May 30, 1944. E. G. K. ANDERSON 2,349,924

ELECTRICAL FIXTURE

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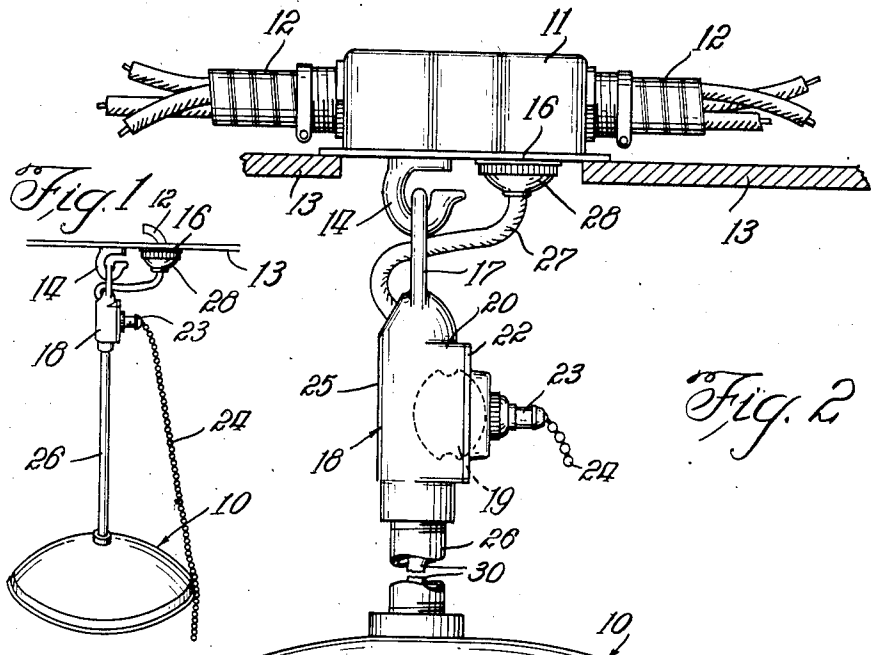


Fig. 1

Fig. 2

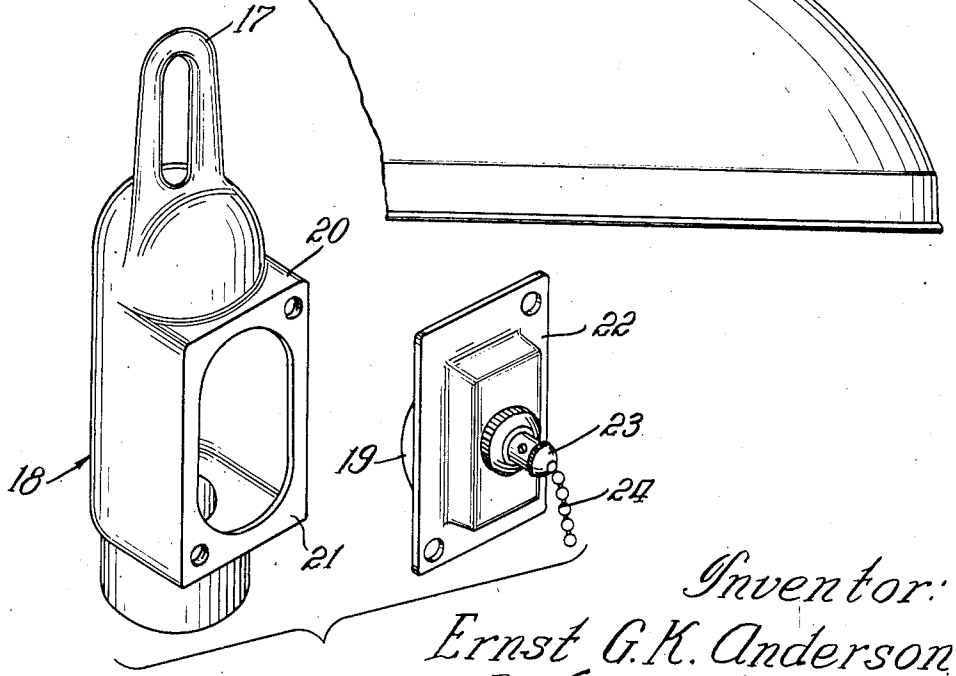


Fig. 3

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ELECTRICAL FIXTURE

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2 Claims. (Cl. 248—343)

This invention relates generally to electrical fixtures and in particular to an electrical fixture of pendent type.

