April 10, 1934. R. E. CROSSLEY 1,954,167

COMBINED ILLUMINATING AND FLOOD LAMP

Filed Jan. 4, 1932 2 Sheets-Sheet 1

Fig-1-

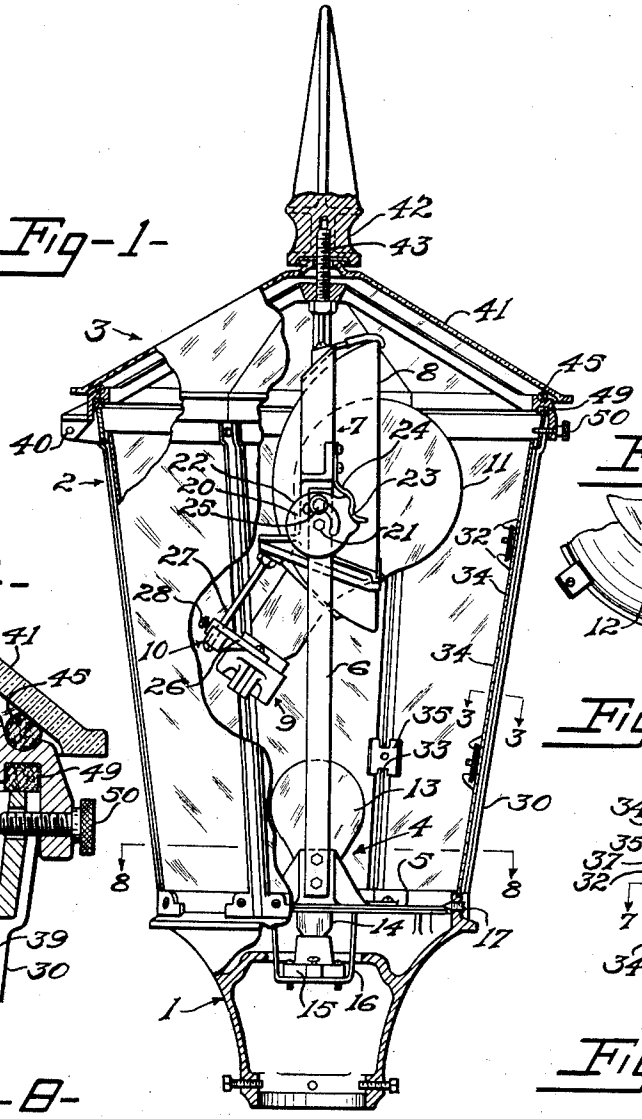


Fig-6-

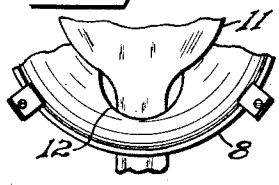


Fig-4-

Fig-3-

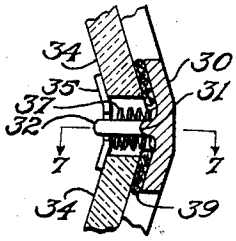


Fig-7-

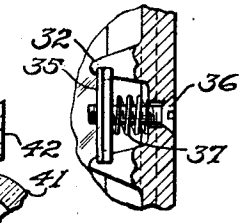


Fig-8-

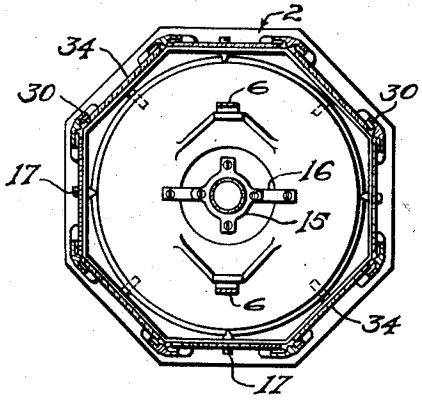
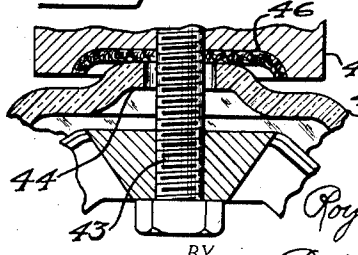


