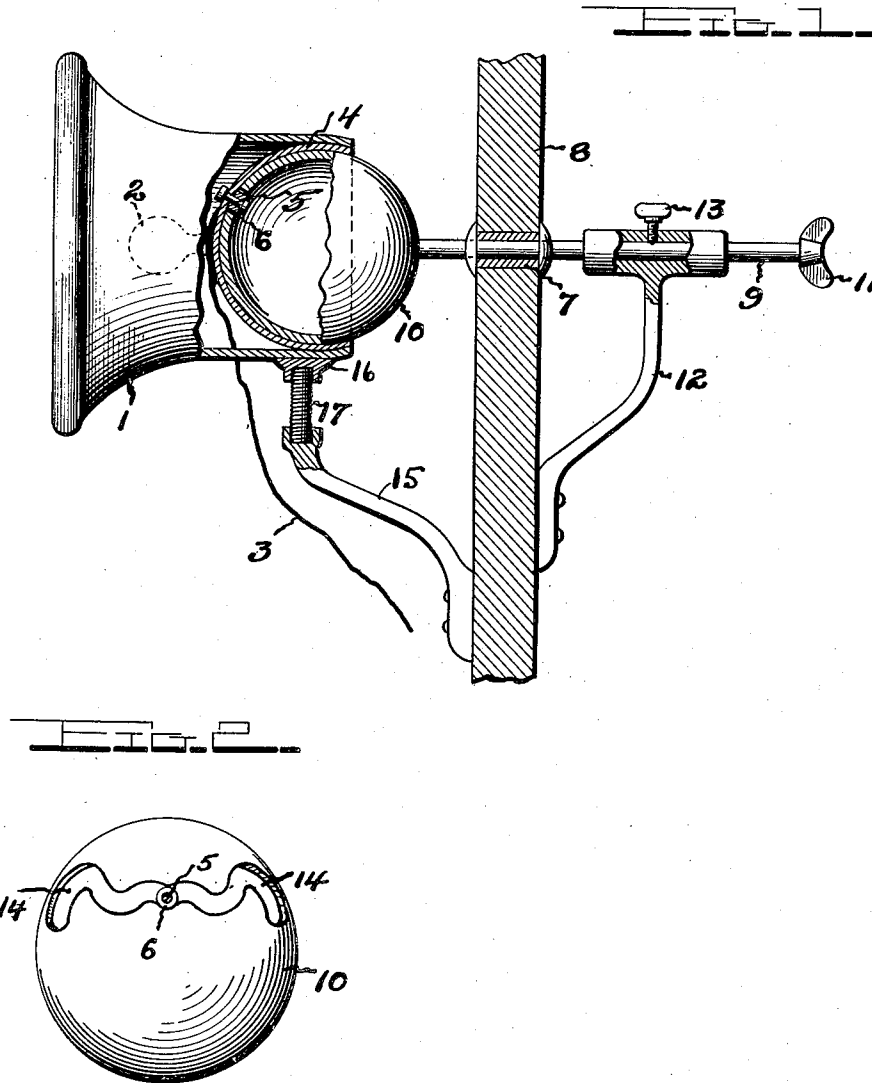


F. C. HOWE.
ADJUSTABLE LAMP.
APPLICATION FILED FEB. 5, 1914.

1,124,902.

Patented Jan. 12, 1915.



Witnesses
Chas. L. Griesbauer.
Florence H. Monk.

By

Inventor
Fred C. Howe
George E. Hall
Attorney

UNITED STATES PATENT OFFICE.

FRED C. HOWE, OF NEW HAVEN, CONNECTICUT.

ADJUSTABLE LAMP.

1,124,902.

Specification of Letters Patent.

Patented Jan. 12, 1915.

Application filed February 5, 1914. Serial No. 816,820.

To all whom it may concern:

Be it known that I, FRED C. HOWE, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Adjustable Lamps, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to a new and improved adjustable lamp, having particular reference to the mechanism for moving the lamp body to various positions about a common center.

To these and other ends, my invention consists in the adjustable lamp, having certain details of construction and combinations of parts, as will be hereinafter described and more particularly pointed out in the claims.

Referring to the drawings, in which like numerals of reference designate like parts in both figures; Figure 1 is a side elevation, partly in section, of my improved lamp; and Fig. 2 is an end view of the guide ball.

