July 3, 1934. J. A. O'NEIL 1,965,428

LIGHTING FIXTURE

Filed Aug. 25, 1932

Fig. 1.

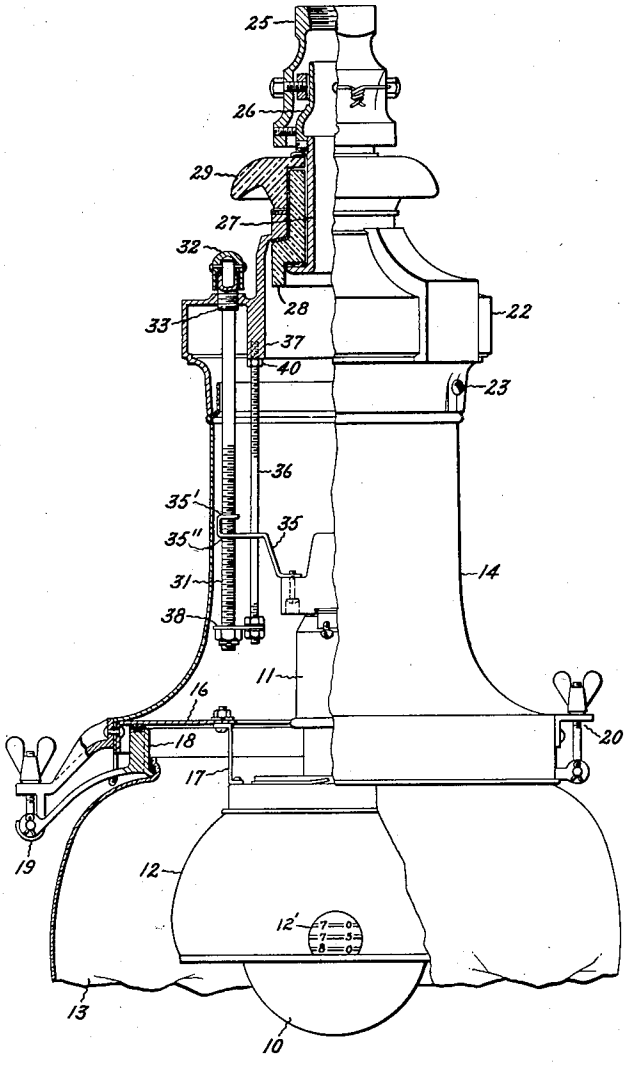


Fig. 2.

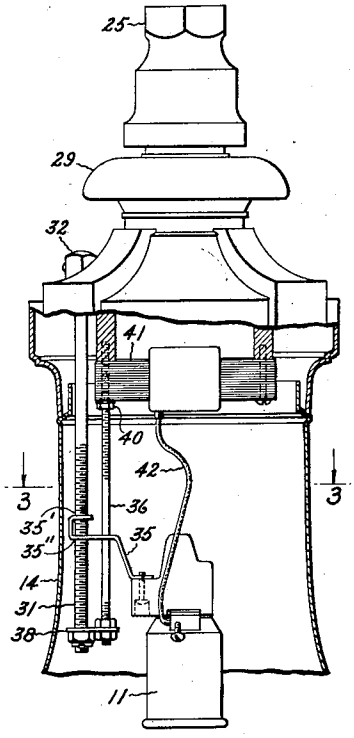
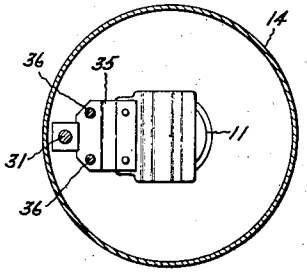


Fig. 3.



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Patented July 3, 1934

1,965,428

UNITED STATES PATENT OFFICE

1,965,428

LIGHTING FIXTURE

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Application August 25, 1932, Serial No. 630,392

3 Claims. (Cl. 240—78)

My invention relates to lighting fixtures and more particularly to lighting fixtures of the type used for street lighting.

In the manufacture of street lighting units it is necessary, for the sake of uniformity and economy, to manufacture units that will be adapted for use in the various multiple and series circuits in common use; and also for use with lamps of different capacities, without changing the outward appearance of the unit and without performing extensive changes within the unit.

It is therefore, the main object of my invention to provide an improved structure for a street lighting fixture using incandescent lamps, which will readily adapt itself for use in various lighting circuits and with lamps of different capacities.

In connection with a street lighting fixture, it is desirable to be able to adjust the lamp so as to bring it to correct position relatively to the refractor or other light directing means. Also, under certain circumstances, it is desirable to utilize in the construction a transformer through which the lamp is supplied with current. More specifically, the object of my invention is to provide an improved construction and arrangement wherein a transformer may be attached to the fixture when its use is required and wherein a portion of the adjusting means for the lamp forms a part of the fastening means for the transformer.

My invention will be better understood from the following description when considered in connection with the accompanying drawing and its scope will be pointed out in the appended claims.

