Oct. 16, 1934. C. D. WOOD 1,977,105

LIGHTING DEVICE

Filed June 4, 1934

Fig. 1

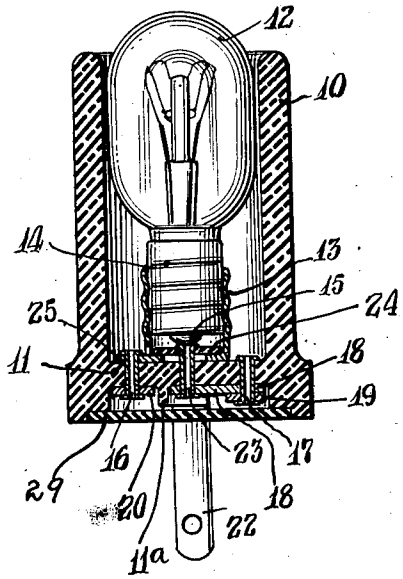


Fig. 2

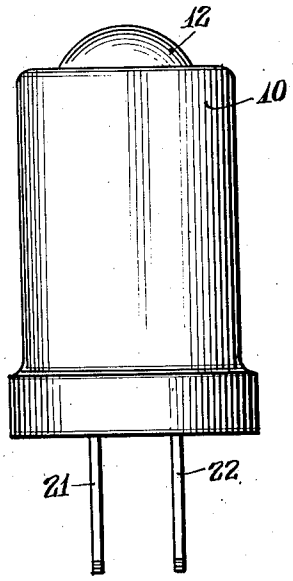


Fig. 3

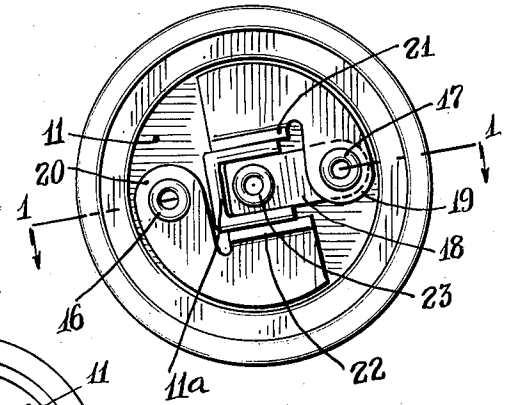
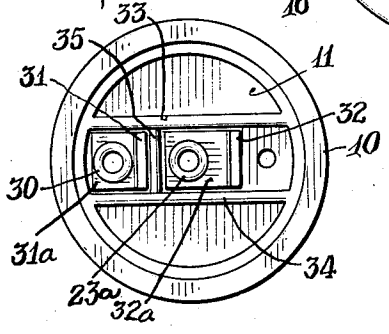


Fig. 4



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LIGHTING DEVICE

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Application June 4, 1934, Serial No. 728,811

1 Claim. (Cl. 240—73)

My invention relates to a new and improved lighting device.

One of the objects of my invention is to combine an electric lighting device, such as an ordinary incandescent bulb, with a receptacle plug.

Another object of my invention is to provide an ordinary receptacle plug with a chamber made of suitable insulating material, said chamber serving as a housing for the socket of the electric-light bulb, and also serving to enclose and protect the major portion of said bulb.

Another object of my invention is to provide a combination plug and lighting device, which can be inserted into any suitable electric outlet or receptacle, in order to provide an emergency light.

Another object of my invention is to provide a device of this type which shall be of very simple construction.

Other objects of my invention will be set forth in the following description and drawing which il ustrates a preferred embodiment thereof, it being understood that the above statements of the objects of my invention are intended to generally explain the same without limiting it in any manner.

Fig. 1 is a vertical sectional elevation of the improved device, showing the electric-light bulb in position.

Fig. 2 is an elevation of said device.

Fig. 3 is a bottom plan view of the device, the insulating cover having been removed.

Fig. 4 is a bottom plan view which illustrates another embodiment of the device.

The device generally comprises a housing 10, which can be made of any suitable insulating material, such as porcelain or the like. This material can be one of the well known resins, such as a phenol formaldehyde condensation resin, which can be readily molded.

Said device 10 is provided with plug blades 21 and 22.

As shown at the bottom of Fig. 1, the bottom of the housing is provided with a recess, and said recess is provided with a shoulder. A closure member 29, made of any suitable insulating material, is provided with openings through which the blades 21 and 22 may project. Said closure member 29 can be made of fibre or any other suitable insulating material, so that it can be bent to a sufficient extent, although said closure member 29 has sufficient rigidity to maintain it normally in the shape shown in Fig. 1.

Said closure member 29 can be slipped into position and it is frictionally held upon the blades 21 and 22, so that no additional means are necessary for holding said member 29 in position.

Referring to Fig. 3, the blade 22 is integral with an arcuate member 20. The blade 21 is integral with an arcuate member 19. Said members 19, 20, 21 and 22 are made of any suitable metal, such as brass or the like.

A rivet 17 connects the member 19 to a superposed metal blade 18 and said rivet 17 also passes through the bottom wall of the housing 10.

