April 5, 1932. F. M. COCKSEDGE 1,852,804

ADJUSTABLE MOUNTING

Filed Dec. 16, 1930

Fig. 1.

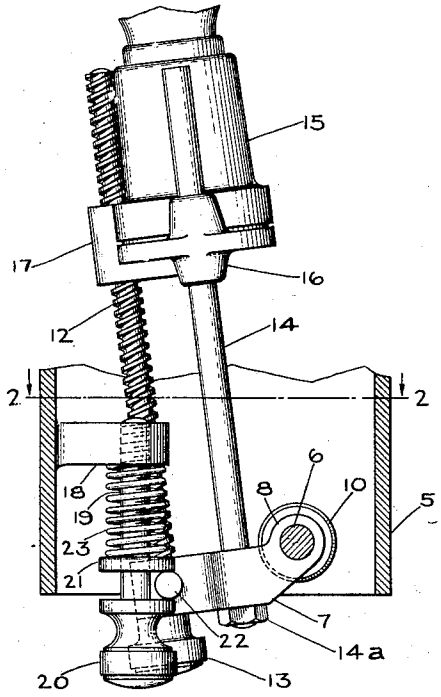
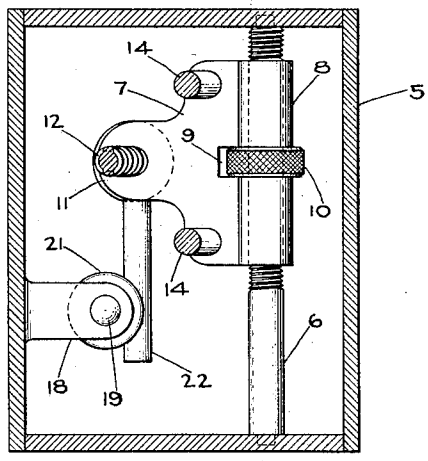


Fig. 2.



Inventor:
Frederick M. Cocksedge,
by Charles V. Mullen
His Attorney.

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UNITED STATES PATENT OFFICE

FREDERICK MALLER COCKSEDGE, OF RUGBY, ENGLAND, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK

ADJUSTABLE MOUNTING

Application filed December 16, 1930, Serial No. 502,751, and in Great Britain January 3, 1930.

This invention relates to an adjustable mounting and provides for the quick and accurate adjustment of a member supported thereby.

While I show and describe the adjustable mounting as applied to an electric lamp holder, it is to be understood that it is not limited thereto, but may be used wherever applicable.

Frequently, when an electric lamp is supported relative to a reflector, as in a floodlight projector, it becomes necessary to change the position of the lamp relative to the reflector. Such cases occur when various types and sizes of lamps are used with the same reflector, thus changing the position of the illuminating means relative to the reflector, with the result that the lamp is not properly focused. The same thing happens when different types of reflectors are interchangeably used in the floodlight structure. With the use of my adjustable mounting, the lamps can be properly focused relative to the reflector at any time.

The object of the invention, therefore, is to provide an improved adjustable mounting for a holder or supporting member.

For a consideration of what I believe to be novel and my invention, attention is directed to the following specification and the claims appended thereto.

In the drawings, Fig. 1 is an elevation partly in section showing my adjustable mounting means applied to an electric lamp holder, and Fig. 2 is a section along the line 2—2 of Fig. 1.

Referring to the drawings, there is shown at 5 the casing of a floodlight projector. A shaft 6 is fixedly mounted in opposite walls of the casing, the shaft being screw-threaded for the greater part of its length. A plate 7, has an enlarged edge 8 which is provided with an axial bore to receive the shaft 6, the plate thus being pivoted on the shaft and free to slide axially thereof. Midway its length, the enlarged edge of the plate is slotted transversely as shown at 9, and in this slot there is a nut 10 which is provided with a threaded bore through which passes the shaft 6. It is thus apparent that rotation of the nut in a clockwise direction will move the plate in one direction along the shaft 6, while rotation of the nut in a counter-clockwise direction will move the plate in the opposite direction along the shaft.

The edge of the plate opposite the enlarged edge 8 is formed as an ear or lug 11 which is provided with a central bore in which is journalled a theaded rod 12. The rod 12 projects below the plate and this projecting portion is provided with a knob 13 whereby the rod may be manually rotated. Projecting from the body of the plate are a plurality of guide rods 14, which are parallel to the threaded rod 12, the guide rods being fixedly secured to the plate by suitable fastening means such as nuts 14*a*. A holder 15, for an electric lamp, has its base formed with apertured extensions or lugs 16, through which pass the guide rods 14, the holder thus being slidable along the guide rods. A lug 17 also formed on the base of the holder 15 is provided with an axial screw-threaded bore for the reception of the threaded rod 12. Thus rotation of the rod 12 will cause the holder to be adjusted along the guide rods 14, relative to the plate 7.