Referring to the drawing, Fig. 1 is an elevation, partially in section, of a street lighting fixture built in accordance with my invention; Fig. 2 is an elevation of the same fixture, partly in section, illustrating the mounting of a transformer within the fixture in accordance with my invention, and Fig. 3 is a sectional view along line 3—3 looking in the direction of the arrows.

Referring to the drawing in detail, 10 is an incandescent lamp mounted in a socket 11 which is vertically adjustable by means of an adjusting device described hereinafter in detail. The lamp 10 is surrounded by a refractor 12, provided with a filament sighting section 12', and a globe 13, both supported from a sheet metal casing 14. The refractor 12 is supported from an annular flange 16 in the lower end of the casing 14, by means of a support 17 and the globe is supported from a collar 18 hinged to the casing at 19 and locked thereto at 20.

The casing 14 is attached to a cover 22 by any convenient means such as screws 23, for example, and the cover 22 in turn may be suspended from any convenient bracket (not shown) by means of a series of interlocked sleeves 25, 26 and 27 insulated from the cover 22 by bushing 28 and collar 29.

To adapt the fixture for use with differently sized lamps and to obtain the maximum lighting efficiency therefrom the socket 11 is vertically adjustable. The adjusting is effected by a threaded stud 31 which projects through the top of the cover 22 and is operable by means of a head 32 which is attached to the stud in any convenient manner. A rain-tight joint is formed at the top of the cover 22 by a bushing 33 threaded into the top of cover 22 and projecting into an annular space formed between the head 32 and the stud 31.

Adjustment of the socket 11 is obtained by turning the stud and obtaining a movement of a single support 35. The support 35 is made of sheet metal which is attached to the socket at one end and bent into a U-shape at the other end, thereby engaging the stud 31 at two points 35' and 35''. In order to prevent the support 35 from turning in a horizontal plane, guide rods 36 are provided. Guide rods 36 are attached to depending flange or wall, 37 at their upper ends and to the threaded stud 31 at its lower end by a plate 38.

The guide rod 36, in accordance with my invention, is locked into flange 37 by a locking nut 40 which is turned tightly up against the flange and thereby locks guide rod 36 into place. The threads on rod 36 are, however, extended so that if it is desired to use an inductance device 41, connected to the socket 11 by lead 42 as shown in Fig. 2 the guide rod may be used to support it. This is accomplished by lowering the nut 40 until enough space is provided for inserting the core between the nut 40 and the downwardly facing surface of the flange 37, inserting the core of the inductance device 41 therebetween and again turning the nut upward until the core is tightly held. The guide rods 36 are therefore adapted to perform two functions, first, the function of guiding the bracket 35 and second, the function of supporting and fastening the transformer or inductance device 41.

In connection with my invention, it will be noted that flange 37 presents a downwardly facing flat surface located above the lamp-socket supporting-bracket 35 and is adapted to have a transformer 41, which may form a part of the

lamp structure clamped against it by screws as shown at the right-hand side of Fig. 2, and by the guide rods 36. Viewed from one aspect, therefore, rods 36 may be considered as being extensions of certain of the fastening means for the transformer.

By my invention it will be seen that I provide an improved construction whereby when a lighting fixture is to be used with a transformer, the transformer may be clamped or fastened against the downwardly facing flat surface of flange 37 without requiring any change in the structure. The surface of flange 37 against which the transformer is fastened is located above bracket 35 a distance such that with the transformer in position, the lamp socket 11 carried by bracket 35 may be adjusted the amount required to correctly focus the lamp carried by the socket. On the other hand, if a transformer is not required it may be omitted without in any way affecting the functioning of the lamp adjusting means. In this manner a great saving is obtained in the installation of the inductance devices. Savings in the manufacture and stocking of the fixtures are also obtained since a single model can be adapted for a great number of different lighting circuits and a large number of differently sized lamp bulbs.

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

1. In a lighting fixture, the combination of a casing, a depending wall in the casing having a downwardly facing surface, an inductance device, means for fastening the inductance device against said surface, one or more of said fastening means being extended to form depending guide rod means, a support on the guide rod means, a lamp socket carried by the support, and means for adjusting the support along the guide rod means.

2. In a lighting fixture, the combination of a casing, a depending wall in said casing having a downwardly facing surface, a lamp socket and a support therefor, adjusting means for vertically adjusting said support, guide rods for said support mounted in said wall and depending from said downwardly facing surface, locking means arranged to cooperate with said surface for locking said guide rods in said wall, an inductance device connected to said socket, and means including said guide rods and said locking means for fastening said inductance device against said surface.

3. In a lighting fixture, the combination of a casing, a depending wall in the casing having a downwardly facing surface, said surface being provided with means whereby an inductance device may be fastened thereto, a guide rod depending from said surface and provided with means cooperating with said first named means for fastening an inductance device against said surface, a support on said guide rod, a lamp socket carried by said support, and means for adjusting the support along the guide rod.

JAMES A. O'NEIL.