The device has been described with reference to its position shown in Fig. 1, but of course the device can be used in any position.

A rivet 16 passes through the curved metal blade 20, and through an inner radial metal blade 25. This blade 25 is suitably connected to the lamp socket 13, which is made in the usual manner, so that said metal socket 13 is provided with a thread.

The metal blade 18 fits in a U-shaped recess of a rib 11*a*, which is integral with the bottom wall of the housing 10.

A central rivet 23 passes through said blade 18, and the inner end of said rivet 23 holds a sheet of insulating material 24, such as mica or the like.

The base 14 of the lamp is of the usual construction, and said lamp 12 is provided with a filament of the usual type, one end of said filament being connected to the metal base 14, and the other end of said filament being connected to the central contact 15.

The central contact 15 abuts the inner end of the rivet 23, when the lamp 12 has been screwed into position.

The circuit of the lamp is as follows, when the blades 21 and 22 are inserted into a suitable plug receptacle, so that said blades 21 and 22 are connected to the terminals of a suitable source of direct or alternating current:—

Assuming that the blade 21 is connected to the plus side of the current, during a half-cycle, the current passes through blade 21, arcuate metal blade 19, outer radial blade 18, rivet 23, to the central contact 15, through the filament of the lamp 12, to the base 14, to the socket 13, through metal blade 25, through rivet 16, through arcuate blade 20, and then to the plug blade 22.

The conducting parts of the device are all made of any suitable metal.

The closure member 29 firmly closes the chamber which is provided below the bottom wall 11 of the housing, in order to prevent any short circuits.

The arcuate blades 19 and 20 can have their

curved surfaces abutting the adjacent cylindrical wall of said chamber, a slight space being shown in Fig. 3 in order to more clearly illustrate said parts.

Likewise, the blades 21 and 22 abut the adjacent legs of the rib 11*a*, of the bottom wall 11. This produces a device in which the parts are prevented from shifting, with the use of a minimum number of rivets or other fastening parts.

For example the blade 19 is prevented from turning relative to the rivet 17, due to the contact of the plug blade 21 with the adjacent leg of the rib 11*a*, and due to the contact of the curved part of the blade 19, with the adjacent cylindrical wall of the housing 10.

The blade 18 fits snugly between the legs of the rib 11*a* and said blade is also held in position by the rivets 17 and 23.

The blade 20 is similar in construction and location to the blade 19 so that it is firmly held in position by the use of a single rivet 16.

In the embodiment shown in Fig. 4, the blades 31 and 32 correspond to the blades 21 and 22. Said blades 31 and 32 have integral extensions 31*a* and 32*a*. The rivet 30 corresponds to the rivet 16 and it holds the member 31*a* in position. The rivet 23*a* corresponds to the rivet 18. Said members 31*a* and 32*a* are located in a depression which is located between the ribs 33 and 34 and the side walls of said members 31*a* and 32*a* substantially abut the adjacent surfaces of said ribs 33 and 34.

A rib 35 separates the blade 31 from the extension 32*a*.

The principle of the device shown in Fig. 4 is substantially the same as that shown in Figs. 1–3, but the device shown in Fig. 4 permits a cheaper construction.

The ribs 33 and 34 prevent the turning of the members 31*a* and 32*a*, so that each of the plug blades can be firmly held in position, by means of a single rivet.

The ribs 33, 34 and 35 are integral with the bottom wall 11 which is made of porcelain or other suitable insulating material.

I do not wish to be limited to the details of the preferred embodiment which has been described as illustrative of the invention, as numerous changes and omissions can be made without departing from the spirit of the invention.

The housing 10 substantially encloses the bulb 12, and it may completely enclose said bulb although I prefer to have a part of the bulb 12 projecting from said housing 10. By substantially enclosing the filament of the lamp in the casing, as shown in Fig. 1, a direct glaring light is substantially eliminated.

By making said housing of porcelain or of a suitable insulating resin or the like, preferably colored, and which is more or less translucent, a soft and diffused light is secured, so that the device can be used in sick rooms, for example, by plugging the light into an outlet which is near the floor. This will give a soft general illumination, without disturbing the patient. However, the housing may be made of any material.

As shown in Fig. 1, the lamp 12 fits closely within the housing or casing 10. Likewise the interior wall of the housing 10 is substantially cylindrical. Hence the housing 10 does not act as a reflector to produce a general bright illumination. On the contrary, the major portion of the light passes through the translucent wall of the housing 10 so as to give a general soft and diffused light.

I claim:

A lighting device including a cup-shaped housing of translucent insulating material having a bottom wall and an integral and substantially cylindrical portion, a lamp socket within the substantially cylindrical portion mounted on said wall, a lamp in said socket, plug blades rigidly mounted on the outer sides of said wall and electrically connected to said socket, said lamp fitting closely within said cylindrical portion and having its filament located substantially entirely within the outer end of the substantially cylindrical portion, whereby a soft and diffused light is produced.

CORNELIUS D. WOOD.