Fig-5-



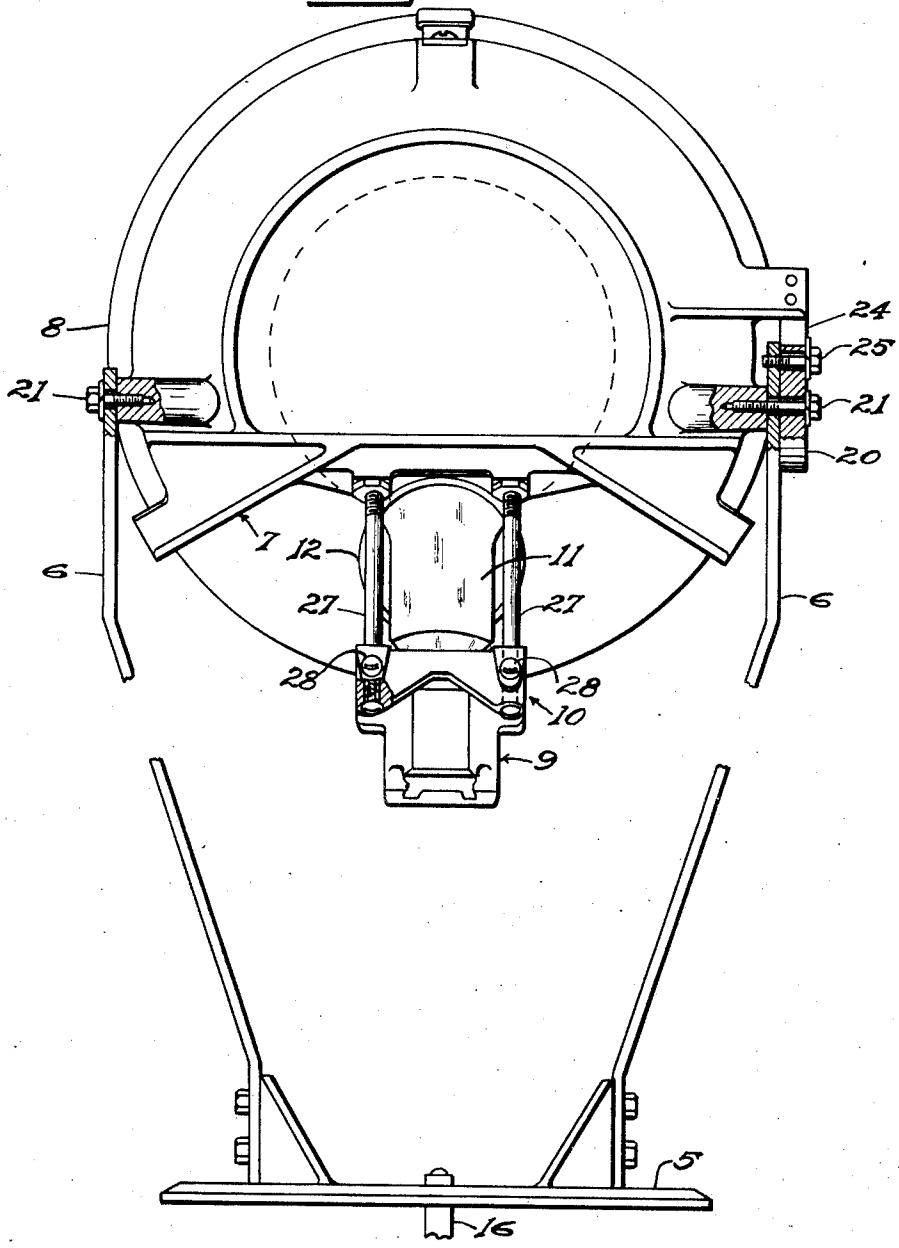
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COMBINED ILLUMINATING AND FLOOD LAMP

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Fig-2-



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UNITED STATES PATENT OFFICE

1,954,167

COMBINED ILLUMINATING AND FLOOD LAMP

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Application January 4, 1932, Serial No. 584,629

4 Claims. (Cl. 240—25)

This invention relates to lamps of the type used for flood lighting, as for example, lighting the exterior of a building. More particularly, the lamp herein described combines a flood light with street lighting lamps of the type usually mounted upon a post, or a pillar. The lamp has two sources of light, one located above the other, the upper light source being adjustable into different angular positions about an upright axis, and also about a horizontal axis, in order to direct it for flood lighting purposes. The lower light source is used for illuminating the interior of the unit, and for general illumination about the support for the unit.

The invention has for its object, a particularly simple and efficient lamp construction, whereby the lower lamp can be made readily accessible through the top of the globe frame by shifting the directable upper lamp, and the upper lamp returned to its adjusted position after being so shifted without the necessity of readjusting.

