

Jan. 1, 1929.

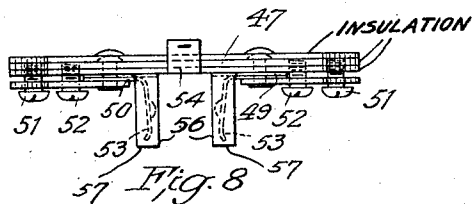
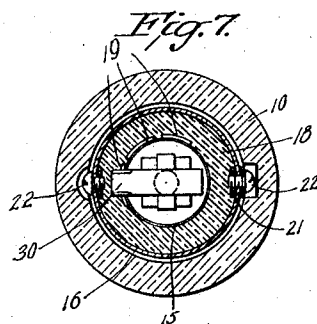
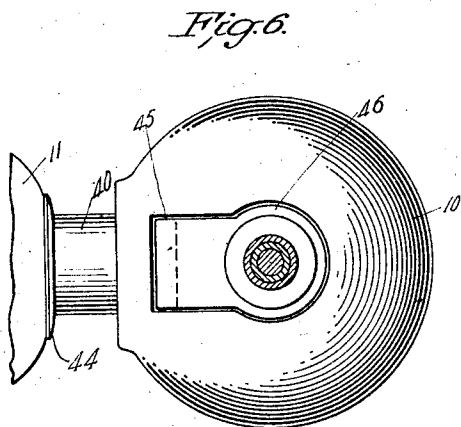
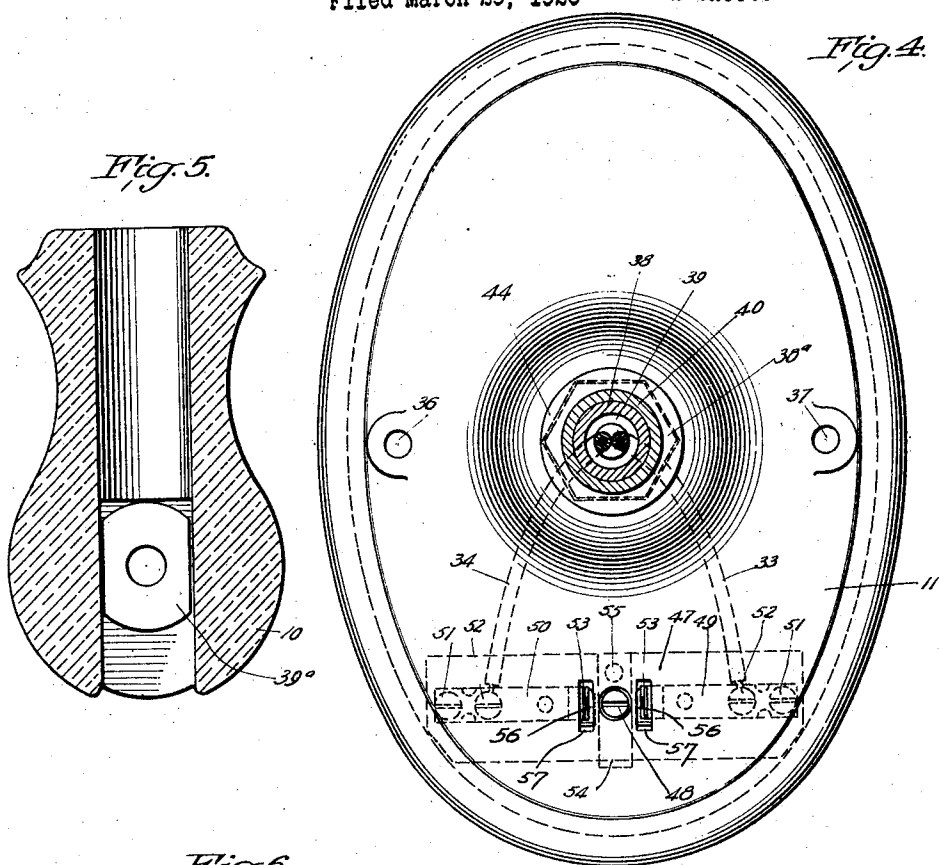
1,697,170

E. A. ERMOLD

LAMP FIXTURE

Filed March 29, 1926

2 Sheets-Sheet 2



INVENTOR.
Elmer A. Ermold
BY *Willard Risk*
ATTORNEY.

UNITED STATES PATENT OFFICE.

ELMER A. ERMOLD, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO WIRT COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF MAINE.

LAMP FIXTURE.

Application filed March 29, 1926. Serial No. 98,133.

This invention relates to electric fixtures and has for its object to provide certain features of construction lending themselves particularly to devices of this kind appropriate for use in bathrooms, kitchens or the like, according to the present day trend in styles in vogue in house furnishings.

The invention is directed more particularly to providing a fixture composed of porcelain parts and when the fixture is composed of two or more pieces, it includes a novel means of connecting them whereby the parts will be rigidly attached and provision allowed for making the necessary wiring connections.

Briefly this is accomplished by constructing a fixture composed of a hollow jacket member to adequately surround and support a lamp socket and a supporting member therefor by means of which it may be mounted on a wall in combination with threaded members extending outwardly through the walls of the jacket and support, which are adapted to be joined to form a connection between said jacket and support.

The present invention will be more thoroughly understood from the following description given in connection with the accompanying drawings in which the same reference characters represent similar parts and in which:

Fig. 1 is a vertical sectional view of a structure showing one embodiment of the invention.

Fig. 2 is a detailed sectional view taken along the line 2*-2* of Fig. 1.

Fig. 3 is a detailed view taken along the line 3*-3* of Fig. 2.

Fig. 4 is a cross-sectional view taken along the line 4*-4* of Fig. 1.

