Dec. 9, 1941. D. L. RIPLEY ET AL 2,265,451

CONDUCTOR GUARD FOR ELECTRIC LIGHTING FIXTURES

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Fig. 1.

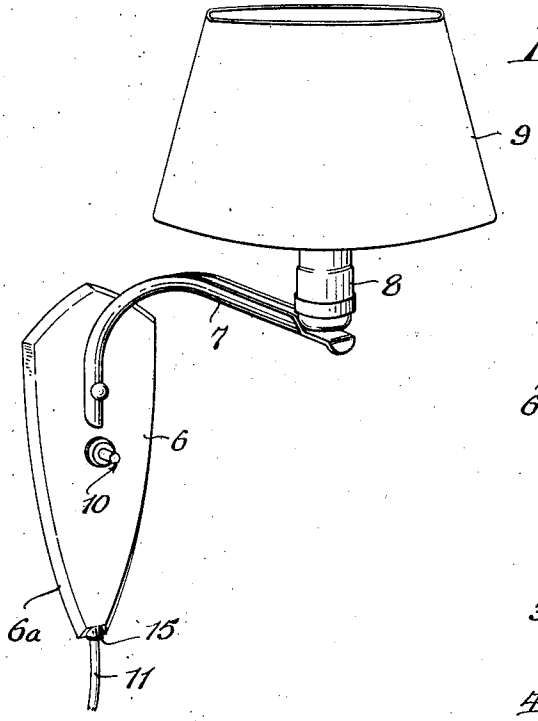


Fig. 2.

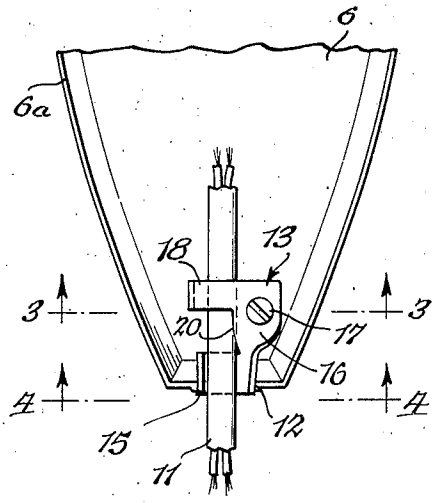


Fig. 3.

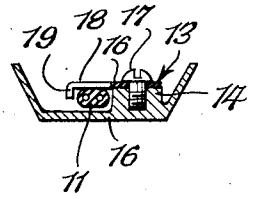


Fig. 5.

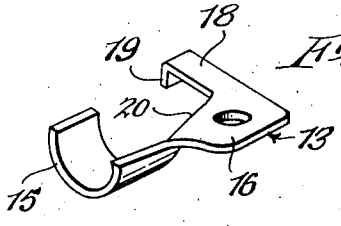
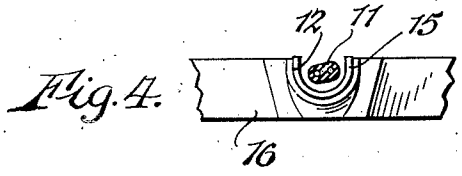


Fig. 4.



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CONDUCTOR GUARD FOR ELECTRIC LIGHTING FIXTURES

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4 Claims. (Cl. 174—167)

This invention relates to improvements in electric lighting fixtures of the wall-bracket type and is characterized by features which, although not necessarily limited to such use, render it of particular utility in connection with fixtures of the kind for which no provision was originally made either for mounting or wiring and which, therefore, are adapted to be suspended upon a hanger attached to a supporting wall in the desired location and connected by a conductor cord to an electrical outlet in the vicinity.

Such fixtures ordinarily include a shield which fits against the supporting wall and a laterally extending arm which is mounted on the shield and which carries the illuminating unit, the shield being dished, flanged or otherwise formed so that with the exception of the marginal edges it is spaced from the supporting wall to provide for the accommodation (concealment) of the hanger upon which the fixture is suspended, the lamp switch and sections of the wires leading to the socket and switch and the marginal edge of the shield being formed with an opening to provide for the passage of the wires of the conductor cord behind the shield. In order to avoid detracting from the appearance of the fixture it is preferred to maintain the size of the conductor opening as small and inconspicuous as possible. However, when the wall of the opening provides for a more or less close confinement of the conductor wires there is danger that the insulation of the wires will be worn and a short occasioned either by contact of bare portions of the wires with the wall or with one another.

The principal object of the present invention, therefore, is to overcome the above objections, this object contemplating the association with the shield of an insulating guard which is so designed and supported that it will minimize wearing of the insulation of the conductor wires and prevent contact between them and the wall of the opening in the shield through which they pass.

A further object is to provide a guard of the character generally described which is adapted to hold the wires of the conductor within the guard and in close proximity to the back of the shield.

Further objects are to provide a guard which is simple and inexpensive in design, which may be applied to the fixture with facility and which will not necessitate any change in the conventional manner of wiring the fixture.

The invention is illustrated in the accompanying drawing in which:

Figure 1 is a perspective view of an electric lighting fixture embodying the features of the invention.

Figure 2 is an enlarged back view of the lower part of the shield of the fixture.

