SWIVEL BRACKET FOR SPOTLIGHTS AND THE LIKE

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The present invention relates to swivel brackets for spotlights and the like, and is more particularly directed toward a device suitable for supporting floodlights, spotlights, and the like in such a manner that they may be adjusted to project the light in various angles.

The present invention contemplates an improved bracket support for this purpose whereby the spotlight or other supporting lighting unit is capable of being turned about both vertical and horizontal axes so that the light may be projected in desired directions.

According to the preferred form, the present invention contemplates that a single clamping device shall be provided for securing the lighting unit in adjusted position. When this clamping device is loosened, one can adjust the unit in either or both directions as desired.

The accompanying drawings show, for purposes of illustrating the present invention, one of the many possible embodiments in which it may take form, it being understood that the drawings are illustrative of the invention rather than limiting the same.

In these drawings:

Figure 1 is a side elevational view showing a portion of the spotlight mounted in the swivel bracket and showing in dotted lines the position of the parts when moved to change the angle of elevation of the spotlight;

Figure 2 is a sectional view taken on the line 2-2 of Figure 1, with parts broken away;

Figure 3 is a vertical sectional view taken on the line 3-3 of Figure 2; and

Figures 4 and 5 are sectional and elevational views of a form of clamping ring or plate.

For purposes of illustrating the invention, the bracket will be shown as particularly suited for supporting spotlights of the type which have a socket housing 10 and reflector 11. The socket housing is adapted to support a socket indicated at 12 and a lamp bulb indicated at 13 may be inserted in the socket. The wires 14 are brought in from the rear. While the reflector and socket cover may be secured together as a unit as in the ordinary construction of spotlights, they are, for convenience, here shown as being secured together and to the swivel bracket. The details of such construction are indicated in Figure 2. Here the reflector 11 and socket cover 16 are clamped between the inner and outer rings 15 and 16 by means of screws 17. These screws pass through the inner ring 15 and through holes in the reflector and socket cover and are threaded into tapped holes 18 in the ring 16.

The ring 16 may conveniently be made in the form of a casting and is provided with a lug 19 which extends downwardly and rearwardly so as to be clear of the reflector 11. This lug is provided with a central aperture 20 to accommodate the shank 21 of a clamping bolt 22. When the device is intended to be employed for supporting spotlights or the like on top of pipes or standards 23, the pipe is provided with a standard coupling 25 threaded onto the pipe and locked in place by a screw 24. A plug bearing 26 is provided with a reduced portion 26 adapted to receive the ring portion 27 of the clamping member 22. The lower end of the plug bearing is threaded as indicated at 28 so as to be received in the upper end of the coupling 23 and these two parts are secured together against turning by means of a lock screw 29. A clamping ring or plate 30 is interposed between the stationary supporting parts and the movable reflector support. This clamping ring 30 is formed on one face to fit the stationary parts and on the opposite face is provided with teeth or serrations 32 to engage with corresponding teeth or serrations 33 on the lug 19.

In the form of construction here shown, the stationary clamping ring 30 has an arcuate undercut 34 to accommodate the ring 27 and shallower undercuts 35 to accommodate the rounded part of the plug bearing 25 and the pipe coupling 23. The plate 30 is also apertured at 36 to accommodate the shank 21 of the clamping bolt.

When the device is assembled as indicated in the drawings, the parts are secured together by means of a wing nut 37 which per-
mits adjusting the spotlight to the various positions. When the wing nut is loosened one can turn the spotlight together with the clamp plate 30 about a vertical axis at which time the clamp plate 30 merely moves about the outer surface of the fixed parts. When it is desired to change the vertical angle of the spotlight or other device, the wing nut 37 is loosened sufficiently to permit rotating the device about the stud 21. When the wing nut is tightened, the engagement of the teeth 32 and 33 will hold the spotlight in the desired vertical angle and the clamping action of the plate 30 against the stationary parts will hold it against rotation about a vertical axis.

It is obvious that the invention may be embodied in many forms and constructions within the scope of the claims, and I wish it to be understood that the particular form shown is but one of the many forms. Various modifications and changes being possible, I do not otherwise limit myself in any way with respect thereto.

I claim:

1. In combination, a support having a plug fixedly carried thereby, a ring revolvable on a reduced portion of the plug and held between the plug and support, a clamp plate concave on its back face to fit the outside of the support and plug, the ring having a threaded stud passing through an aperture in the plate, a second plate rotatable on the stud and carried in front of the first plate, the plates having opposed friction faces, and a nut for clamping the parts together to secure the second plate against movement relative to the support.

2. In combination, a support having a plug fixedly carried thereby, a ring revolvable on a reduced portion of the plug and held between the plug and support, a clamp plate concave on its back face to fit the outside of the support and plug, the ring having a threaded stud passing through an aperture in the plate, a second plate rotatable on the stud and carried in front of the first plate, the plates having opposed friction faces, and a nut for clamping the parts together to secure the second plate against movement relative to the support, the second plate carrying a spotlight supporting portion.

Signed at Meriden, in the county of New Haven and State of Connecticut, this 23d day of March, 1929.

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