A wall of the casing 5 is formed with an interiorly projecting lug 18 which is provided with a threaded bore for the reception of a threaded rod 19. The rod 19, at its free end, is provided with a knob 20 whereby the rod may be manually rotated. Mounted on the rod and suitably spaced from the inner face of the knob is a washer or flange member 21 of the same diameter as the inner face of the knob 20, the space between the knob and the flange member thus forming an annular groove in which is received the free end of a lever or arm 22 that projects laterally from the edge of the plate 7. Rotation of the rod 19 will cause the rod to move up or down through the lug 18 and will cause the plate 7 to be rotated about the shaft 6. A spring 23, situated between the flange member 21 and the adjacent face of the lug 18, surrounds the rod 19 and serves to prevent any axial movement of the rod 19 due to wear, thereby maintaining the plate 7 in its adjusted position about the shaft 6.

From the foregoing description, it will

be apparent that three separate and independent adjustments are provided for the lamp holder. By rotating the nut 10 the holder can be moved laterally in the casing. By rotating the threaded rod 12 the holder can be raised and lowered in the casing and by rotating the threaded rod 19, the holder can be swung about the shaft 6 to position the lamp in a plane transverse to its plane of lateral movement. By these adjustments the lamp may be moved laterally of a reflector positioned in the casing, toward and away from the reflector, and may also be raised and lowered relative to the reflector.

In accordance with the provisions of the patent statutes I have described what I now consider to represent the best embodiment of my invention, but it is to be understood that the structure shown is merely illustrative and that the invention may be carried out by other means.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. An adjustable mounting comprising a non-rotatable shaft, a plate pivoted on said shaft and slidable axially thereof, means for moving said plate along said shaft, a holder supported by said plate, means for moving said holder at right angles to said plate, and means for pivotally adjusting the plate about said shaft.

2. An adjustable mounting comprising a non-rotatable shaft, a plate pivoted on said shaft and slidable axially thereof, means for moving said plate along said shaft, guide rods projecting at right angles from said plate, a holder, said holder being slidable on said guide rods, means for adjusting said holder along the guide rods, and means for pivotally adjusting the plate about said shaft.

3. An adjustable mounting for a holder comprising a non-rotatable screw-threaded shaft, a plate pivoted on said shaft, and slidable axially thereof, screw-threaded means cooperating with said shaft and abutting said plate for moving said plate along said shaft, a plurality of guide rods projecting from said plate, said holder being slidable on said guide rods, means for adjusting said holder along the guide rods and means for pivotally adjusting said plate about said shaft.

4. Means for adjustably mounting a holder comprising a non-rotatable screw-threaded shaft, a plate pivotally mounted on said shaft, and slidable axially thereof, screw-threaded means cooperating with said shaft and abutting said plate for moving said plate along said shaft, a pair of guide rods projecting from said plate, said holder being slidable on said guide rods, a screw-threaded rod journalled in said plate, said holder having a threaded opening through which the screw threaded rod extends for adjusting said holder along said guide rods, and means for pivotallly adjusting said plate about said shaft.

5. Means for adjustably mounting a holder comprising a non-rotatable screw-threaded shaft, a plate pivotally mounted on said shaft and slidable axially thereof, screw-threaded means cooperating with said shaft and engaging said plate for moving said plate along said shaft, a pair of guide rods projecting from said plate, said holder being slidable on said guide rods, a screw-threaded rod journalled in said plate, said holder having a threaded opening through which the screw-threaded rod extends for adjusting said holder along said guide rods, a lever projecting from said plate and means for raising and lowering said lever for rotating said plate about said shaft.

6. The combination with a lamp holder of means for adjustably mounting said holder, said means comprising a casing, a shaft fixedly mounted in opposite walls of said casing, said shaft being screw-threaded for the greater part of its length, a plate pivotally mounted on said shaft, and slidable axially thereof, screw-threaded means cooperating with said shaft and engaging said plate for moving said plate along said shaft, guide rods projecting from said plate, said holder being slidable along said guide rods, a screw-threaded rod journalled in said plate and projecting therefrom, said holder having a threaded opening through which the screw-threaded rod extends, a lever projecting from the free end of said plate, and means carried by the casing and engaging said lever for rotating said plate about said shaft.

In witness whereof, I have hereunto set my hand this 4th day of December, 1930.

FREDERICK MALLER COCKSEDGE.