Figure 3 is a horizontal section taken along line 3—3 of Figure 2.

Figure 4 is a similar section taken along line 4—4 of the same figure, th lower end of the shield being shown in elevation.

Figure 5 is an enlarged perspective view of the guard.

The shield and arm of the fixture are indicated at 6 and 7, respectively, and may be of any suitable ornamental design, the lower end of the arm being formed with or secured to the shield in any desired manner and the upper end providing a mounting for the socket 8 and shade 9 of the lamp. In accordance with conventional practice the shield is dished, flanged or otherwise formed so that the marginal edge 6a will fit against the supporting wall while the body portion will be spaced from the said wall. Provision is thus made for accommodating behind the shield, and thereby concealing, the hanger (not shown) upon which the fixture is adapted to be suspended, the lamp switch 10 and sections of the conductor wires 11 leading to the switch and to the lamp socket, the marginal edge of the shield being cut away or otherwise formed at the lower end to provide an opening 12 for the wires 11.

In order to prevent wearing away of the insulation of the wires 11 by the wall of the opening 12, with the attendant possibility of the wires being shorted either by contact of bare sections with one another or with the shield, a guard 13 is mounted upon a boss 14 which is formed upon the back of the shield in the vicinity of the opening 12. The guard may be of fiber or any other suitable insulating material. In accordance with the invention it includes a depending skirt 15 which preferably conforms to the shape of the opening 12 and which, therefore, in the embodiment illustrated is substantially semi-cylindrical, the skirt 15 fitting in the opening 12 and overlying the wall thereof to prevent contact of the wires 11 with the wall. The skirt is laterally offset with respect to the body 16 of the guard which is secured to the boss 14 by a screw 17, the boss and body 16 preferably being located at one side of a vertical median line through the opening 12 so that they will lie outside the intended path of the wires and the plane of the face of the boss preferably being parallel with

the plane of the supporting wall but inset with respect to the plane of the marginal edges of the shield.

An arm 18 of the guard extends across the wires 11 and serves to hold the latter within the curve of the skirt 15 and in close proximity to the back of the shield, the terminal portion of the arm being inturned as at 19 and cooperating with the adjacent edge 20 of the body 16 and the boss 14 to prevent displacement of the wires from under the arm. Thus the skirt 15 engages the front of the wires while the arm 18 engages their backs. As the terminal portions of the arm and skirt extend in opposite directions (see Figure 5) and as the curvature of the skirt away from the plane of the arm is less than the thickness of the conductor wires, whereby the sections of the conductor wires between the skirt and arm are bent in the direction of the back of the shield, permanent securement of the wires in the curvature of the skirt is insured. In this connection it will be noted that the distance between the lower edge of the arm and the upper edge of the skirt is greater than the thickness of the wires and that the inturned end of the arm is spaced from the back of the shield a distance equal to, or slightly less, than the thickness of the wires. The fixture may, therefore, be wired after the guard has been secured in place, it only being necessary in such case to bend the sections of the wires which are to be engaged by the arm of the guard and force them under the arm. The latter is resilient and will yield, if necessary, to permit passage of the wires under the inturned end 19. If desired, however, the guard may be so designed that the wires must be arranged under the arm prior to tightening of the screw 17, the inturned end of the arm 18 in such case being adapted to be so closely spaced to the back of the shield when the screw has been tightened as to render it impossible to force the wires under the arm or, if they are under the arm, to remove them.

We claim as our invention:

1. An insulating guard for use in connection with a member formed with an opening for accommodating an electrical conductor, said guard having a body portion, a skirt portion and an arm and means for securing the body portion to said member at one side of the path of the conductor, the skirt portion fitting in said opening to cover the wall thereof and being formed to provide a concavity in which the conductor may be arranged and the arm extending across the conductor to hold the latter in said concavity.

2. An insulating guard for use in connection with a member which is formed with an opening for accommodating an electrical conductor and which is formed with a boss at one side of the path of the conductor, said guard having a body portion, a skirt portion and an arm and means for securing the body portion to said boss, the skirt portion fitting in said opening to cover the wall thereof and being formed to provide a concavity in which the conductor may be arranged and the arm extending across the conductor to hold the latter in said concavity.

3. An insulating guard for use in connection with a member which is formed with an opening for accommodating an electrical conductor and which is formed with a boss at one side of the path of the conductor, said guard having a body portion, a skirt and an arm and means for securing the body portion to said boss, the skirt portion fitting in said opening to cover the wall thereof and being formed to provide a concavity in which the conductor may be arranged and the arm extending across the conductor to hold the latter in said concavity and having a terminal portion which is inturned to prevent the conductor from moving out from under it.

4. An insulating guard for use in connection with a wall fixture shield having a notch formed in an edge thereof for accommodating an electrical conductor, said guard having a skirt and an arm, the former being located in said notch and extending crosswise of said edge and being shaped to provide an open channel which extends lengthwise of the conducor and in which the conductor may be arranged and held out of contact with said edges, said arm extending across said conductor and being engageable with the conductor to hold it in said channel, and means for attaching said guard to said shield so that said arm and skirt are held in the positions described.

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