F. A. ANDERSON.

ADJUSTABLE CASING FOR THERAPEUTIC APPLICATION OF LIGHT.

APPLICATION FILED APR. 30, 1921.

**1,411,074.** **Patented Mar. 28, 1922.**

2 SHEETS—SHEET 1.

Fig. 2.

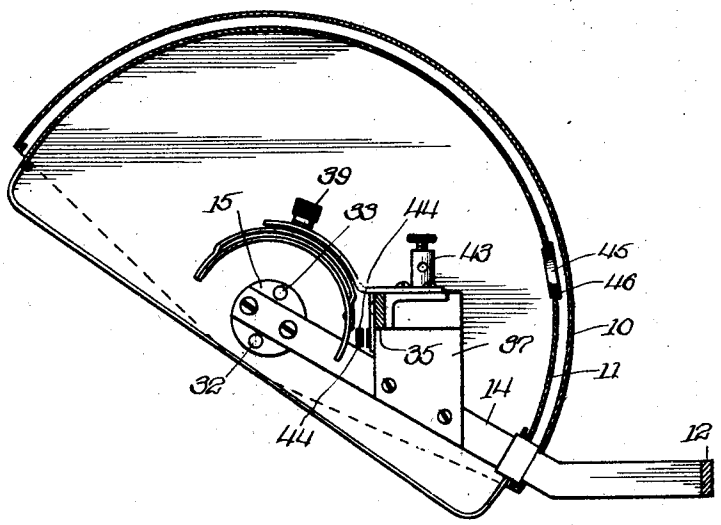
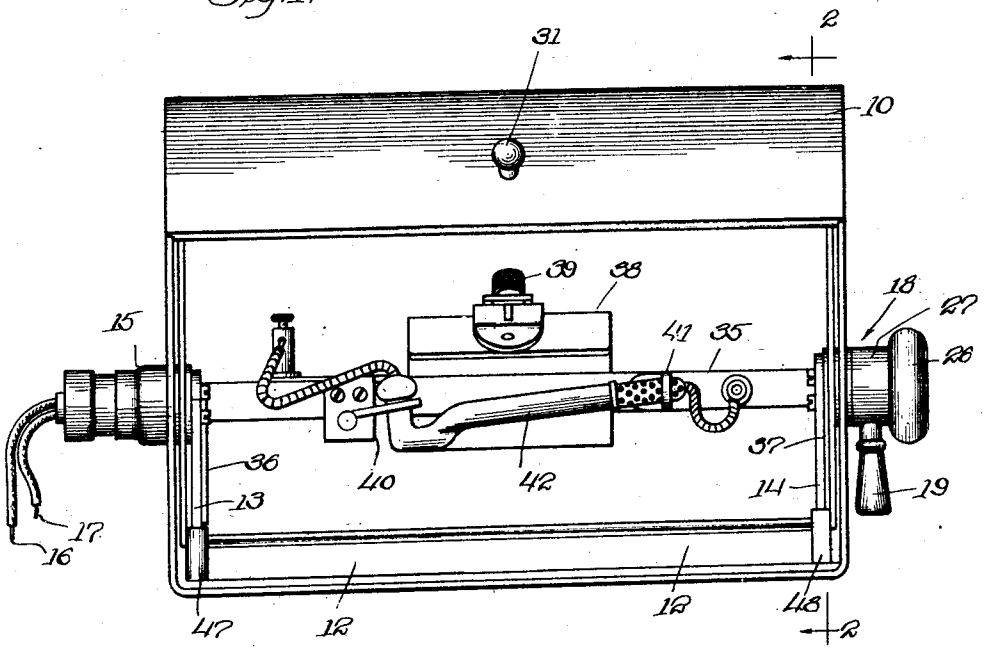



Fig. 1.




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2 SHEETS—SHEET 2.

Fig. 6.

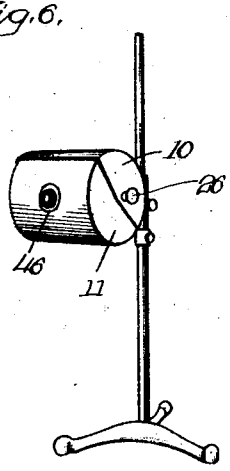



Fig. 3.