Electrical fixtures are well known in the prior art for suspending an electrical unit from a conduit box or like structure having a hook and an electric socket or receptacle thereon. The fixture is provided with a supporting portion adapted for connection with the hook and also carries a plug extension for insertion in the receptacle. In some of the prior art fixtures the switch mechanism for controlling the operation of the electrical unit is assembled with the conduit body so that the operating lever therefor extends outwardly from one side of the conduit box. Where installations require the conduit box being located entirely above an opening in the ceiling or supporting wall the operating lever is generally inaccessible so that the usual pull chain operatively associated therewith must be extended through a separate opening in the supporting wall. This of course is objectionable from an appearance standpoint and further is generally inconvenient due to the chain frequently catching on the sides of the opening therefor. In other of the prior art fixtures the switch mechanism is assembled as a part of the electrical unit and is located in a position immediately above the unit. This construction is particularly objectionable where the electrical unit may be of considerable bulk, such as in the usual electric light reflector assemblies, due to the pull chain overlying a portion of the reflector and then dropping vertically therefrom. Thus on operation of the switch mechanism the pull chain usually becomes entangled with the reflector so that the vertical hanging portion of the chain must be lifted and extended in a somewhat longitudinal direction to operate the lever. Along with these inconveniences there is the further inconvenience of the electrical fixture being excessively rocked each time the operating lever is actuated.

It is an object of this invention, therefore to provide an improved electrical fixture.

Another object of this invention is to provide a switch unit adapted to be suspended from one end and attachable with an electrical unit at the opposite end thereof.

A further object of this invention is to provide a pendent electrical fixture including a switch mechanism adapted to be operated freely without interference from any portion of the electrical fixture or the fixture supporting structure.

A feature of this invention is found in the provision of a preassembled pendent switch unit which is simple and rugged in construction, adapted to be readily and quickly assembled in mechanical and electrical connection with an electrical unit, and having an eye portion at one end for suspension purposes to provide in all a complete pendent fixture.

Another feature of this invention is found in the provision of a fitting for receiving a switch mechanism therein adapted to be suspended from one end and attached with an electrical unit at its opposite end, with the wires electrically connecting the switch mechanism and electrical unit being extended through the fitting in a substantially vertical direction and generally free of the switch mechanism.

Further objects, features, and advantages of this invention will become apparent from the following description when taken in connection with the accompanying drawing in which:

Fig. 1 is a view in perspective showing the complete assembly of the electrical fixture of this invention;

Fig. 2 is an elevational view of the electrical fixture in assembly with a conduit fitting; and

Fig. 3 is an exploded view in perspective of a pendent switch unit for the electrical fixture.

With reference to Figs. 1 and 2 of the drawing the electrical fixture is illustrated in assembly with an electric lighting unit 10 including a reflector. The improved fixture includes a body member 11 which is illustrated in Fig. 2 as a standard conduit box or fitting having conduits 12 leading thereto. The box 11 is supported entirely above an opening in a ceiling or wall portion 13 with the lower side thereof, as viewed in Fig. 2, provided with a hook portion 14 and an electric receptacle or socket 16 located within the opening.

The electrical unit 10 and body member 11 are connected together by means including a fitting having a housing 18 with an eye portion 17 formed at one end for connection with the hook portion 14 (Figs. 2 and 3). The body member 18 is shown as being of a substantially tubular shape and is provided intermediate the ends thereof with an enlarged portion 20 having a flat open side 21 for receiving a switch mechanism 19 therein. It is to be understood of course that the housing may be of any other suitable shape. The switch mechanism 19 is of a preassembled type adapted to be carried in a cover 22 for closing the side 21, and has an operating lever 23 projecting outwardly from the cover when the cover is in a closing position. The cover 22 at the support for the switch mechanism is bulged or raised outwardly so as to position the switch away from the housing wall 25. An open space is thus provided in the housing in a direction longitudinally thereof for a purpose to be later noted. The lever 23 is shown as being of a universal type connected with a usual ball chain 24. The lower end of the housing 18, as viewed in Figs. 2 and 3, is internally threaded for threaded engagement with a conduit or tubular connecting

member 26, the opposite end of which is attached to the electrical unit 10 by threaded engagement therewith.

