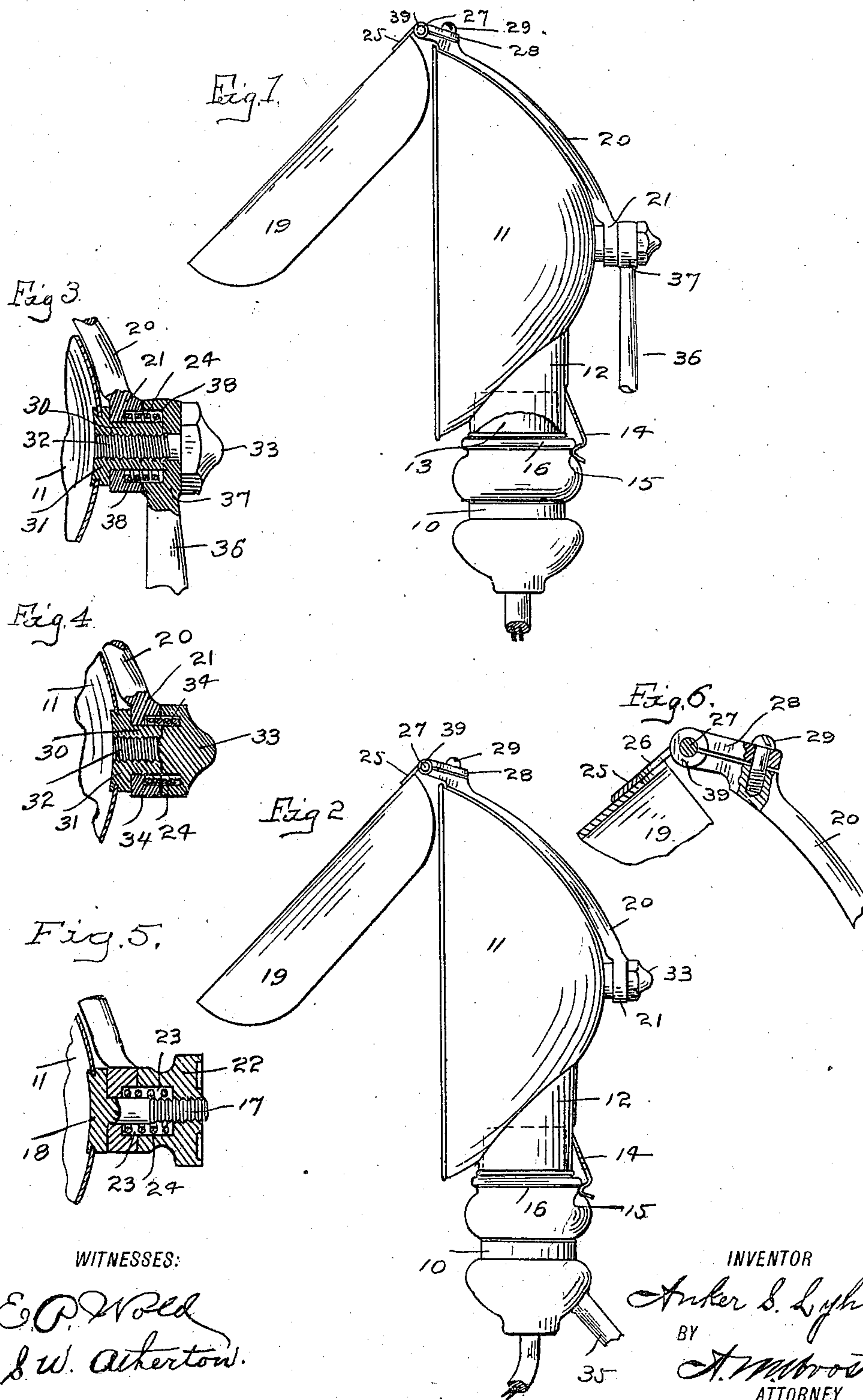


963,912.

Patented July 12, 1910.



UNITED STATES PATENT OFFICE.

ANKER S. LYHNE, OF BRIDGEPORT, CONNECTICUT.

ADJUSTABLE REFLECTOR.

963,912.

Specification of Letters Patent. Patented July 12, 1910.

Application filed April 8, 1910. Serial No. 554,261.

To all whom it may concern:

Be it known that I, ANKER S. LYHNE, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented an Improvement in Adjustable Reflectors, of which the following is a specification.

This invention has for its object to provide a shade adapted for general use and especially adapted for desk and reading lamps, which is used in connection with a reflector, is movable toward and from the plane of the reflector and is also movable around the reflector in the vertical plane, thereby enabling the user to shade the eyes under all conditions of use, to throw practically the entire light in any direction required and furthermore to concentrate practically the entire light in any direction upon a relatively small surface.

