May 29, 1951 C. NITARDY 2,555,000

FLUORESCENT LIGHTING FIXTURE

Filed Sept. 27, 1945

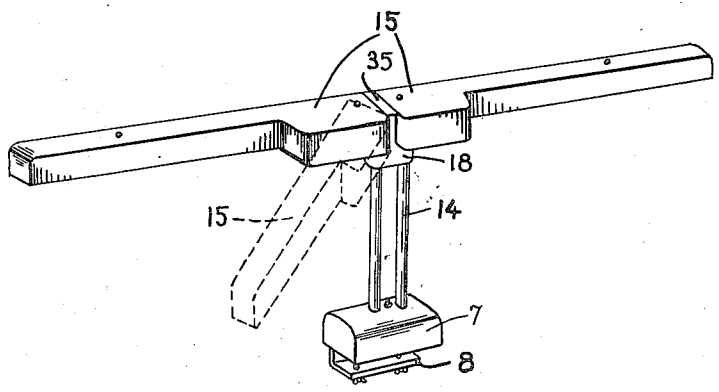
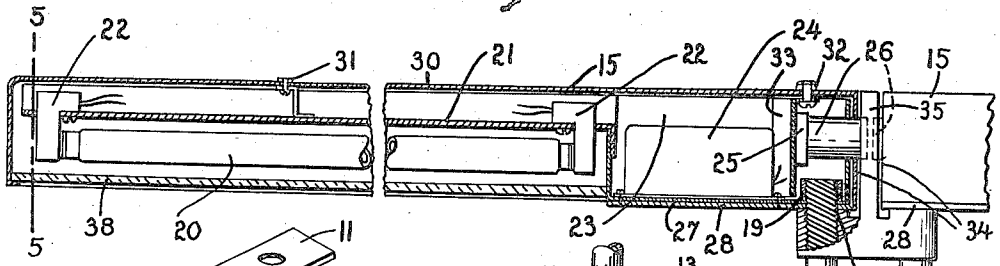


Fig. 1



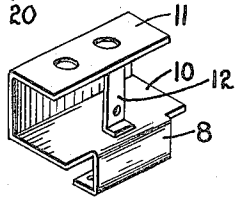


Fig. 3

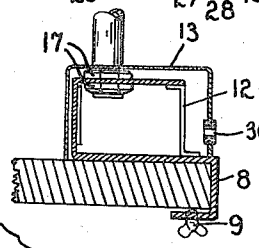


Fig. 4

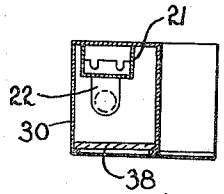


Fig. 5

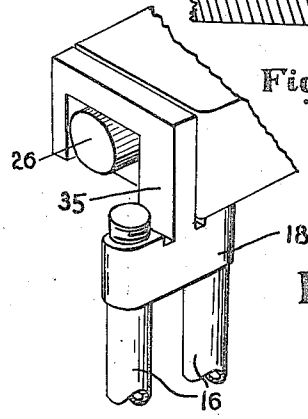


Fig. 6

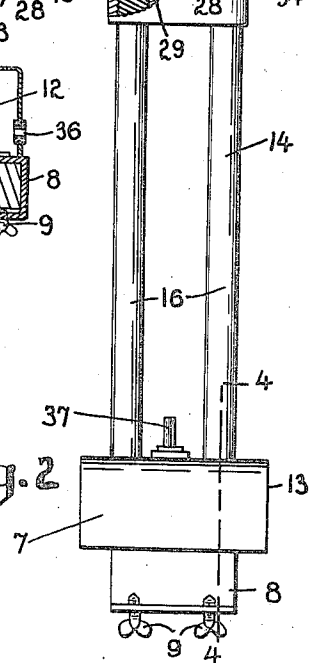


Fig. 2

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FLUORESCENT LIGHTING FIXTURE

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1 Claim. (Cl. 240—51.11)

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This invention relates to electric lighting fixtures and particularly to fixtures to be used upon desks, tables and the like.

An object of the invention is to provide a practical and efficient application of fluorescent light to localized illumination of relatively small areas.

A further object of the invention is to provide a lighting fixture of the type suggested having means adjusting the distribution of light upon the illuminated area.

A further object of the invention is to provide a fixture which is adjustable to obtain a maximum degree of diffusion upon the illuminated area.

A further object of the invention is to provide a fixture which is highly durable and attractive in appearance.

Other objects and features will more fully appear from the following description and will be pointed out in the appended claim.

The fixture constituting the invention is particularly adapted to use upon a working area such as a desk, table top or the like and is provided with a base to rest upon or be clamped to or adjacent the surface to be illuminated. A column structure is secured to the base and extends upward. The upper end of the column is provided with means to pivotally support one or more chassis members to swing in a horizontal plane. The chassis members contain means for holding at least one fluorescent lamp and the necessary auxiliary equipment. The lamps are arranged to throw their light downward.

To provide a better understanding of the invention a preferred embodiment thereof will be described and illustrated in the accompanying drawings in which:

Figure 1 is a perspective view of the fixture illustrating its adjustability;

Figure 2 is a front elevation of the fixture shown in partial section;

Figure 3 is a perspective view of the supporting frame for the fixture base;

Figure 4 is a cross sectional view on line 4—4, Figure 2;

Figure 5 is a cross sectional view on line 5—5, Figure 2; and

Figure 6 is a detail perspective view of the lamp chassis supporting means.

