J. O. GILL.

ELECTRIC LIGHT FIXTURE.

APPLICATION FILED NOV. 7, 1917.

1,270,025. Patented June 18, 1918.

Fig. 3

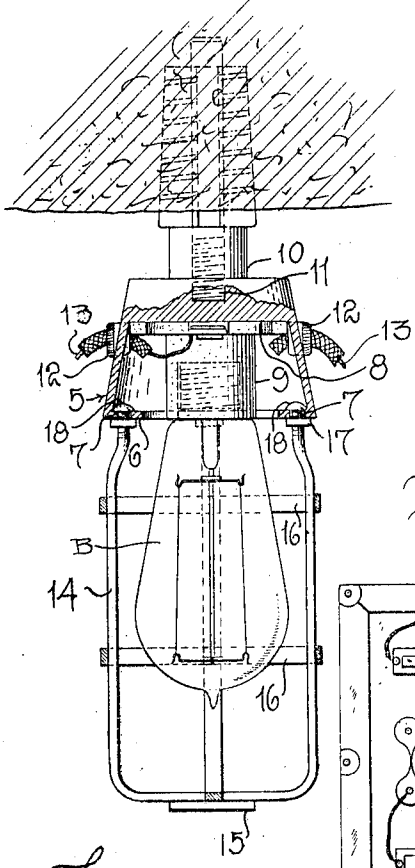


Fig. 1

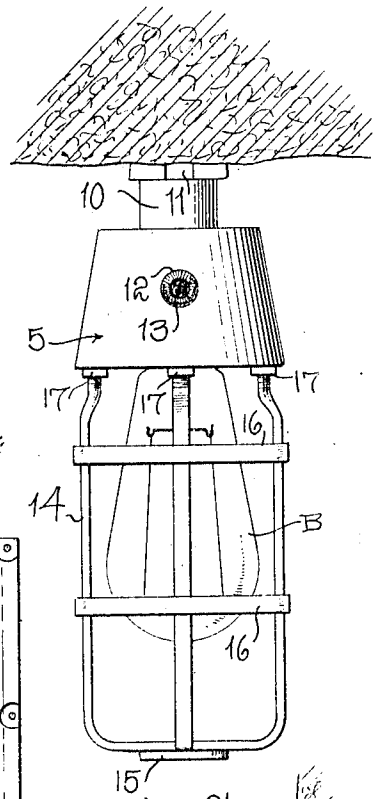


Fig. 4

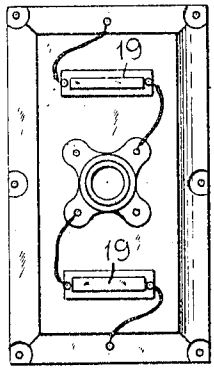


Fig. 2

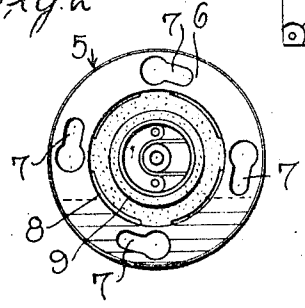
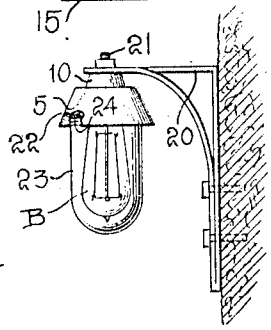


Fig. 5



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ELECTRIC-LIGHT FIXTURE.

1,270,025. Specification of Letters Patent. Patented June 18, 1918.

Application filed November 7, 1917. Serial No. 200,818.

To all whom it may concern:

Be it known that I, JOHN ORWEN GILL, a citizen of the United States, residing at Barnesboro, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Electric-Light Fixtures, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved electric light fixture, and has for its primary object to provide a fixture which is particularly designed for use in mines, subways, tunnels, basements, and like places where the socket and the electric light bulb require a guard or protection.

It is another and more particular object of my invention to provide a fixture for the above purpose, embodying a hood or housing having means for the connection of the same to an expansible bolt fixed in the wall or ceiling, and means for attaching a bulb guard to the housing wall.

It is also a further general object of my invention to provide a fixture as above characterized, which is quite simple and inexpensive in its construction, highly convenient and serviceable in practical use, and may be manufactured and installed at relatively small cost.

With the above and other objects in view, my invention consists in the novel features of construction, combination, and arrangement of parts to be hereinafter more fully described, claimed, and illustrated in the accompanying drawing, in which,

Figure 1 is a side elevation illustrating one embodiment of the invention;

Fig. 2 is a bottom plan view of the socket housing;

Fig. 3 is a vertical sectional view through the fixture;

Fig. 4 is a bottom plan view illustrating a slightly modified form of the housing; and

Fig. 5 is a side elevation, partly in section, illustrating another manner of mounting the fixture and a different form of the guard for the light bulb.

