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E. STEINBERG

LIGHT RADIATOR FOR MEDICAL PURPOSES

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Fig. 1.

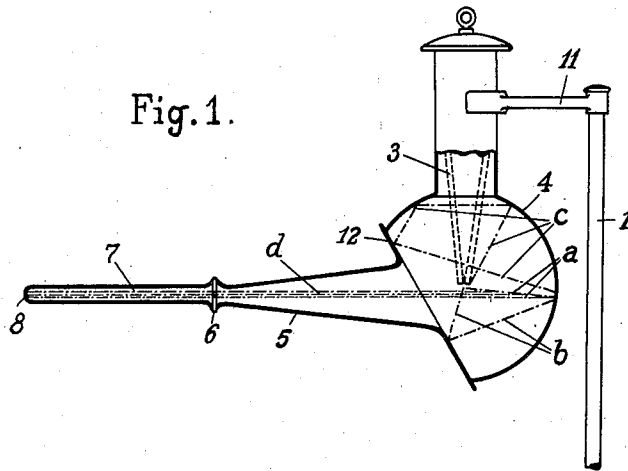
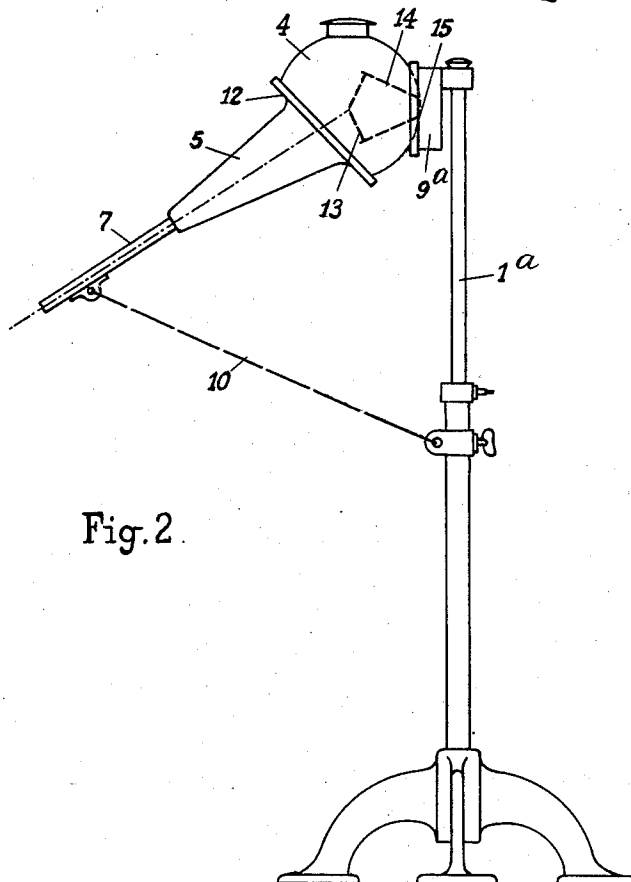


Fig. 2.



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LIGHT RADIATOR FOR MEDICAL PURPOSES.

Application filed May 29, 1922. Serial No. 564,566.

To all whom it may concern:

Be it known that I, EDGAR STEINBERG, a citizen of the German Republic, residing at Berlin-Wilmersdorf, Germany, have invented certain new and useful Improvements in Light Radiators for Medical Purposes, of which the following is a specification.

The object of the present invention is to produce a light radiator for medical purposes of a shape and structure which allows it to be conveniently and safely brought close to the body of the patient, and the invention consists in the provision of a spherical reflector which is truncated in an oblique plane relative to a ventilation shaft whereby the reflector is surmounted, the truncated side of the reflector being closed by a flanged, conical projecting tube whose length is about equal to the diameter of the reflector and which is continued by a plain tube of about the same length. The light is obtained from an electric arc, the carbon holders being arranged so as to project into the reflector through a single, easily covered aperture so that the arc will be effectively enclosed and so that all spluttering will be confined to the reflector.

Fig. 1 of the accompanying drawings represents a side view, partly in section, of one form of construction of the apparatus, and Fig. 2, a side view of another form.

A truncated spherical reflector casing 4 is surmounted by a ventilation shaft 9 for leading off the heat produced by an electric arc lamp arranged with the arc in the center of the casing in alignment with the shaft. The casing is truncated obliquely relative to the ventilation shaft, and the truncated side of the casing is closed by a flange 12 of substantial width which is formed on the wide end of a conical light-projecting tube 5. The length of the tube 5 is about equal to the diameter of the casing 4, and it is continued by a plain projecting tube 7, the free end 8 of which may be rounded off as shown in Fig. 1. The joint 6 may be articulated for facilitating the insertion of the tube into cavities which are to be subjected to treatment by means of the apparatus.

The lamp is arranged so that the carbon holders can be introduced together into the

reflector casing through an aperture which can easily be covered, so that the spluttering of the arc will not inconvenience the patient however closely the lamp is approached to the latter.

Fig. 1 shows the holders 3 introduced through the ventilation shaft 9, while in Fig. 2, where the carbons 13 are arranged at right angles to the holder arms 14, the latter enter the reflector at 15 through a separate slit which is covered by a casing 9^a containing the lamp mechanism.

The projecting tubes are arranged in alignment with the arc. The comparatively long tubes and their position relative to the truncated side of the reflector, render the apparatus particularly convenient for use in the treatment of vaginal and like diseases, the close approach of the lamp to the body being rendered possible by the complete enclosure of the arc.

The angular position of the projecting tubes relative to the reflector may be somewhat varied to suit different circumstances. Fig. 1 shows the tube at a greater angle relative to the flange 12 than in Fig. 2.

The means of support may also be varied. The lamp shown in Fig. 1 is adapted to be suspended, for instance from a ceiling, and it may be steadied by an arm 11 connected to a vertically adjustable upright 1 fitted in a suitable stand.

The stand 1^a shown in Fig. 2 is adapted to carry the lamp without other support, but the apparatus may be steadied by means of a stay 10 connected at one end to the stand and at the other end to one of the projecting tubes.

I claim:

1. A light radiator for medical purposes comprising a truncated spherical reflector, a ventilation shaft connected to said reflector in alignment with the center of the latter and at an angle to the plane in which the reflector is truncated, a conical projecting tube of substantially the same length as the diameter of the reflector, a flange of substantial width formed at the wide end of said tube, the tube being connected by means of said flange to the reflector as a closure for the truncated side of the latter, a plain

projecting tube substantially equal in length to the conical tube and arranged as a continuation of the same, and carbon holders arranged so as to project into the reflector through a single aperture for the production of an electric arc in the center of the reflector.

2. A light radiator according to claim 1 having the carbon holders arranged so as to project through the ventilation shaft into the reflector, substantially as and for the purpose set forth. 10

EDGAR STEINBERG.