

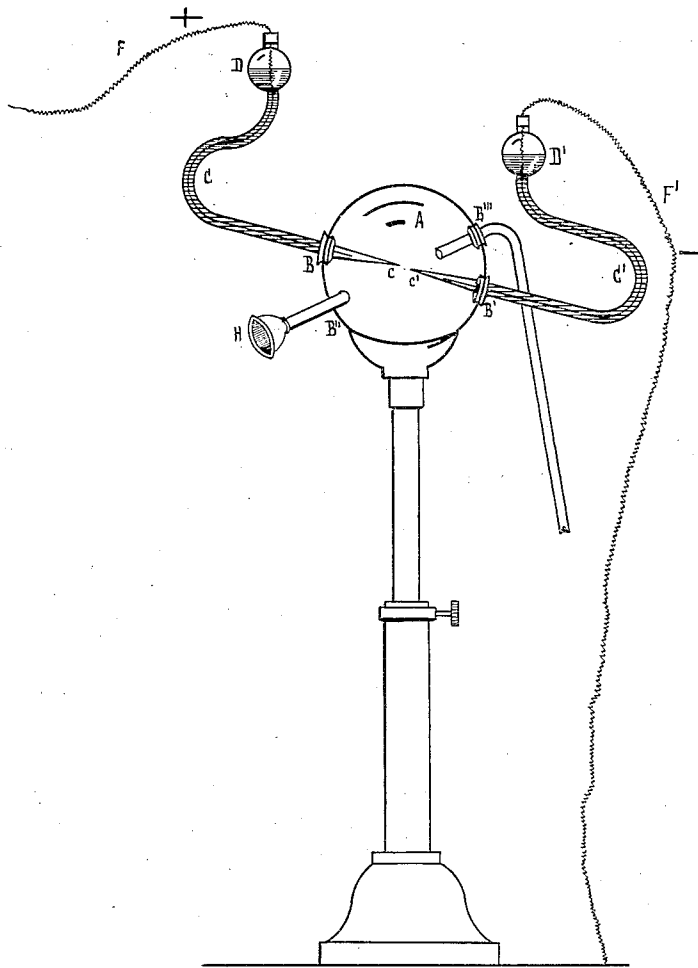
(No Model.)

H. A. B. H. DE VARS.

ELECTRIC SPRAY PRODUCING APPARATUS.

No. 398,327.

Patented Feb. 19, 1889.



WITNESSES

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UNITED STATES PATENT OFFICE.

HILARION ANTOINE BERNARD HUGUET DE VARS, OF PARIS, FRANCE.

ELECTRIC SPRAY-PRODUCING APPARATUS

SPECIFICATION forming part of Letters Patent No. 398,327, dated February 19, 1889.

Application filed November 30, 1888. Serial No. 292,181. (No model.)

To all whom it may concern:

Be it known that I, HILARION ANTOINE BERNARD HUGUET DE VARS, a citizen of France, and a resident of Paris, France, have invented certain improvements in Electric Spray-Producing Apparatus, of which the following is a specification.

The invention relates to an apparatus for producing spray by electricity.

In order to make the invention clearly understood, reference will now be made to the accompanying drawing, in which—

A represents a glass globe having four openings, B B' B'' B'''.

C C' are two glass tubes with reservoirs D D', the lower ends of which tubes taper off and form the capillary tubes c c'. These two tubes are curved substantially as shown, so that the reservoirs D D' stand upright, and said tubes fit into the globe A by means of india-rubber sockets A', which pass through openings B B' in the globe in such manner that their capillary ends are opposite one to the other and about half an inch or more apart inside the globe A. In each of these tubes there is a very fine silver wire, F F', which acts as a conductor for the electricity. These wires do not reach quite as far as the capillary parts of the tubes, as the latter might be obstructed thereby. The air is injected through the opening B''' by means of a ventilator. The other opening, B'', is provided with a funnel-shaped mouth-piece, H, for guiding the liquid after its vaporization by the electric current.

The apparatus is mounted on a support, in which it slides vertically to allow of its adjustment to the height required in order to be on a level with the respiratory passages of the patient.

The apparatus works in the following manner: The liquid to be vaporized is introduced into the tubes C C' and reservoirs D D'. The tube C is connected with the positive of an electric machine by means of the wire F, and the other tube, C', is connected with the ground by means of the wire F'. Then as soon as the electric machine is started the liquid contained in the two tubes C C' becomes charged with electricity, and as the electric circuit can only take place by the capillary points c c' the positive liquid is thrown upon the negative one, dividing the molecules of liquid and producing an extremely fine spray. The air which arrives inside the globe A by the opening B''' forces the spray through the opening B'', so that the person placed before such opening may breathe the spray as fast as it is produced.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a spray-producing apparatus, a globe, A, provided with openings B B', in which are placed two tubes, C C', (terminating in capillary tubes c c' and containing wires F F' for conducting electricity,) and with openings B'' B''', the one for receiving a ventilating-tube and the other a mouth-piece, the entire apparatus being fitted into a sliding support, substantially as above described, and represented in the accompanying drawing.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HILARION ANTOINE BERNARD HUGUET DE VARS.

Witnesses:

G. LOMBARD,
CH. BROWN.