To all whom it may concern:

Be it known that we, HUGH L. CAMPBELL and JAMES L. WATTS, citizens of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Electrical Vapor Apparatuses; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention is an improved electrical vapor apparatus for the production of a vapor to be inhaled and used for the treatment of pulmonary diseases, tuberculosis and diseases of a similar nature, and it consists in the construction, combination and arrangement of devices hereinafter described and claimed.

The accompanying drawing is a vertical sectional view of an electrical vapor apparatus embodying our improvements.

In a vapor producing tank 1 are located a pair of electrodes 2, 3, which are preferably made of steel. The electrode 2 is carried by a holder 4, which is adjustable in a stuffing-box 5 in the top of the tank. The electrode 3 is secured in a bracket-holder 6, which depends from the top of the tank. A reservoir 7 has its upper portion connected to the upper portion of the tank 1 by a pipe 8, which includes a coupling sleeve 9 and is provided with a valve 10. Said tank or reservoir 7 is provided with a discharge valve 11 to which is attached a flexible tube 12, which has a respirator 13 to cover the mouth and nose of the patient. In the reservoir 7 is an air pump 14, which may be of any suitable construction, and which is connected to the tank by a pipe 15, which includes a coupling sleeve 16 and a valve 17.

The operation of our invention is as follows: An electric current is passed through the electrodes to form an arc between them in the tank 1, and the pump 14 is operated to force air into said tank and cause it to become commingled with the vapors resulting from the decomposition of the electrodes. The commingled air and vapor are forced by the action of the pump from the tank 1 into the reservoir 7 and accumulated in the latter. The electric arc converts the air into ozone and this is impregnated with the vapors and gases resulting from the gradual decomposition of the electrodes, and is inhaled by the patient in the treatment of the diseases herefore mentioned.

Having thus described our invention, what we claim as new, and desire to secure by Letters-Patent, is,—

1. An electrical vapor apparatus comprising a vessel, means for creating an electric arc therein, a reservoir, a pump contained in the latter and operable for supplying air under compression to the vessel and to force air and vapor therefrom into the reservoir, and a discharge for the reservoir including the respirator.

2. The herein described electrical vapor apparatus comprising a vessel, means including metallic electrodes to create an electric arc therein, a respirator communicating with said vessel and having discharge means including the respirator, and a pump contained in the reservoir and connected with the vessel for forcing air into the vessel and from the latter to the reservoir.

In testimony whereof we have hereunto set our hand in presence of two subscribing witnesses.

HUGH L. CAMPBELL
JAMES L. WATTS.

Witnesses:

NOAH W. COOPER,
THOS. E. SHUTE.