Other objects will appear throughout the specification.

The invention consists in the novel features and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawings, in which like characters designate corresponding parts in all the views.

Figure 1 is an elevation, partly in section, of this lamp.

Figure 2 is an elevation, partly in section, of the support for the flood lamp.

Figure 3 is a sectional view on line 3—3, Figure 1.

Figure 4 is an enlarged, fragmentary, sectional view showing the joint between the glass cover of the top and the top frame.

Figure 5 is an enlarged, fragmentary, sectional view of the joint between the apex of the glass cover of the top and the top frame.

Figure 6 is a fragmentary elevation of the reflector and the contiguous portion of the lamp.

Figure 7 is an enlarged, sectional view on line 7—7, Figure 3.

Figure 8 is a sectional view taken on line 8—8, Figure 1.

This lamp comprises generally, a base, a globe frame mounted on the base and having a movable top for permitting access to the interior of the globe frame and the lamps therein, lamps mounted in the frame, one above the other, the upper lamp being adjustable into different angular positions, one of these adjustments being a tilting movement about a horizontal axis, and means by which, when the upper lamp is adjusted in a certain position, it can be readily tilted out of such position for the purpose of removing and replacing the lamp therein, and for the purpose of removing and replacing the lower lamp below the same and then moved back into the exact adjusted position without any attention on the part of the operator to accurately relocate it in its adjusted position.

1 designates a hollow base mountable upon a post.

2 designates the globe frame having a movable top 3 for permitting access to the interior of the globe frame.

4 designates generally, a lamp support, this including a disk shaped turn-table 5 rotatably mounted on the base to cover the open top side thereof, and upwardly extending yoke arms 6 extending to the upper part of the globe frame.

7 is a lamp carriage for the upper lamp mounted between the yoke arms 6 on a horizontal axis.

8 is a reflector fixed in any suitable manner to the carriage 7.

9 is a lamp socket, and 10 a lamp socket support secured to the carriage 7.

11 is a lamp having a base extending through an opening 12 in the reflector and into the lamp socket 9.

13 is the lower lamp having its base 14 extending through a central opening of the turn-table 5 and into a lamp socket 15 carried by a suitable support 16 secured to the turn-table and depending into the base 1 in order that the wires, which extend through the base, may be readily secured to the binding posts of the lamp socket 15. The wires leading to the lamp socket 9 also extend from the base through the central opening of the turn-table.

The turn-table is adjustable through a complete circle in order to direct the reflector 8 in a predetermined horizontal radial angle, and is held in its adjusted position by a set screw 17. The lamp carriage 7 and the reflector are adjustable, as a unit, about a horizontal axis in order to direct the light from the upper lamp in a predetermined radial angle out of the horizontal and the carriage 7 is held in its adjusted position by impositive or friction latch means, which permits it to be temporarily shifted out of its adjusted position in order to give access to either the upper or lower lamp 11 or 13, through the top of the globe frame and then snap back into its present position without giving any attention to the adjustment.

As here shown, one yoke arm is provided with a member 20 which is shiftable about the pivot 21 of the carriage, this member having an arc shaped surface 22 struck from the center 21, and a single notch 23 at the end of the arc shaped surface 22; and the carriage 7 is formed with a spring pressed or resilient pawl or latch 24 coacting with the notch 23 and the surface 22. The member 20 is adjustable about the pivot 21 to any predetermined angular position and is held

in its position by a clamping screw 25 extending through an arc shaped slot in the member 20 and threading into one of the yoke arms 6. Thus, when the angular position of the lamp carriage 7 is determined, the member 20 is adjusted so that the pawl 24 engages the notch 23 and thus, upon movement of the carriage about its pivot, the latch will move out of the notch along the surface 22 and then when the carriage is shifted back, the latch will again re-engage the notch 23 and the lamp carriage will be located exactly in the same angular position as before.

This latching means is particularly advantageous in that both the lamps 11 and 13 are accessible through the upper top of the globe frame, and when it is necessary to remove and replace either one of the lamps, it is necessary to tilt the carriage 7, and that the tilting can be effected without upsetting the accurate adjustment of the angular adjustment of the lamp carriage 7, or rather, the lamp carriage 7 can be returned to its adjusted position without readjustment. The lamp socket 9 is adjustable axially to locate the lamp filament relative to the focus of the reflector and as here shown, the socket is carried by a yoke or fork 26 or any other suitable carriage, which is slidable along a guide as rods 27. The fork 26 is held in its adjusted position by suitable means as set screws 28.

