

J. W. MOLIÈRE.
ELECTROTHERAPEUTICAL INSTRUMENT.
APPLICATION FILED JULY 16, 1906.

Fig. 1.

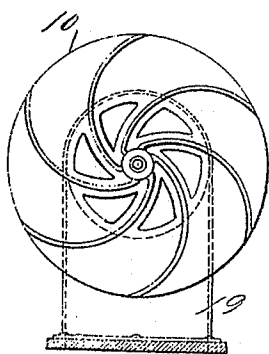
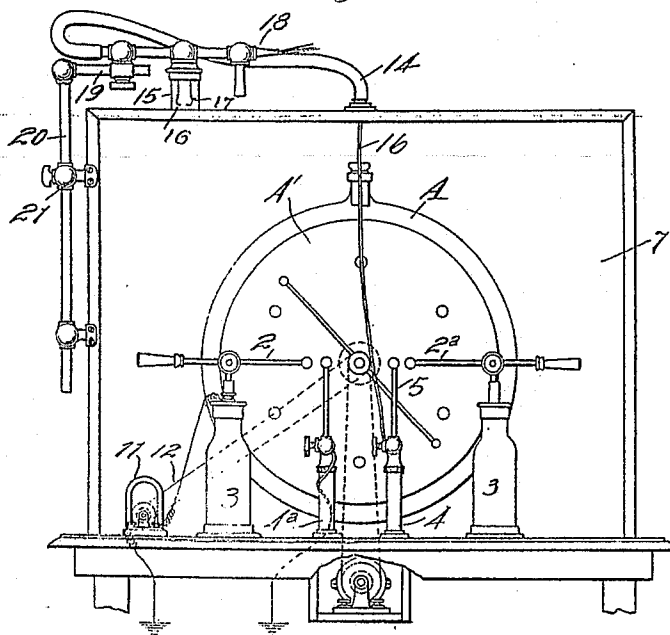


Fig. 3.

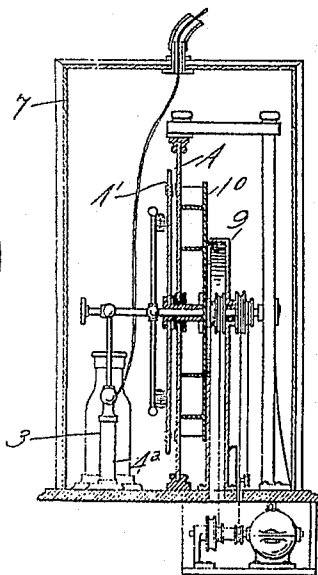


Fig. 2.

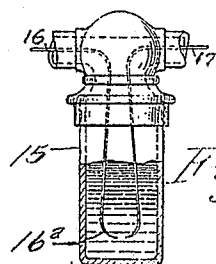


Fig. 4.

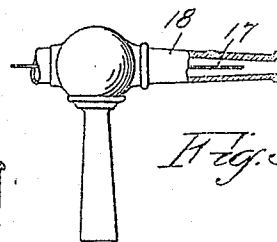


Fig. 5.

Witnesses:
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G. H. Jones

Inventor:
James W. Molliere
By Geo H. Strong
Att'y.

UNITED STATES PATENT OFFICE.

JAMES W. MOLIÈRE, OF OAKLAND, CALIFORNIA.

ELECTROTHERAPEUTICAL INSTRUMENT.

No. 852,133.

Specification of Letters Patent.

Patented April 30, 1907.

Application filed July 18, 1906. Serial No. 326,661.

To all whom it may concern:

Be it known that I, JAMES W. MOLIÈRE, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Electrotherapeutical Instruments, of which the following is a specification.

My invention relates to an apparatus designed for the treatment of diseases.

It consists in the combination of mechanism, and in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of my apparatus. Fig. 2 is a transverse vertical section in line of the shaft but showing the shaft and pulleys in elevation. Fig. 3 is a separate view of the air supply mechanism. Fig. 4 is a view of the water jar and transmitting device. Fig. 5 is a view of the discharge nozzle.

The object of my invention is to provide an apparatus for the production of ozone, and means for supplying it to patients. The apparatus which I employ for this purpose consists of a device for developing static electricity, and in conjunction therewith of certain attachments whereby air is submitted to the electrical action, and ozone produced.

A—A' are the generating plates of an apparatus for developing static electricity. 2—2^a are the brushes or collectors, 3 the Leyden jars or accumulators, and 4—4^a the dischargers, as ordinarily constructed, one of these dischargers having an insulated wire coil around it, and the end carried to a point where a suitable ground may be provided. 5 is a vertical rod extending upwardly from the post 4^a and connecting with the negative pole and supply brushes 2. The plate is revolved in a direction to convey the electricity to the collecting brushes 2^a at the opposite side of the plate. This apparatus is inclosed in an air-tight glass case 7 having inlet and outlet openings for a purpose to be hereafter described.

