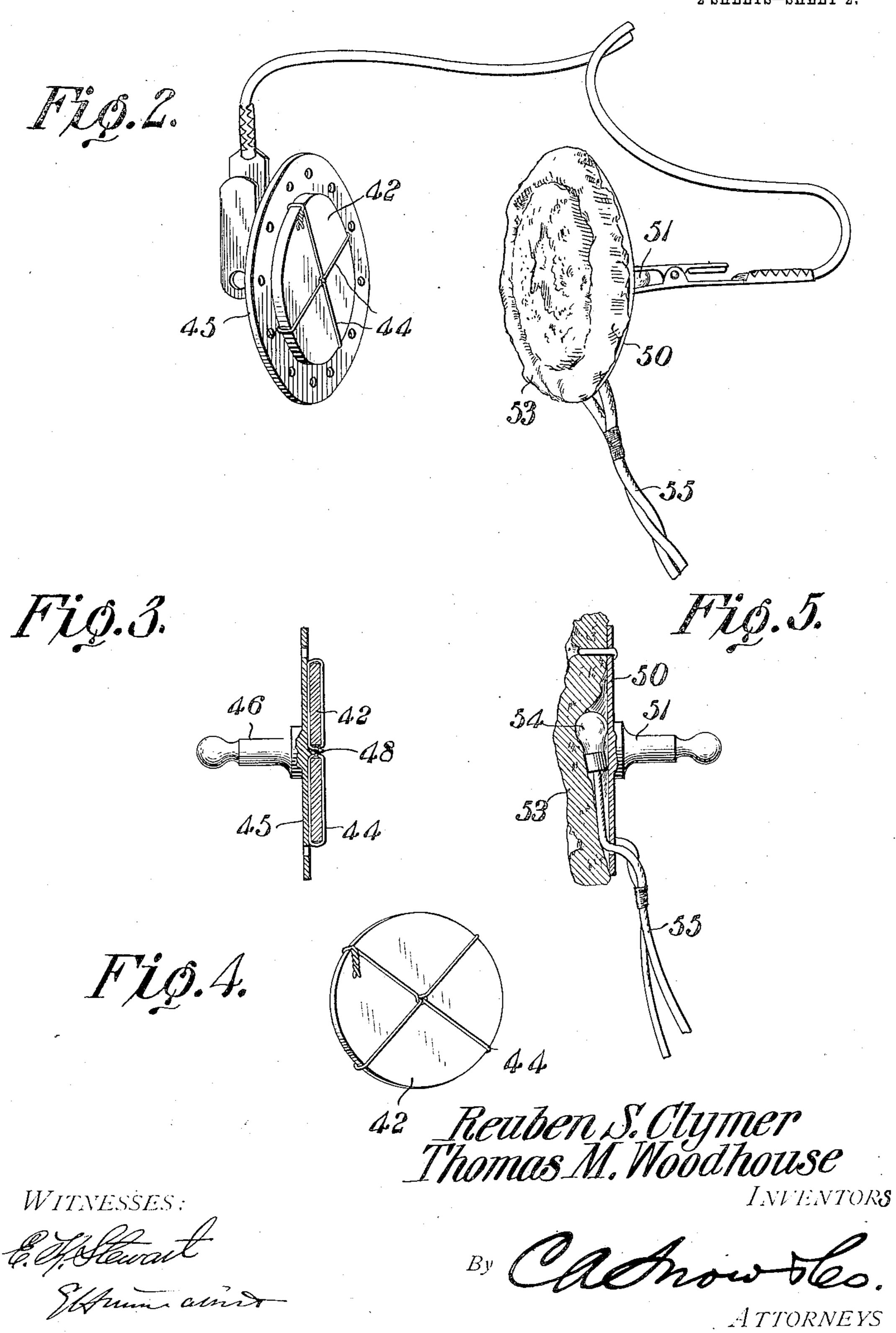


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UNITED STATES PATENT OFFICE.

REUBEN S. CLYMER AND THOMAS M. WOODHOUSE, OF ALLENTOWN, PENNSYLVANIA; SAID WOODHOUSE ASSIGNOR TO SAID CLYMER.

BATTERY.

No. 865,330.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed November 7, 1906. Serial No. 342,383.

To all whom it may concern:

Be it known that we, Reuben S. Clymer and Thomas M. Woodhouse, citizens of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented a new and useful Battery, of which the following is a specification.

This invention relates to apparatus for the treatment of various diseases and infirmities of the body, and has for its principal object to provide an apparatus whereby a suitable liquid may be driven directly through the skin to the afflicted or diseased part, thus dispensing with the more indirect and unsatisfactory treatment at present employed where all medicines are taken into the stomach and must undergo considerable chemical change before reaching the seat of trouble.

