

R. H. LEVERIDGE.
 LOCKED GUARD FOR ELECTRIC LAMP BULBS.
 APPLICATION FILED APR. 29, 1911.

1,050,149.

Patented Jan. 14, 1913.

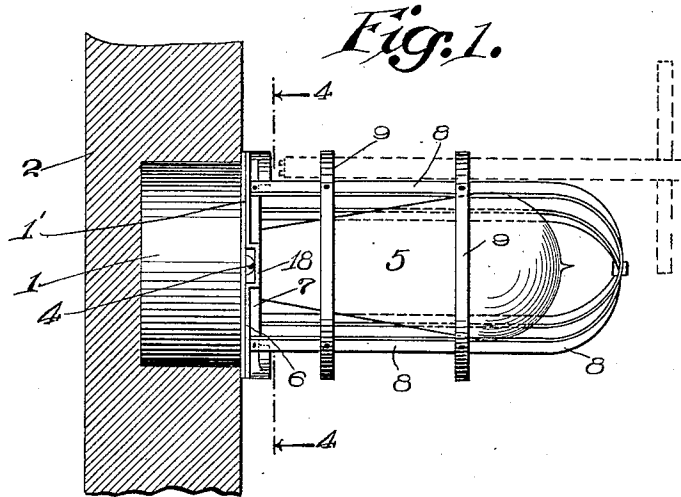


Fig. 2.

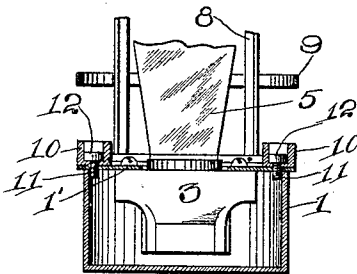


Fig. 3.

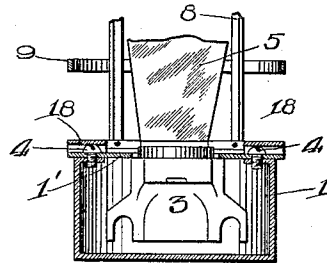


Fig. 4.

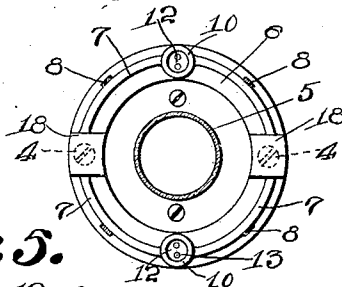


Fig. 5.

WITNESSES:
T. P. Townsend.
Chas. Leffing.

INVENTOR
 ROWLAND H. LEVERIDGE,
 BY
Townsend & Lecker
 ATTORNEYS

UNITED STATES PATENT OFFICE.

ROWLAND H. LEVERIDGE, OF PLAINFIELD, NEW JERSEY, ASSIGNOR TO CHARLES W. LEVERIDGE, OF NEW YORK, N. Y.

LOCKED GUARD FOR ELECTRIC-LAMP BULBS.

1,050,149.

Specification of Letters Patent.

Patented Jan. 14, 1913.

Application filed April 29, 1911. Serial No. 624,101.

To all whom it may concern:

Be it known that I, ROWLAND H. LEVERIDGE, a citizen of the United States, and a resident of Plainfield, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Locked Guards for Electric-Lamp Bulbs, of which the following is a specification.

My invention relates to guards for incandescent electric lamps and in particular has reference to means for locking the lamp guard to prevent its detachment except by means of the proper key.

The object of the invention is to provide simple and efficient means for locking or securing the lamp guard about the lamp or to its support whereby the guard cannot be detached and the lamp bulb removed except by a special key adapted for the purpose.

The invention consists in the improved guard for electric lamp bulbs and in the details of construction and combinations of parts hereinafter more particularly described and then specified in the claims.

In the accompanying drawings, Figure 1 is a side elevation of an incandescent electric lamp having a lamp guard constructed in accordance with my invention in its preferred form associated therewith. Fig. 2 is a longitudinal section through the lower portion of the same. Fig. 3 is a similar section taken transverse to the section illustrated in Fig. 2. Fig. 4 is a section taken on the line 4, 4 Fig. 1 and looking in the direction of the arrow X. Fig. 5 is an enlarged view of the preferred form of lock and the key therefor.

Owing to the increasing use of electric heating or resistance devices such as electric irons, cooking utensils and other appliances which consume a much greater amount of current than the ordinary incandescent electric bulb and which might in some instances require an entirely different voltage than the lamp it has become necessary to protect the ordinary lighting circuit from use by such appliances. This is particularly true in theatrical dressing rooms and other places where a number of the lamp sockets in one circuit might have irons or other heating devices plugged in, thus overloading the circuit and leading to damage of various kinds. This condition has led the Fire Underwriters to require in such localities that each

bulb be provided with a guard locked in place to prevent the removal of the lamp bulb. Also in other locations locked guards are necessary or desirable for the lamp bulbs to prevent theft.