The inlet opening is preferably made in the base of the apparatus, and is covered and inclosed by a hood 9 through which the bearing-shaft of the electrical plate passes to its journal-boxes.

10 is a plate made of hard rubber or other non-conducting material, and fixed to the driving shaft concentric with the plate A, and upon the opposite side from the revolu-

ble plate A'. Within this disk or between it and the plate A, are fixed radial blades or buckets which are preferably curved in form as shown.

The central portion of the disk is opened to communicate with the hood 9, and when the apparatus is revolved the action of the arms or buckets 10 will produce a centrifugal action from the periphery of the wheel, producing a vacuum which is sufficient to draw the air into the hood 9, and into the space occupied by the buckets, from which the air is discharged into the interior of the inclosing case 7. The electricity generated by the revolving plates being discharged through the atmosphere within the case, will produce the well known effect of such electricity in ozonizing the contained air.

In conjunction with this apparatus I have shown a magnetic generator 11, of any suitable or well known construction, and by means of a belt 12 power is transmitted from a pulley upon the driving shaft so that an electro-magnetic current will be generated by this portion of the apparatus.

In the top of the case 7 is an opening having connected with it a flexible pipe 14, and this pipe transmits the ozonized air from the interior of the case to a jar 15 which contains water.

A conductor 16 passes from the discharger 4 into and through the pipe 14, and that end may be extended into the jar, dipping into the water thereof, as at 16^a. The end of this wire may be bent having a discharge point, and another wire 17 having a similar point is fixed in the jar with the point opposite to the point of 16^a so that an electrical current may be transmitted within the water through the jar, and thence through a discharge pipe and mouth-piece at 18. The wire 17 terminates a short distance from the mouth-piece, and the mouth-piece, which is of non-conducting material, may be used by a patient through which to inhale the ozone produced by the apparatus.

The end of the flexible pipe 14 may be supported by an arm or bar 19 connected with a turnable post 20, which is slidable in brackets 21 fixed to the case 7 so that the jar 15 may be either set upon the top of the case, or it may be removed and raised or lowered by means of the slidable rod 20 to any desired position with relation to the patient and apparatus.

The apparatus may be driven by any suit-

able or available motor, and resistance coils, or their equivalent, may be employed to regulate the speed of the apparatus.

If it is found desirable the relative speed of the plate A and the bucket-carrying plate 9 may be varied by using pulleys or driving mechanism of different diameters.

Having thus described my invention, what I claim and desire to secure by Letters Patent is—

1. An apparatus for the generation of electrical currents and the production of ozone, said apparatus including stationary and revoluble plates, electrical brushes and collectors, and an inclosing case therefor, a disk revoluble in unison with the generating disk and carrying radially disposed buckets, a hood having connection with the air outside of the case and open connection between the interior of the hood and the central portion of the buckets.

2. An apparatus for the generation of electrical currents and the production of ozone, said apparatus including an electrical machine inclosed in an air-tight insulated casing, an air-forcing device consisting of a disk revoluble in close proximity to the stationary plate of the electrical machine, said disk having substantially radial arms carried on its inner face and discharging outwardly, a hood having open communication with the outer air and with the central portion of the disk, a discharge passage and conductor connecting with the upper part of the case, and an inhaling tube connected therewith.

3. An apparatus for the production of electricity and ozone, said apparatus consisting of an electrical machine and a magnetic generator inclosed in an air-tight insulated casing, means by which power is transmitted to revolve the electrical plates and the magnetic

generator simultaneously, a revoluble disk carrying radially disposed buckets, and located in close proximity with the stationary plate of the electrical machine, connections between the central portion of the disk and the outer air whereby centrifugal action will deliver air into the machine to be acted upon by the electrical discharges, a flexible pipe connecting the upper part of the casing with a liquid-containing jar, an electrical conductor extending from the discharge post of the machine through the tube, and having a terminal within the liquid in the jar, a continuation of the pipe and a mouth-piece therefor, a second wire having a terminal within the jar and extending into the mouth-piece.

4. In an electrical and ozone producing apparatus, an electrical machine and magnetic generator inclosed in an air-tight insulated casing and connected to be revolved in unison, an air-forcing mechanism connected with and revoluble with the electrical plates, a discharge pipe and an electrical conductor extending there-through, a liquid containing jar in which the conductor is submerged, a second wire submerged within the jar, and a continuation of the pipe having a mouth-piece within which the second wire terminates, means for supporting and changing the position of the mouth-piece and charge, said means comprising a bracket, and a turnable and slidable rod adjustable on the containing case.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES W. MOLIERE.

Witnesses:

E. G. KNAPP,
C. H. HARVEY.