Jan. 17, 1928. 1,656,777

H. DENNIS

COMBINATION HEAT AND LIGHT THERAPY LAMP

Filed Nov. 6. 1924 2 Sheets-Sheet 1

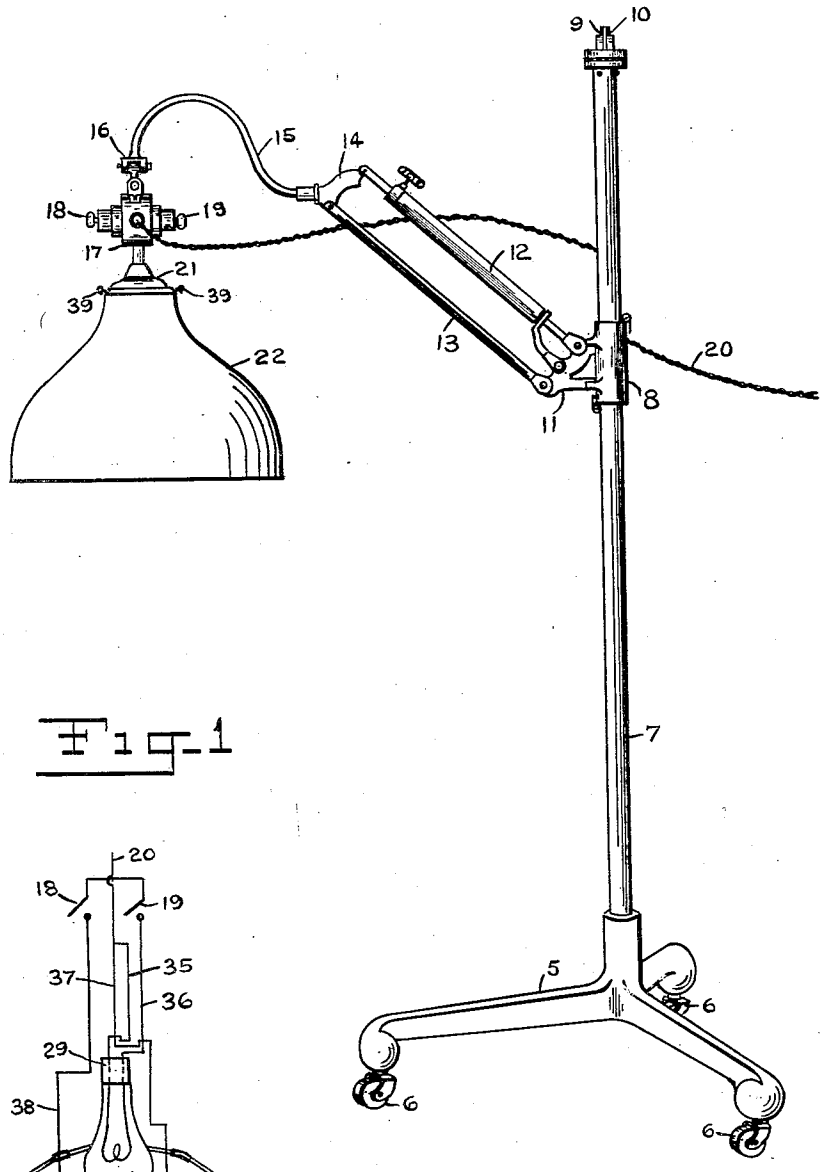


Fig-1

Fig-4

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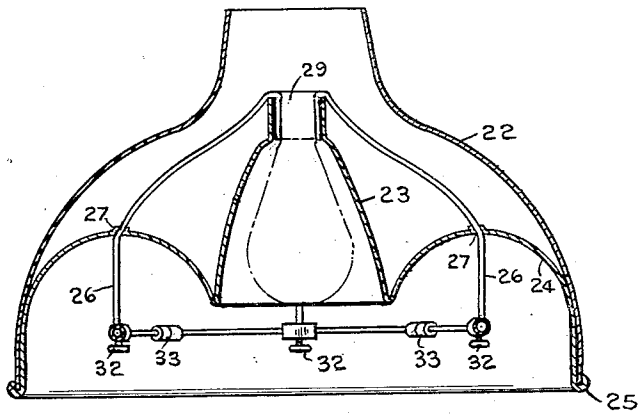