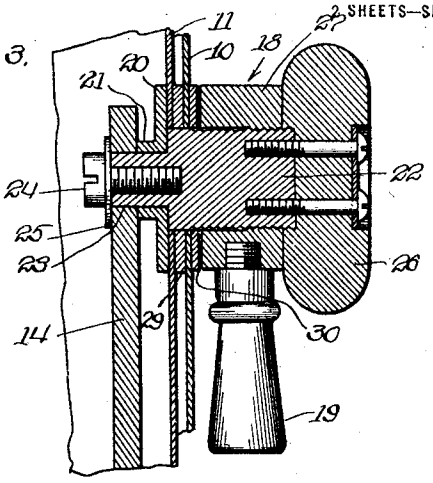



Fig. 4.

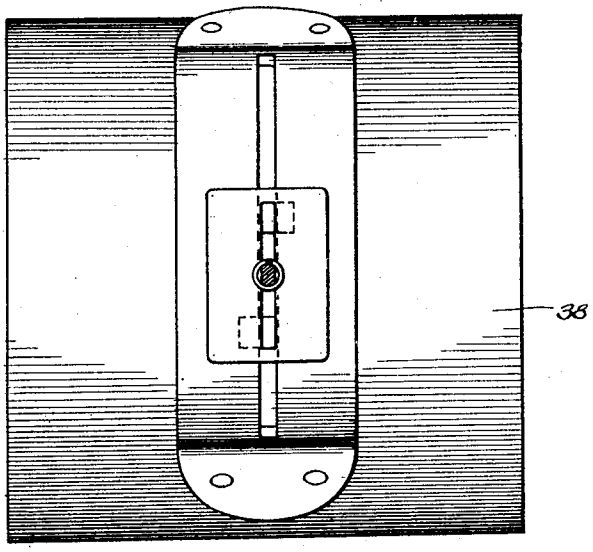
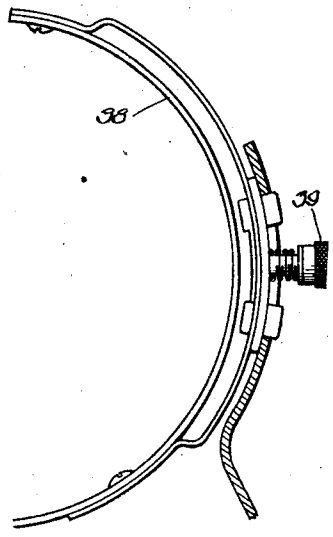



Fig. 5.




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# UNITED STATES PATENT OFFICE.

FRITZ A. ANDERSON, OF MILTON, WISCONSIN, ASSIGNOR TO BURDICK CABINET COMPANY, A CORPORATION OF WISCONSIN.

## ADJUSTABLE CASING FOR THERAPEUTIC APPLICATION OF LIGHT.

1,411,074. Specification of Letters Patent. Patented Mar. 28, 1922.

Application filed April 30, 1921. Serial No. 465,800.

*To all whom it may concern:*

Be it known that I, FRITZ A. ANDERSON, a citizen of the United States, residing at Milton, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in Adjustable Casings for Therapeutic Application of Light, of which the following is a specification.

The invention relates to adjustable casings for therapeutic application of light.

One of the objects of the invention is to provide a convenient, relatively inexpensive casing for containing a lamp, adjustable for application of light radiating therefrom, so that the light rays may be accurately directed to an affected part for therapeutic purposes.

Another object is to provide a cylindrical casing closed at both ends and divided horizontally into two substantially semi-cylindrical members rotatable about each other so as to vary the size of the light opening betwen the two members; means to hold the members in adjusted positions, and rotatable together to locate the opening.

Other, further and more specific objects of the invention will become readily apparent, to persons skilled in the art, from a consideration of the following description, when taken in conjunction with the drawings, wherein:—

Fig. 1 is a front elevation of the casing showing it open.