With these and other objects in view I have devised the novel reflector which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts:

Figure 1 is an elevation illustrating the application of my novel reflector to a form of lamp in which the lamp is carried by the reflector; Fig. 2 a similar view illustrating a form in which the reflector is carried by the lamp; Fig. 3 an enlarged detail view partly in elevation and partly in section corresponding with Fig. 1; Fig. 4 a similar view corresponding with Fig. 2; Fig. 5 a view corresponding with Fig. 4, illustrating changes in the details of construction; and Fig. 6 is an enlarged detail view illustrating the connection of the reflector to the carrier.

10 denotes an ornamental casing for a lamp socket, neither the socket nor the lamp being shown as they form no portion of the present invention.

11 denotes a reflector which is provided with a sleeve 12 adapted to turn freely on a hub 13 on the casing. The reflector is secured to the casing in any ordinary or preferred manner, as by means of a spring 14 having a lug or projection 15 adapted to engage a rib 16 on the casing. This spring attaches the reflector securely in place but leaves it free to be rotated in the horizontal plane and readily detachable.

19 denotes a shade having a head 21 which is mounted to oscillate on a suitable bearing

extending forward of the reflector. In the form illustrated in Fig. 5, the head of the carrier has its bearing on a shank 17 which extends axially from the reflector, is threaded at its outer end and is provided with a head 18 to which the reflector is rigidly secured. The carrier is retained upon the shank by means of a nut 22. The head of the carrier and the nut are provided with sockets 23 which receive a spring 24, the action of which is to retain the carrier in any position in which it may be placed leaving it, however, free to be oscillated about the axis of the reflector, that is to be moved in either direction in the vertical plane so as to place the shade in position to throw the light laterally in either direction as high or low as may be required.

I preferably connect the shade to the carrier substantially as illustrated in Fig. 6. A plate 25 rigidly secured to the shade is provided with a central opening 26 and the ends of the plate on opposite sides of the opening are curved about a rod 27. The end of the carrier is provided with an eye 39 through which the rod passes and which lies in the opening. Extending backward from the eye is a spring arm 28. A screw 29 passes through the spring arm and engages the carrier. By tightening or loosening this screw the required amount of pressure is placed upon the rod to retain the shade in any position in which it may be placed but leaving it free to be adjusted by the hand of the operator.

In Fig. 4 I have illustrated a modified form in which the head of the carrier has its bearing on a hub 30 having a head 31 to which the reflector is rigidly secured. The hub is tapped to receive a screw 32 having a head 33 which lies on the outer side of the head of the carrier. The head of the screw and the head of the carrier are provided with recesses 34 which receive a spring 24 as in the other form, by which the carrier is retained in any position in which it may be placed.

In the forms illustrated in Figs. 2, 4 and 5, the casing supports the reflector and is itself supported by a standard 35.

In the form illustrated in Figs. 1 and 3, the casing is supported by the reflector which is itself supported by a standard 36. This form differs from the form illustrated in Figs. 2 and 4 only in details of construction. The screw 32 is made longer and

passes through a head 37 on standard 36. The hub likewise is made slightly longer. The spring 24 is socketed in recesses 38 in the head of the carrier and in the head 37 of standard 36.

The operation will be obvious from the description already given. More or less concentration of the light as may be required is secured by moving the shade toward or from the reflector. If the light is required to be thrown downward the carrier is swung upward so as to place the attached end of the shade contiguous to the upper edge of the reflector as in Figs. 1 and 2. Should it be required to throw the light laterally in either direction the carrier with the shade thereon is swung around to either side as may be required.

Having thus described my invention I claim:

1. The combination of a reflector, a shade and a carrier therefor having oscillatory movement about the axis of the reflector.
2. The combination of a reflector, a carrier having oscillatory movement about the axis of the reflector and a shade hinged to

the carrier and adapted to be swung toward and from the face of the reflector.

3. The combination of a reflector, a carrier having oscillatory movement about the axis of the reflector, a shade hinged to the carrier and adapted to be swung toward and from the face of the reflector and means for retaining the carrier in any position in which it may be placed.

4. The combination of a standard, a bearing secured thereto, a reflector secured to the bearing and a shade carrier mounted on the bearing and adapted to oscillate about the reflector.

5. The combination of a standard, a bearing secured thereto, a reflector secured to the bearing, a carrier mounted to oscillate on the bearing and a shade hinged to the carrier and adapted to be swung toward and from the face of the reflector.

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

ANKER S. LYHNE.

Witnesses:

CHAS. PHILLIPS,
HERMAN K. BEACH.