Fig. 2

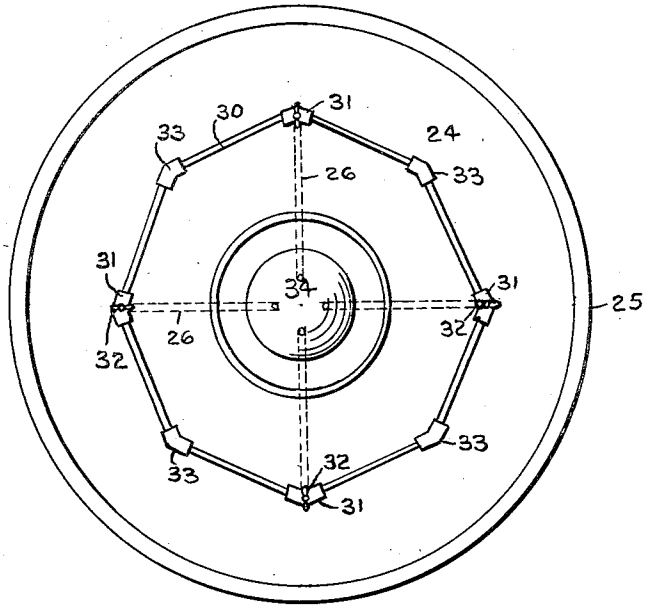


Fig. 3

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Patented Jan. 17, 1928. 1,656,777

UNITED STATES PATENT OFFICE.

HUGH DENNIS, OF NEW YORK, N. Y., ASSIGNOR TO THE KNY-SCHEERER CORPORATION OF AMERICA, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

COMBINATION HEAT AND LIGHT THERAPY LAMP.

Application filed November 6, 1924. Serial No. 748,058.

My invention relates to a combination heat and light therapy lamp and the novelty consists in the adaptation and arrangement of parts as will be more fully hereinafter pointed out.

In the treatment of certain physical troubles it has been found that a treatment by certain electrical light rays has a stimulating and healing effect. The use of electrically generated heat for certain other troubles has also been found to have a beneficial and healing effect so that it is well recognized that the use of certain light rays and heat waves both have therapeutic value. In some cases it has been scientifically demonstrated that the use of both the heat and light applications must be used together in order to secure effective treatment, the light rays particularly affecting and stimulating the skin or upper surfaces of the part exposed while the heat waves penetrate and have a beneficial effect upon the enclosed or interior portions of the part being treated which are inaccessible to the effect of the light rays.

There are many special devices for projecting such therapeutic light rays and more recently some devices adapted to generate and radiate heat waves but there is no device adapted to apply both heat and light in such therapeutic treatment and the devices available are not adapted to be used together nor could they be so used in treating a comparatively small area where both surface and interior portions must be treated simultaneously by both the heat and light treatment.

My device solves this problem furnishing a combined heat and light device controlled by one switch so that both heat and light may be applied to a small area to be treated or either heat or light may be used as the doctor operating the device may determine is essential and said heat and light elements are controlled by one combination reflector.

Referring to the drawings Figure 1 is a perspective of my complete device. Figure 2 is a vertical section of the shade holder and the heating and lighting elements and reflector contained therein. Figure 3 is a bottom plan view of the portion of my device shown in Figure 2. Figure 4 is a diagrammatic view of the circuits of the heating and lighting elements.

In the drawings 5 is a tripod base of usual construction having casters 6 mounted therein in the usual manner. A hollow post 7 is rigidly mounted in said base 5 in vertical position on which is mounted a collar 8 being counterbalanced through connecting lines 9 running over pulleys at 10 and having the usual counterweights (which are not shown) on the inside of the post 7 which travel up and down as the collar 8 is moved up and down on said post 7. The collar 8 has a bracket 11 rigidly attached thereto which has a tube 12 at the upper arm of said bracket in which is mounted a spring adapted to serve as a counterpressure to the movement of the lower bracket member 13 in conjunction with said upper bracket member 12. This bracket construction is not new and is adapted for use in connection with devices where it is desired to raise or lower them by merely pulling on the arm and having the arm stay in the position to which it is pulled. On the outer end of the bracket members 12 and 13, which are pivoted together by an outer hinge member 14, is rigidly secured a supporting neck 15. At the outer end of the supporting neck 15 is a swivel joint 16 of usual construction to which is attached a switch housing 17 having switches 18 and 19 adapted to control the flow of power through the wires 20 which come from a source of power not shown but which may be any usual electric outlet. A shade holder 21 is secured to the base of the switch housing 17 and a shade 22 is secured by screws at 39 to the shade holder 21. A reflector having a central conical portion 23 and an outer circular arched portion 24 is spun over the edge of the shade 22 at 25 so as to lock the shade 22 and the reflector having portions 23 and 24 together thereby effecting a reinforced edge of desirable strength at 25. A frame having four legs 26 is mounted in the reflector by means of holes with bushings at 27 through the middle of suitable points in the outer circular portion 24 of the reflector and said legs 26 curve up so as to come together and form a pocket at their upper ends so that an electric light socket 29 of usual construction can be mounted therein so as to project into the upper end of the inner reflector portion 23. A horizontal octagonal frame portion 30 is adapted to be secured to the frame members 26 at joints 31 by means of wing nuts 32. The horizontal octagonal frame 30