Any suitable means may be employed to properly position and hold the fixture upon the desk top or other surface to be illuminated. As shown in the drawings a base 7 is provided with a downwardly projecting clamping portion 8 which desirably fits over the desk top or other surface and is provided with clamping screws 9.

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The base is provided with an inner frame member 10 of which the clamping portion 8 is a part. The member 10 is generally channel shaped and is desirably made of relatively stiff sheet metal. The member 10 presents an upper flat portion 11 whose rigidity desirably is reinforced by means of a strut 12 secured thereto at its upper end and to the bottom portion of the member 10 at its lower end. The base member 10 desirably is covered by a decorative casing 13.

The upper portion 11 of the member 10 functions to support an upright or column structure 14 upon the upper end of which is supported a pair of lamp holding chassis 15. A desirable structure for the column member consists of a pair of tubular members 16 which project through spaced apertures in the portion 11 and are rigidly secured thereto by clamping collars 17 threaded upon the tubular members 16.

The upper ends of the tubes 16 are anchored in a frame member 18. The tubes 16 are threaded in and project through the member 18. The threaded upper ends of the tubes are provided with collars which act to pivotally secure the lamp chassis 15 to the tubes.

Each chassis 15 is constructed to receive a fluorescent lamp 20 and acts to direct the light downward. If desired the bottom openings in the chassis may be provided with diffusing panels 38.

Each chassis 15 is desirably composed of an inner member 21 which serves as a supporting framework for the lamp sockets 22 at its outer end and is provided with an enlarged chamber portion 23 which constitutes a housing for such auxiliary devices as the ballasts 24, and sockets 25 to receive lamp starting units 26. The bottom wall 27 of the inner chambered portion 23 desirably is reinforced for at least a portion of its area with a relatively heavy metal plate 28. The forward inner corner of the bottom 27 and plate 28 of each chassis have formed therein apertures 29 through which the upper ends of the tubes 16 extend. To assemble the chassis upon the fixture the ends of the tubes are passed through apertures 29 and the collars 19 are turned down until the bottom walls 27 are held firmly between the collars and the upper face of the member 18.

The collars 19 are so adjusted that the chassis will be held firmly in a horizontal position but are free to rotate upon the tubes 16. Desirably the collars are locked in position by set screws.

A smoothly contoured outer decorative casing 30 is placed over and encloses the inner member

21. The members 21 and 30 may be secured together in any desired manner as by means of bolts or screws 31 and 32. The screw 31 secures the outer end of the member 21. The bolt 32 passes through an aperture in a transverse member 33 welded or otherwise secured to the member 21. The member 33 also serves to support the starter sockets 25 in such position that the starter units 26 when inserted in the sockets project through apertures in the inner walls 34 of the chassis and extend outside a short distance to be grasped by the fingers to remove or insert a starter. The member 18 is provided with a central spacing member 35 extending upward, rearward and downward between the inner end walls 34 of the chassis. The outer ends of the starter units 26 project into the space formed by the member 35.

The wiring for the fixture is not shown but may be arranged in any suitable manner. Desirably the power supply wire is led in the base member 7 through an aperture 36 formed in the casing 13. The current may be controlled by a suitable switch 37 from where lead wires pass through the tubes 16 to their respective chassis 15 and are connected to the lamps in the conventional manner.

A lamp constructed according to the invention is adaptable to many lighting requirements. The two arms may be swung into alignment as shown in full lines in Figure 1 of the drawings in which case a maximum of diffusion takes place laterally of the illuminated area and is distributed throughout the relatively wide area covered by both lamps.

To vary the distribution and character of the illumination one or both of the lamp chassis 15 can be swung into angular positions such as the dotted position in Figure 1. Let is be assumed that one lamp chassis is swung into a position at right angles to the other. In this case an ideally diffused light is obtained since the diffusing effect of the tubular lamps takes place in two directions at right angles to each other. When the lamps are so positioned or approximately so positioned no distinct shadows

are cast by objects between the lamps and the illuminated surface.

Many different arrangements of the lamps may be made to suit a specific lighting objective or problem. For example, when the fixture is to be used upon a desk or like surface in the corner of a room or against a wall, one lamp chassis may be arranged against the wall or when the desk is in a corner both lamp chassis can be placed against the angled walls of the corner. Under such conditions the efficient qualities of the fixture function at their maximum and moreover the decorative effect of the fixture and room is enhanced.

What I claim is:

A fluorescent lighting fixture comprising: a base; a pair of standards mounted on said base; a yoke mounted on said standards near the upper ends thereof, said yoke having a pair of apertures therein through which said standards project and a channel-shaped spacing member connected to said yoke between the apertures therein and extending upwardly and rearwardly therefrom; and an elongated lamp-receiving chassis pivotally mounted on one end thereof on the top of each of said standards, each chassis having lamp sockets for supporting a lamp in the outer end of said chassis, a ballast housing at the inner end of said chassis and a lamp starter socket on the inner end wall of said chassis.

CARL NITARDY.

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