The invention is illustrated in the drawings as applied to an electric lamp; but it may be used equally as well for any type of mechanism, wherein it is designed that one of the members thereof should be moved about a common center. I do not, therefore, desire to be limited in the use of this device to a lamp, its particular application thereto in this case being merely for the purpose of showing one form or method of the embodiment thereof.

In the drawings, the numeral 1 designates the lamp body, within which is the usual incandescent lamp 2, current for which is conducted through the wires 3. At the rear end of this body is the cup 4, within which is fixed a headed stud 5, upon which is mounted an anti-friction roll 6.

Rotatably mounted in a journal 7 in a fixed member 8 is a shaft 9, having a guide ball 10 secured to one end thereof and a thumb nut 11 at the other end. This thumb nut 11 provides means for a manual rotation of the shaft 9. Additional support for this shaft is provided by the bracket 12, which is secured to the fixed member 8, and having a thumb screw 13 therein, the end of which impinges against said shaft. Within the periphery of the guide ball 10 is the curved slot 14, which extends an equal distance upon each side of the center of said

ball (see Fig. 2), and into which projects the roll 6. Secured to said fixed member 8 is a bracket 15, between which and a collar 16 upon the body member 1, is a coil spring 17, for a purpose hereafter described.

In assembling the parts of this device the guide ball 10 is first inserted within the cup 4, after which the outer end of said cup 4 and lamp body 1 are turned inwardly, as shown in Fig. 1, to insure a positive engagement of said cup and body member with said guide ball.

The several parts in Fig. 1 are shown in their relative positions when the axis of the body member 1 is coincident with that of the shaft 9, at which time said shaft is held against rotation by the thumb screw 13, while the spring 17 and roll 6, by its engagement with the slot 14, will hold the lamp body against movement.

To shift the relative position of the lamp body 1, with that of the shaft 9, the thumb screw 13 is unloosened and the shaft 9 rotated upon its axis by means of the thumb nut 11, at which time said lamp body is moved about the ball 10 by engagement of the roll 6 with the slot 14, the spring 17 expanding during this action. When in the desired position the parts are locked against accidental movement by the screw 13 impinging against the shaft 9. The parts are returned to the positions shown in Fig. 1 by unloosening the screw 13, at which time the spring 17 will pull the lamp body 1 back to the position shown in Fig. 1, assisted, if necessary, by the rotation of the shaft 9. By this mechanism the lamp body is moved to any desired position about the guide ball 10 and as a result thereof the rays of light from the incandescent lamp are capable of being thrown in any direction over a zone not appreciably less than an entire globe.

What I claim as new and desire to secure by Letters Patent, is:

1. The combination with a member rotatable about a fixed axis, and having a groove therein of irregular shape and partly surrounding it; of a second member movable about its center, substantially coincident with the center of said member; and an operative connection between said members.

2. The combination with a globular member rotatable about a fixed axis, and having a groove therein of irregular shape and partly surrounding it; of a second member

in part surrounding said globular member; and means for operatively connecting said members through said groove, whereby the movement of said globular member about its axis will impart a movement to said surrounding member about the center of said globular member.

3. The combination with a globular member, having a slot in the periphery thereof; of means for rotating said globular member about its axis; a second member in part surrounding said globular member; and means connected with said second member, and having engagement with the slot in said globular member, whereby movement of said globular member about a fixed axis is transmitted to said second member, whereby the same is moved about the center of said globular member.

4. The combination with a globular member, having a slot in the periphery thereof; a shaft connected with said globular member and rotating about a fixed axis; a second member in part surrounding said globular member; a part connected with said sec-

ond member, projecting into the said slot in said globular member whereby movement is transmitted to said second member from the said shaft; and means for normally maintaining said second member in a predetermined position.

5. The combination with a globular member, having a slot in the periphery thereof; a shaft connected with said globular member and rotating about a fixed axis; a second member in part surrounding said globular member; a part connected with said second member, projecting into the said slot in said globular member whereby movement is transmitted to said second member from said shaft; and spring means for returning said second member to a predetermined position.

In testimony whereof I affix my signature in presence of two witnesses.

FRED C. HOWE.

Witnesses:

GEORGE E. HALL,
FLORENCE H. MONK.