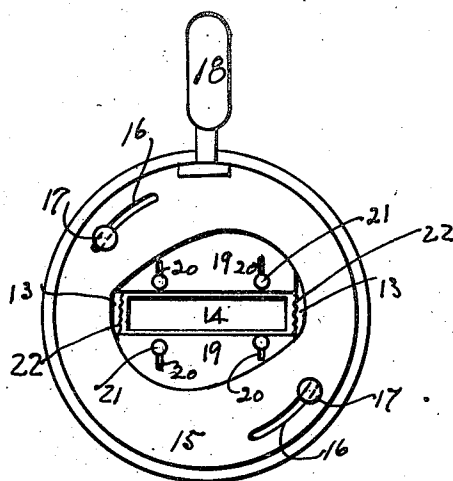
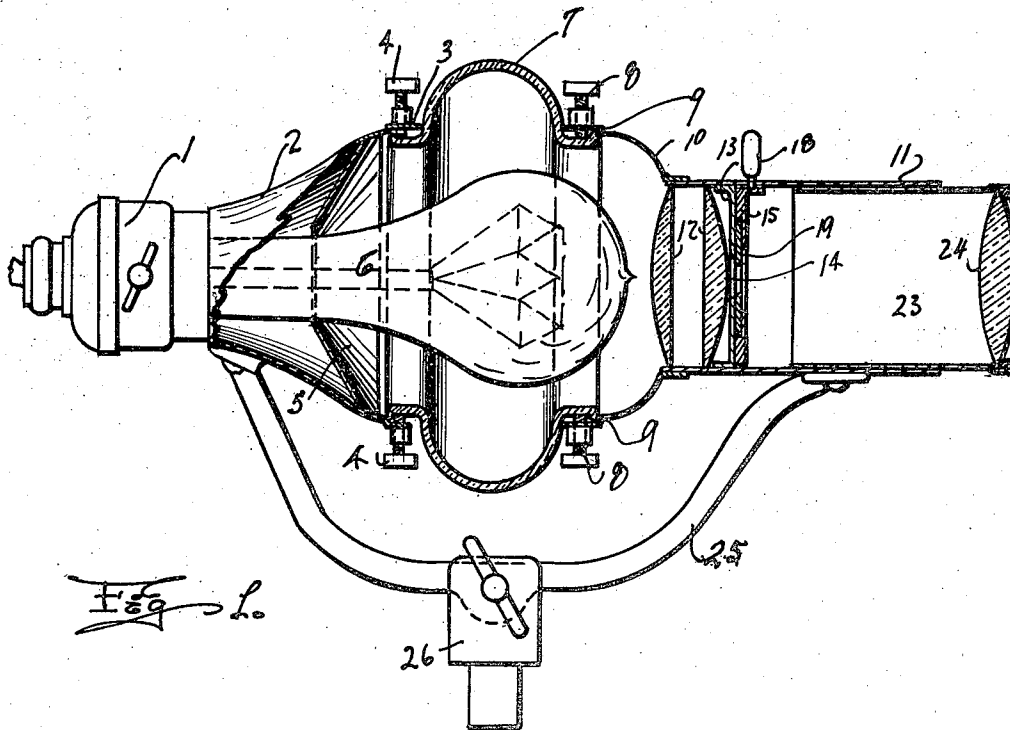


O. J. HANSON.
DENTIST LAMP.
APPLICATION FILED MAY 1, 1917.

1,263,234.

Patented Apr. 16, 1918.



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DENTIST-LAMP.

1,263,234.

Specification of Letters Patent.

Patented Apr. 16, 1918.

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To all whom it may concern:

Be it known that I, OSCAR J. HANSON, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Dentist-Lamps, of which the following is a specification.

This invention relates to improvements in dentist lamps and has for its principal object to provide an improved and novel type of dentist lamp which projects an oval shaft of light which may be turned upon the mouth of the patient. Another object of my device is to provide improved and novel means for controlling the shape and size of the said shaft of light. In dentist work, it is desirable to project a strong ray of light into the patient's mouth and at the same time to provide means for excluding the intense light from the patient's face and eyes. My device is designed to meet the above desired requirements and to obviate the disadvantages encountered with the ordinary lamp.