By the use of my invention the lamp guards can be locked to the standard junction box at present installed as part of the wiring system and thus the requirements of the Fire Underwriters complied with and precautions taken against theft of the lamps without the necessity of providing special junction boxes or sockets which would have to be approved by the Board of Fire Underwriters. Also the cost of applying locked guards to a system already installed is greatly reduced.

In the drawings, 1 indicates the usual standard junction box secured in the wall and having mounted therein the usual porcelain lamp socket 3 to which the circuit wires are attached in the usual manner. The lamp socket is secured to the cover 1' of the junction box and the cover fastened to the box by screws 4, the heads of which in the usual standard junction box project above the cover, although in carrying my invention into effect these screws might be countersunk if desired so that their heads will be flush with the cover.

5 indicates the electric lamp bulb screwed in the socket 3.

6 indicates the lamp guard base preferably constructed as a ring which seats on the cover 1' of the junction box. The ring or base 6 is preferably provided with an annular ridge 7 to which is suitably secured the ends of the longitudinal wires or strips 8 which inclose the lamp bulb 5. The wires or strips 8 curve around the outer end of the bulb preferably a short distance therefrom and are strengthened by reinforcing bands or rings 9. If desired, the cage or network inclosing the lamp bulb and forming the guard proper might be otherwise formed without departing from the spirit of the invention, the particular manner of constructing this part or the design thereof being immaterial. The inner diameter of the base or ring 6 is of such size that it will slip easily over the bulb 5 when it is desired to unlock and detach the guard from the junction box.

10 indicates lugs or bosses of any desired number suitably formed on and rising from

the guard base 6. These lugs or bosses are provided with a countersunk bore in which are located the screws or other devices for fastening and locking the guard to the junction box. By preference and for simplicity the locks consist of screws 11 which pass through the bore in the lugs 10 and base 6 and are tapped into the cover 1' or other suitable part of the junction box. The screws 11 are provided with a head 12 which seats on an annular ledge in the lug or boss 10 and instead of having the usual groove or slit for insertion of a screw driver are provided with holes 13 which project downward into the head a suitable distance. The screw heads might be provided with any number of these holes and disposed in any desired manner, the one illustrated having two holes diagonally disposed.

14 indicates a key in the form of a rod having a head 15, the rod preferably being of such length that the head, when the key is inserted in the lug 10, comes above the projecting end of the guard cage. The operating end of the key is of such size that it will enter the bore in the lugs 10 and is provided with projecting pins 16 arranged to coact with and enter the holes 13 in the head of the screw 11.

The lugs or bosses 10 are of such height that when the fasteners 11 are screwed down the lugs project for some distance above the head of them thus preventing access or manipulation of the fastener from the side.

To unlock the guard the special key 14 must be inserted inside the guard or cage from the top and enter the bore in the lugs 10 longitudinally, the screws or locks 11 being located within the boundaries of the guard cage. By this construction the guard cannot be removed from the junction box without the use of a key specially adapted as shown, and therefore the lamp cannot be removed and another plug substituted without first removing the guard which latter is impossible without the use of a key of the form shown or a similar one. Also there is not sufficient room to unscrew the lamp and insert a plug, the lamp remaining within the guard.

When the heads of the screws 7 for fastening the junction box cover project above the cover the ring 6 is provided with an offset as at 18 which offset however bears down close upon the head of the screws and prevents the cover of the junction box being removed without removing the lamp guard. Obviously, if the heads of the screws 7 are

countersunk the under seating surface of the base or ring 6 will be flush.

It will be understood that the invention is not limited to the details of construction shown and described but various modifications and equivalents might be resorted to without departing from the spirit of the invention, as set forth in the appended claims.

What I claim as my invention is:

1. In a device of the character described, the combination of a junction box, a lamp bulb projecting from said box, a lamp guard inclosing said lamp, means for locking said guard to said box and means adapted to prevent removal of the junction box cover previous to removal of the lamp guard.

2. In a device of the character described, the combination of a junction box, a lamp bulb projecting from said box, a skeleton lamp guard inclosing said bulb and seated against said box and covering the fastening screws thereof, bosses on the base of said guard and screws located entirely within said bosses and locking said guard to said box.

3. In a device of the character described, the combination of a junction box, a lamp guard having an annular base seated against said junction box, lugs or bosses rising from said base and locking screws passing through said lugs for locking said guard to said box, the heads of said screws having independent holes therein, and said heads being located entirely below the top of said lugs or bosses.

4. In a device of the character described, the combination of a junction box, a lamp guard having an annular base seated against the cover of said box and locking screws for securing said guard to said box, said base covering the heads of the junction box cover screws.

5. In a device of the character described, the combination of a junction box, a lamp guard having an annular base seated against the cover of said box, lugs or bosses on said base and screws located in said bosses and securing said guard to said box, said base being provided with offsets covering the junction box cover screws.

Signed at New York in the county of New York and State of New York this 28th day of April A. D. 1911.

ROWLAND H. LEVERIDGE.

Witnesses:

W. J. LEVERIDGE,
E. F. HIGGINS.