Fig. 2 is a transverse section taken on line 2—2 of Fig. 1.

Fig. 3 is an enlarged sectional view taken through the axis of one of the trunnions and the locking device.

Fig. 4 is a rear view of an auxiliary light reflector within the casing.

Fig. 5 is a side elevation of the auxiliary reflector and adjustable support therefor.

Fig. 6 shows the two members of the casing in reduced size closed and mounted on its support.

In all the views the same reference characters are employed to indicate similar parts.

10 is the outer member of the cylindrical casing and 11 is the inner member, the latter being within the former, and both members rotatable about a common axis.

A support 12 is provided with two arms 13 and 14 upon which the casing is supported and which extends into the inner casing 11. The arms 13 and 14 are each connected to an outwardly extending trunnion about which the casing members are rotatable. Through one of the trunnions 15 the conducting wires 16 and 17 may pass into the interior of the casing, and on the other trunnion 18 the locking device 19 is threaded.

Secured to the inner member 11 is a ring 20, having a collar portion 21. An outwardly threaded stud or lug 22 has a reduced part 23 which is preferably angular in cross section to prevent its rotation and which passes through the supporting arm 14. A screw 24 is threaded into the reduced portion 23 and through a washer 25 and holds the collar 21 in firm contact with the supporting arm 14.

Secured on the threaded lug 22 is a knob 26 through which screws pass into the said lug. The inner casing member 11 is rotatable by means of this knob. Threaded on the lug 22 is a threaded collar 18 provided with a handle 19. The washer 29 is placed between the end walls of the casing members 10 and 11 and another washer 30 of the same size is located on the outside of the member 10 in contact with the threaded collar 18. When the inner casing has been rotated by the knob 26 and it is desirable to also rotate the outer casing member 10, relative to the casing member, which may be done by pressing on a knob 31, which is fastened on the outer periphery of the casing 10 and then when the members are in suitable positions they may be clamped in their selected positions by rotating the handle 19 which clamps the members 10 and 11 tightly together and holds them by frictional engagement to the supporting frame.

The trunnion 15 is similar to the one just described with the exception that there is no locking device associated therewith and it is provided with a central bore which divides near its inner end into the perforations 32 and 33 through which the electric service wires pass.

A cross bar 35 extending between upstanding arms 36 and 37, which are secured to the support 12 supports the reflector 38, which is rotatably adjustable by the screw 39. The bar 35 also carries outstanding brackets 40 and 41 for support of a lamp 42 within the inner casing member 11. The reflector and

the means of adjustment form the subject matter of another application and is not of present interest.

Wire binding screws 43 and 44 constitute the lamp terminals to which the in-leading wires 16 and 17 are properly connected.

The inner casing member 11 is provided with an opening 45 in which is enclosed a frame 46 and to which an applicator of suitable character may be secured for the concentrated application of light to a limited area, when the two casing members are in positions to entirely enclose the light within the cylinder thus formed. The light also may be projected from the interior of the casing through the space between the edges of adjacent walls of the two members when they are separated to the desired extent.

The supporting arms 13 and 14 are surrounded with soft yielding shoes or cushions 47 and 48 against the edges of which the respective casing members may strike in order to prevent any resultant noise.

While I have herein shown a single embodiment of my invention for the purpose of clear disclosure, it will be manifest to persons skilled in the art that considerable change may be made in the general arrangement and configuration of the parts, within the scope of the appended claims.

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

1. A lamp casing for containing a lamp comprising a cylinder closed at its ends and divided into two rotatable members one within the other; a support, whereon one member may be rotated about the other and means to lock the members in relatively adjusted positions.

2. A lamp casing for containing a lamp comprising a cylinder closed at its ends and divided into two rotatable members one within the other; a trunnion at each end of said members about the axis of which both members are rotatable; a support having two arms secured to the respective trunnions and means to lock the members together at one of said trunnions.

In testimony whereof I hereunto subscribe my name.

FRITZ A. ANDERSON.