The globe frame 2 is here shown as polygonal in general form in cross section, and as in the general form of an inverted truncated cone.

The frame consists of upright spaced frame members 30 with glass panels between them. Each of the frame members is formed with a lengthwise rib 31 along the median line thereof, and said rib is formed at intervals with spaced apart lugs 32. The glass panels 34 rest on the members 30 on opposite sides of the rib and are clamped in position by clamping members 35 interlocked with the lugs 32, and overlying the margins of the glass panes 34. The clamping members are held in position by screws 36 extending through the frame members 30 and the ribs thereof between the lugs 32 and threading into the clamping members. Springs 37 are interposed between the clamping members and the tops of the ribs and between the edges of the glass panes 34, the springs encircling the screws 36. Obviously, upon tightening of the screws, the clamping members will be yieldingly pressed against the margins of the glass panes 34. Suitable packing material 39 is interposed between the margins of the glass panes 34 and the frame members 30.

The top 3 includes a suitable metallic frame, which is preferably hinged at 40, and one piece conical glass top 41 overlying the frame. The glass top 41 is clamped to the top frame by means of a centrally located clamping nut 42 threading on a stud 43 at the apex of the top frame and thrusting against an outwardly extending hollow hub 44 at the apex of the glass 41. A suitable gasket 45 is interposed between the margin of the glass 41 and the margin of the top frame. Also, a suitable yielding packing material 46 is interposed between the nut 42 and the hub 44. A suitable gasket 49 is also inserted between the top frame and the globe frame 2. The top frame is held in its closed position by a suitable screw 50.

In installing these lamps, one gang of workmen mount the base, and globe frame, and top, and the electricians perform the wiring operation and adjust the lamp carriage 7 into the proper angular position and thus, after the workmen have installed the base, and globe frame, the adjustments can be readily made through the open top, although the wire connections, particularly to the lower lamp, are preferably made by removing one or more of the glass panels. This can be easily done by reason of the fastening means for the glass panels, the turn-table being provided with a suitable work hole for the wiring. The insertion and replacement of the lamps can be readily made without permanently upsetting the angular adjustment of the upper lamp and without readjustment of the upper lamp after it has been once adjusted.

What I claim is:

1. In a lamp of the class described, a hollow base, a polygonal globe frame fixedly mounted on the base, a lamp support mounted on the base and extending into the frame, said lamp support having a turn-table at its lower end closing the top of the hollow base and upwardly extending yoke arms, a tiltable reflector and lamp carriage pivoted between the yoke arms and adjustable about its pivotal axis into different angular positions, a lamp carried by the turn-table below the former lamp and a lamp socket for the second lamp carried by the turn-table on the under side thereof and depending into the base, said turn-table being adjustable about its axis to direct the first lamp and its reflector in any one of a plurality of directions radial with the axis of the turn-table.

2. In a lamp of the class described, a hollow base, a globe frame fixedly mounted on the base, a lamp support mounted on the base and extending into the frame, said lamp support having a turn-table at its lower end enclosing the top of the hollow base and upwardly extending yoke arms, a tiltable reflector and lamp carriage pivoted between the yoke arms and adjustable about its pivotal axis into different angular positions, a lamp and lamp socket carried by the turn-table below the former lamp, said turn-table being adjustable about its axis to direct the first lamp and its reflector in any one of a plurality of directions radial with the axis of the turn-table.

3. In a lamp of the class described, a hollow base, a globe frame fixedly mounted on the base and extending upwardly therefrom, a turn-table mounted on the base and closing the top thereof, said turn-table being provided with upwardly extending yoke arms, a reflector and lamp carriage assembly pivoted between the upper ends of said arms, a second lamp and lamp receptacle carried by the turn-table below the former lamp, said turn-table being rotatable relative to the base and globe frame, and means operable from the outside of the base to secure the turn-table in any of a plurality of adjusted positions.

4. In a lamp of the class described, a base, a globe frame fixedly mounted on the base, a turn-table mounted on the base within the globe frame and being rotatable on a vertical axis relative to the base and globe frame, a pair of yoke arms mounted on the turn-table and extending upwardly therefrom, a carriage pivotally mounted between the upper ends of said arms, means for securing a reflector to said carriage, a lamp socket mounted on said carriage, and means for adjusting the lamp socket toward and from the axis of the reflector.

ROYAL E. CROSSLEY.