Referring in detail to the drawing, and more particularly to Figs. 1, 2 and 3 thereof, 5 designates the housing for the bulb socket, preferably constructed of metal, and which may be of any desired form in plan. This housing is opened at one end and provided upon its wall with an inwardly extending flange 6 having spaced keyhole slots 7 formed therein. To the wall 8, at the other end of the housing 5 and upon the inner face thereof, the bulb receiving socket member 9 is suitably secured. This end wall 8 of the housing is further provided centrally thereof with a downwardly projecting boss 10 having a threaded bore extending through the end wall 8 and designed to receive the threaded shank of a bolt indicated at 11. This bolt may be any one of the several well known types of expansible bolts and is adapted to be anchored at its other end in the ceiling or wall of the mine corridor or passage.

In the side wall of the housing 5, at diametrically opposite points, suitable rubber bushings 12 are arranged to insulate the wires 13 from the housing wall, said wires being connected to the respective contact terminals of the bulb socket in the usual manner. In lieu of the bushings 12, a single pipe or conduit may be threaded into the housing wall through which the wires 13 can be extended.

The bulb shown at B has the usual threaded plug at one end for engagement in the socket member 9, and for this bulb a suitable guard is provided. This guard, as herein shown, consists of spaced, parallel, metal bars or rods 14 rigidly fixed to each other at one of their ends by the plate 15. These bars are also connected and braced at spaced points by means of the metal rings 16. The other end of each bar 14 of the guard is threaded to receive a nut 17 and a head 18 is provided upon the terminal of this threaded end of the bar. In connecting the guard to the housing, it will be understood that the heads 18 are adapted to be engaged through the enlarged ends of the keyhole slots 7 and said guard then turned to dispose the threaded shanks of the bars 14 in the narrower ends of the slots. The nuts 17 are finally adjusted into tight clamping engagement against the flange 6, whereby the guard is securely held in connection with the housing. In this manner, it will be seen that the lamp bulb is protected against possible breakage by being accidentally struck.

In Fig. 4, I have illustrated a slightly modified form of the device wherein the hood or housing is of rectangular form in plan, and to the end wall thereof at oppo-

site sides of the bulb socket, the fuses indicated at 19 are secured. It is apparent, of course, that a single fuse may be used in connection with each housing if desired. It will also be manifest that in the use of this form of the housing, the shape of the bulb guard will be somewhat different from that shown in Fig. 1.

In Fig. 5 of the drawing, I have shown a slightly different form of the device, wherein the housing is suspended from the arm of a bracket member 20 by means of the bolt 21 which is threaded into the boss 10. The outer wall of the housing is provided adjacent to the open end of the housing with an internal, annular shoulder 22, the thickness of the housing wall being reduced and such reduced portion threaded to receive one end of a glass globe 23 disposed over the electric light bulb B. Preferably, a packing ring 24 of asbestos, is disposed between the end of this globe and the shoulder 22. Thus, any possibility of fire or sparks escaping from the housing when the flue blows out or the lamp bulb breaks, is obviated. This form of the device is particularly designed for use in mines and other places where gas may accumulate and which might possibly be ignited from such cause.

From the foregoing description, taken in connection with the accompanying drawing, the construction, manner of operation, and several advantages of the described forms of my invention will be clearly and fully understood. The device as a whole is relatively simple, highly convenient and serviceable in practical use, and may be cheaply manufactured and installed. Many other variations of the invention than those above explained are, of course, possible, and it is therefore to be understood that while I have herein specifically set forth several practical constructions of the device, the same is nevertheless susceptible of still further modifications in the form, proportion, and arrangement of its several detail features without departing from the spirit or sacrificing any of the advantages of the invention as claimed.

Having thus fully described my invention, what I desire to claim and secure by Letters Patent is:—

1. An electric light fixture including a housing open at one end, a bulb socket fixed within the housing to the opposite end thereof, the body wall of said housing being provided with openings on opposite sides thereof through which circuit wires extend for connection to said socket, a lamp bulb guard and means for detachably connecting the guard to the open end of the housing, and means on the closed end of the housing for the connection of said housing to a supporting bolt whereby the housing, the lamp bulb and the guard may be removed as a unit from connection with said bolt without disconnecting the circuit wires from the bulb socket.

2. An electric light fixture including a housing open at one end and having a wall at its other end provided with a central, outwardly projecting boss having a threaded bore adapted to receive the shank of an attaching bolt, a bulb socket fixed to the inner face of said wall, the housing wall at its open end having an inwardly projecting flange, said flange being provided with spaced keyhole slots therein, a lamp bulb guard having spaced bars provided with threaded end portions terminating in enlarged heads, said heads being adapted for engagement through the enlarged ends of the respective keyhole slots, whereby the threaded ends of said members may be turned into the narrower portions of the slots, and clamping nuts engaged on the threaded ends of said members for engagement with said flange.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JOHN ORWEN GILL.

Witnesses:
J. H. Williams,
William F. Dill.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."