Other objects will appear as my invention is more fully explained in the following specification, illustrated in the accompanying drawings and pointed out in the appended claims:

In the drawings, Figure 1 is a side elevation of my device with parts broken away. Fig. 2 is an enlarged front elevation of my means for controlling the shape of the light shaft.

Referring more particularly to the drawings, numeral 1 indicates an electric lamp socket to which is removably affixed a bell shaped outer casing 2 which terminates in a rim 3 having globe holding screws 4. A reflector 5 fits within the larger end of casing 2 and a lamp bulb 6 passes centrally through the said reflector and engages the socket 1 in the usual manner. A frosted globe 7 is retained at one end by means of the screws 4 and similarly at the other end by means of screws 8 which are attached to a rim 9 which in turn forms the larger end of a front casing 10. A lens tube 11 fits within the smaller and forward end of casing 10 and contains lenses 12 adjacent its inner end. In front of lenses 12 and adjacent thereto, my means for regulating the size and shape of the shaft of light is positioned. This means consists of a disk 13 having a central opening 14. The disk 14 fits snugly the inside of tube 11. A cam disk 15 is rotatively

fastened to the face of disk 13 by means of slots 16 and cooperating screws 17. Handle 18 which projects through tube 11 is utilized to rotate in cam disk 15. Cam disk 15 is provided with a central opening within which mask plates 19 are positioned, one on either side of opening 14. The shape of the cam opening within the cam disk 15 conforms to the outline of the cam faces of mask plates 19 and is of such shape as to move the said cam plates inwardly simultaneously when rotated clockwise. The cam plates 19 are slotted as at 20 and engage pins 21 which guides their movement with respect to the opening 14. Springs 22 tend to maintain the mask plates in an open position with respect to the opening 14. When it is desired to contract the size of the opening 14 and consequently the size of the shaft of light, the cam disk 15 is rotated clockwise, thereby moving the mask plates toward each other and partially covering the opening 14. It will be understood that the shape of the opening 14 and the shape of the adjacent edge of the mask plates may be changed to suit the condition in hand. Forward of the light shaft regulating device, an outer lens tube 23 having a lens 24 is telescopically mounted within lens tube 11. A yoke 25 is removably attached at one end to casing 2 and at the other end to lens tube 11. A supporting connection 26 is pivotally secured to yoke 25 and is adapted to fasten the lamp to a bracket or the like. In operation, the shaft of light which passes through the lens and shaft regulating device is turned upon the mouth of the patient by the operator.

While I have shown a particular form of embodiment of my invention, I am aware that many minor changes therein will readily suggest themselves to others skilled in the art without departing from the spirit and scope of the invention, and I therefore desire to avoid being limited to the exact form shown and described.

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

1. In a device of the class described, the combination of a source of light, casing and globe, means for inclosing said source of light, lenses for focusing and concentrating the said light into a shaft, and means for adjustably regulating the shape of said shaft of light, said means including a disk having

- a central light opening, a cam disk revolubly mounted upon the face of the first mentioned disk, and mask plates slidably mounted upon the first mentioned disk on either side of the opening therein and coöperating with the said cam disk, whereby the rotation of the cam disk will cause the mask plates to intersect the opening in the first mentioned disk.
- 10 2. In a device of the class described, the combination of a source of light, an inclosed casing for said source of light, a reflector, a lens tube engaging the forward end of said casing, lenses within the said tubes, where-
15 by the light may be projected in the form of a shaft, means intermediate the lenses for adjustably shaping the said shaft of light, said means including a centrally slotted disk secured within the said lens tube, a cam disk rotatively secured to the first mentioned disk 20 and having a central cam opening therein, mask plates oppositely disposed on either side of the opening in the first mentioned disk and slidable therewith, the said mask plates engaging the cam face of said cam 25 disk, and manual means for rotating the said cam disk, whereby the mask plates are movable partially across the face of the opening in the first mentioned disk and the contour of the shaft of light is regulated.
- 30 In testimony whereof I affix my signature.
OSCAR J. HANSON.