A further object of the invention is to provide means whereby an absorbent electrode may be saturated with the medicine to be applied and placed in close contact with the skin, while another moistened and heated electrode is applied at another point, and through this a current passes from a suitable battery or source of energy which will act to drive the medicine directly through the skin to the seat of pain.

A still further object of the invention is to provide an apparatus of this nature in which the positive electrode may be saturated with water, which water will be decomposed by the passage of the current liberating ozone which is driven through the skin into the blood of the patient.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

View illustrating the apparatus, the generator being shown in section. Fig. 2 is a perspective view of the two body electrodes; Fig. 3 is a cross section of the medicine-carrying electrode; Fig. 4 is a perspective view of the absorbent pad on the electrode shown in Fig. 4, removed from said electrode head; and Fig. 5 is a cross section of the other or heating electrode.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The generator is preferably located within a casing 10 formed of wood or other suitable material, in the upper portion of which is arranged a shaft 11 having at one end a crank 12 and a ratchet wheel 13, the latter being engaged by a pawl 14 for the purpose of holding

the shaft in adjusted position. Within this casing is a glass vessel 15 which is partly filled with a liquid at a low temperature, preferably ice water, and this vessel is arranged to receive a metallic casing 16 closed at the sides, ends and bottom, and open at the top. 60 This vessel is connected to the shaft by chains or cords 17, and the shaft may be turned for the purpose of winding or unwinding the chain or cord, and thus altering the distance between the casing 16 and the bottom of the glass vessel.

Two conducting wires 40 and 41 lead respectively from the generator to the electrodes to be applied to the body.

The positive or therapeutic electrode 42 is preferably in the form of a disk of an absorbent nature which 70 may be saturated with a medicine to be applied, or with water, and this disk has a central opening through which several binding wires 44 pass, these wires serving, also, as conductors and resting against a metallic disk 45 that carries a binding post 46 for connection 75 with the wire 40. At the central portion of the disk 45 is a pin 48 which enters an opening in the therapeutic electrode and serves to removably retain the absorbent disk in place. The negative or indifferent electrode is in the form of a plate 50 having a binding 80 post 51 for connection with the wire 41, and said disk is provided with a number of openings for the passage of securing threads by which a sponge or similar absorbent 53 is secured to the disk, this sponge being preferably saturated with water. Arranged within 85 and supported by the sponge is a pea lamp 54 that is connected by wires 55 to a small battery 56 or other source of energy, the object being to maintain the moistened electrode in a heated condition for the purpose of increasing the effective force of the battery. 90

We have found in the practical use of our invention that when the absorbent disk 42 is saturated with medicine and applied to the lower jaw under the chin and the other electrode is placed behind the ear and kept hot by the heat radiated from the electric lamp, 95 the characteristic taste of the various medicines is plainly distinguishable in the mouth, the circuit between the electrodes including the organs of taste. This demonstrates that there is a marked transfer of the medicine contained in the positive body electrode 100 to the interior of the body through the skin. We have also found that upon the application of the electrodes to the bodies of persons suffering from diseases, with the medicated electrode moistened with medicines known to be curative of the diseases, that we have 105 had rapid recoveries of the patients so treated. We have also placed the electrodes in contact with a patient's body with the electrode designed to receive medicine simply moistened with water, the other electrode being heated by the electric lamp, and 110 this we have found to produce marked curative effects which we attribute to the production of ozone at the positive electrode and its transfer through the skin to the circulation or to the nerves.

We claim:—

1. In apparatus of the class described, a source of energy and a pair of electrodes connected to the opposite poles thereof, the therapeutic electrodes being connected to the positive pole and being formed of a conducting plate, an 10 absorbent material secured thereto, and current conducting means between the plate and absorbent material and also on the active face of the latter; and the indifferent electrode being provided with heating means.

2. In an apparatus of the class described, a source of 15 energy; a therapeutic electrode formed of a conducting plate having a centrally-located projecting pin, a disk of absorbent material having a central opening for receiving the pin to removably secure the said disk to the conducting plate, and current conducting means between the plate and 20 the absorbent material and also on the active face of the lat-

ter; and an indifferent electrode having absorbent material secured theretor a resistance element embedded in said absorbent material away from the active face thereof and held to the electrode by said absorbent material, and a source of electrical energy connected to the resistance ele- 25 ment for raising the temperature thereof.

3. In an apparatus of the class described, an electrode comprising a metallic disk having a central projecting pin, a disk of absorbent material having a central opening into which the pin extends, and conducting wires passing 30 through the central opening and between the absorbent and metallic disks and also along the active face of the absorbent disk.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of 35 two witnesses.

REUBEN S. CLYMER. THOMAS M. WOODHOUSE.

Witnesses: CHARLES P. MILLER, MARY O'DONNELL.