The switch mechanism 19 and the electrical unit 10 are electrically connected by conductor means, indicated at 30, carried within the housing 18 and tubular connecting member or conduit 26. As appears best in Fig. 2 the conductor means are extended in a substantially straight line through the connector 26 and the space provided in the housing 18 between the housing wall 25 and the switch mechanism 19 and includes a wire 27 extended outwardly through an opening in the upper end of the housing. The wire 27 has an electric plug 28 thereon for insertion in the receptacle 16. It is seen, therefore, that the switch unit, including the switch mechanism 19 and housing 18, are releasably attachable at one end with the hook 14 and at the opposite end thereof with the electrical unit 10. The conductor means 30 are easily accessible through the open side 21 for connection with the switch mechanism and readily positioned in the space provided therefor in the housing 18 on closing of such side by the cover 22.

From a consideration of the above description it is apparent that the conduit structure 11 and conduits 12 may be completely installed separately from the electrical fixture, with the box 11 supported either entirely above the wall 13 or below such wall without in any way interfering with its assembly with the electrical fixture. Thus as is shown in Fig. 1 the hook 14 and receptacle 16 may be carried directly on the wall 13 with the electrical connections 12 for the socket 16 being extended through the wall and suitably supported on the top or inside thereof. Since the operating lever 23 is included as a part of the pendent switch unit it is unnecessary to make any provision therefor in the electrical assembly on the wall 13.

It is to be noted further that the switch unit is supported directly at the hook 14 so that any force applied on the chain 24 to operate the lever 23 is applied substantially at the pivotal support of the switch unit. A rocking of the electrical fixture during the operation of the lever 23 is thus practically eliminated. The operation of the lever 23 is further facilitated by virtue of the electrical unit 10 being spaced from the switch unit by the connector member 26 so that the chain 24, as is clearly shown in Fig. 1, is adapted to hang in a substantially vertical direction to the outside of the electrical unit 10. The chain 24, therefore, when manipulated to operate the lever 23 is practically free of the electrical unit 10 so as to further eliminate any rocking action of the fixture.

By virtue of this assembly of the switch unit in the electrical fixture the complete fixture is capable of being entirely assembled separately from its associated hook 14 and receptacle 16. Its installation is a simple matter of merely connecting the eye 17 on the hook 14 and inserting the plug 28 within the receptacle 16. In many instances, such as in army barracks, auditoriums or the like a conduit box and associated hook 14 and socket 16 may be installed wherever light may be desired and the electrical fixtures can be attached thereto whenever required. The location of the conduit above the ceiling does not detract in any way from the appearance of the room while the detachment and suspension of the electrical fixtures is simply accomplished in a minimum of time.

The invention thus provides an improved electrical fixture including a detachable pendent switch assembly constructed and relatively assembled in the fixture so as to be easily connected electrically with the electrical unit and freely operated without interference with the fixture supporting structure or the suspended electrical unit.

Although the invention has been described with respect to a preferred embodiment thereof it is to be understood that modifications may be made therein which are within the full intended scope of the invention as defined in the appended claims.

I claim:

1. In an electrical fixture including a first portion carried on a wall structure and a second portion detachably suspended from said first portion, the means for detachably suspending said second portion from said first portion including a conduit structure with conductors therein, said structure being connected at one end with said second portion, a conduit box at the opposite end of said conduit structure having an opening in each end thereof, and a central portion with one side projected laterally therefrom, with said one side being open, a cover for said open side, a switch mechanism carried on said cover, said switch mechanism, when said cover is in a closed position relative to said open side, being arranged in said central portion in a spaced relation with the wall thereof, with said conductors being connected to said switch mechanism and second portion and extended longitudinally of said conduit box for connection with said first portion, and a portion integrally formed with said conduit box and adjacent one end thereof adapted for detachable connection with said first portion to suspend said conduit structure and second portion as a unit from said first portion.

2. In an electrical apparatus including a fixed electrical means and electrical means detachably suspended from said fixed electrical means, the means for suspending said detachable means from said fixed means including a conduit structure with conductors therein and having a conduit box adjacent one end thereof and connected at its opposite end with said detachable means, said conduit box having one end open and adapted for threaded engagement with the next adjacent part of said conduit structure, and a partially closed opposite end formed with an integral portion adapted for detachable connection with said fixed means, said conduit box having a central portion of enlarged section open at one side, and a cover for said one side adapted to carry switch mechanism thereon, said switch mechanism, when said cover is in a closed position relative to said open side, being located in said enlarged central portion in a spaced relation with the wall of said central portion, with the conductors in said conduit structure being connected with said switch mechanism and extended longitudinally through said conduit box for connection with said detachable means and said fixed means, said opposite end of the conduit box having an opening therein for said conductors.

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