carries heating elements 33 so that the heat therefrom is caught and deflected by means of the outer circular arched reflector portion 24 and thrown downwardly. An electric light bulb of suitable construction 34 is mounted in the socket 29 and the rays from this bulb are caught by the conical central reflector portion 23 and thrown downward.

The circuits for the heating and lighting elements are shown in Figure 4 in which the main circuit 20 leads to the socket 29 on wire 35 and returns therefrom by a wire 36 being controlled by switch 19. The power wire 20 leads to the heating elements 33 by means of wire 37 through the frame members 28, 26 and 30 and passes out again through wire 38 which circuit is controlled by switch 18.

In using my device on a patient the patient is first prepared by being laid out on a table or arranged in a suitable chair so that the part to be treated is properly exposed. The operator then adjusts the collar 8 to the height required and pulling down on arms 12 and 13 brings the shade 22 and the attached parts into the desired position above the exposed part to be treated. If it is necessary to swing the shade 22 into a horizontal or inverted position this can be done within the limitations of the movement of the swivel joint 16. The power having been turned on through the wires 20 the switch 19 will be turned on if the treatment by light rays is desired and the circuit will be traced as described in connection with Figure 4 thereby illuminating the bulb 34 and the light rays therefrom being deflected by the inner conical reflector portion 23 downwardly onto the portion of the patient being treated. If the heat waves be desired then the switch 18 will be turned on and the heating units 33 will immediately become heated through the circuit as described in connection with Figure 4 and the heat waves will be deflected by the outer arched circular reflector portion 24 and if both the heat and light waves and rays are desired then both switches 18 and 19 will be turned on.

Many variations may be made in the mechanical construction of my device as herein illustrated without departing from the spirit and intent of my invention.

I claim:

1. In a therapy lamp the combination of an electric lighting element, separate electric heating elements arranged around said lighting element, a reflector having a central conical portion around said lighting element and an outer circular arched portion around said heating elements, means for controlling the power to said lighting and heating elements and means for adjusting said lamp in any desired position on a movable stand.

2. In a therapy lamp the combination of an electric lighting element, separate electric heating elements arranged around said lighting element, a reflector having means for reflecting the light rays from said lighting element and separate means for reflecting the heat rays from said heating elements, means for controlling the power to said lighting and heating elements and independent means for supporting said lamp comprising a stand, a collar counter-balanced so as to be movable up and down thereon and a bracket carrying said lamp secured to said collar and means adapting it to be moved in any direction and means for maintaining it in any such position.

3. In a therapy lamp the combination of a shade, a reflector mounted therein having a central conical member and an outer circular arched portion, a frame mounted in said reflector at the lower edge of the outer portion and running up into said central member, an electric socket mounted in the upper portion of said frame, an electric light bulb mounted in said socket, an octagonal subframe horizontally secured to said frame, heating elements mounted on said subframe, supporting means for said lamp comprising a stand, a collar counterbalanced so as to be movable up and down thereon and a bracket carrying said lamp secured to said collar and means adapting it to be moved in any direction and means for maintaining it in any such position, and means for controlling power to said lighting and heating elements.

4. In a therapy lamp the combination of a shade, a reflector mounted therein having a central conical member and an outer circular arched portion, a frame mounted in said reflector at the lower edge of the outer portion and running up into said central member, an electric socket mounted in the upper portion of said frame, an electric light bulb mounted in said socket, an octagonal subframe horizontally secured to said frame, heating elements mounted on said subframe, supporting means for said lamp, said means permitting the movement of the same in any direction, and means for controlling power to said lighting and heating elements.

In testimony whereof I affix my signature.

HUGH DENNIS.