Fig. 5 is a cross-sectional view taken along the line 5*-5* of Fig. 1.

Fig. 6 is a bottom plan view of the lamp socket jacket, partly in section, taken on the line 6-6 of Fig. 1.

Fig. 7 is a bottom view of a portion of the structure taken along the line 7*-7* of Fig. 1.

Fig. 8 is a detail view showing the circuit contacts provided for a plug connection, which are mounted within the wall bracket, this illustration showing said parts as a unit detached from the bracket.

Referring to the drawings, a fixture constructed in accordance with a feature of the invention is shown in conjunction with and as a means of supporting an incandescent elec-

tric lamp socket 8 and a dimmer element 9 for regulating the intensity or candle power of the lamp proper. The fixture comprises a tubular jacket 10 and its supporting member 11 preferably composed of a moulded or baked insulating material, as porcelain, of substantial thickness, and means for joining said members. The lamp socket 8 may be of the standard type and it is shown herein as mounted on an insulating disc 12 to which is secured a center contact 13.

In the use of electric fixtures, it is often desirable to reduce the brightness of the light produced without completely switching off the current. As a means of accomplishing this end in a fixture of this character I have provided a rheostat arrangement associated with the socket, by means of which resistance may be cut in or out of series with the lamp filament to control the flow of current passing through the filament. Referring particularly to Figures 1, 2 and 3, I have illustrated a suitable dimmer or rheostat comprising cylindrical inner and outer shells 15 and 16 enclosing a resistance coil 17 embedded in a mass of insulating material 18 and having contacts 19 exposed at one end and a contact 20 exposed at the other end of the shell. The latter is preferably closed at one end by the insulation 18 and secured at its open end to the socket shell 8 by means of extending ears 21 carried by the disc 12 and engaging the outer shell 16 through the media of screws 22.

Extending on both sides through the closed end of the rheostat is a threaded tubular member 23 held in place by lock nuts 24, 25, 26 and washers 27 and 28. This member 23 serves as a bushing or bearing for a switch shaft 29 carrying on one end spring contact 30 and on the other the key or knob 31 by which the shaft may be readily rotated.

The contact 30 may be of any desired form adapted to provide a connection between the center contact 13 and the rheostat contacts 19. In the form shown herein, the switch contact 30 comprises a thin U shaped metallic strip secured to, but insulated from, the shaft 29. With this construction, the center of the contact 30 makes positive engagement with the socket contact 13, while the free end of the same successively engages the contacts 19 upon rotation of the shaft 29.

The operation of the dimmer 9 will now be readily understood. An electric circuit including the lamp filament and a resistance

will be established by connecting leads 33 and 34 from a source of current to the terminal 20 secured to the resistance coil 18 and the bus-bar 32 secured to the outer shell 16 and leading to the socket 8. Current will pass from terminal 20, through a portion of the resistance coil 17 (depending upon the position of the shaft 19), through that contact 19 which is in engagement with the contact 30 and thereby to socket contact 13. From this point, the current will pass, as usual, through the lamp filament to the socket 8. Since the latter is electrically connected to rheostat shell 16 through ears or lugs 21, the circuit will be completed through said ears 21, shell 16 and terminal 32. The leads 33 and 34 may suitably be a twisted insulated couple joined to the main circuit, as will be understood.

The jacket 10 is preferably shaped to completely surround the socket 8 and dimmer 9 to obscure these parts from view and protect them from injury. Accordingly it is shown herein as shaped with an ornamental exterior and provided interiorly with a central cylindrical recess open at its upper end and at the lower end having an aperture accommodating the switch shaft 29.

The socket and dimmer structure is maintained in position within the jacket 10 by means of the nuts 26 and 35 threaded on the shaft bushing 23 and engaging respectively the inner and outer walls of the closed lower end of the jacket.

The supporting bracket 11 may be of various constructions adapted to be secured to a support such as a wall and to serve as a foundation on which the jacket 10 can be supported. It is shown herein as comprising a hollow member with walls of substantial thickness open at the rear side and adapted to be secured in position by means of screws extending through holes 36 and 37. On its outer or closed side the support 11 has a forwardly extending neck portion provided with an aperture and surrounding the latter on the inner side of the wall is an angularly shaped recess.

The means of uniting the jacket and supporting members consists of two tubular bolts 38 and 39 passing through the apertures in the walls of these parts, having heads 38^a and 39^a which are shaped to engage the walls of the recesses surrounding said apertures. One of these tubular members is threaded exteriorly and the other threaded interiorly for the purpose of effecting a connection between them. For convenience in construction and for the purpose of keeping the apertures in the jacket and support as small as possible, I make one of the tubular members in two parts. This is preferably the member attached to the jacket and it carries a coupling member 40 threaded internally on one end to engage the threads of the jacket bolt 39

and on the other end to engage those of the support bolt 38. This arrangement permits the coupling to be turned up on its tubular member 39 against a spring washer 41 seated at the bottom of the recess 42 in the face of the jacket surrounding the aperture so that a very rigid connection can be effected between the member 39 and the jacket 10 and the parts may be locked in place by forcing down a tongue 43 on the member 39 into a slot provided in the coupling 40. The jacket 10 and support 11 may then be joined by threading the coupling 40 on the bolt 38 and turning it down thereon until the desired position of the jacket is obtained.

In order to present a finished appearance which is neat and pleasing to the eye, a washer 44 formed to fit the contour of the bracket 11 is inserted around the bolt 38 between the coupling 40 and the outer face of the bracket.

As will be obvious, the formation of the recess in the inner jacket wall during the molding process will be facilitated if it is made to extend through to one end of the jacket rather than merely surrounding the inner side of the aperture and in thus forming the recess, I extend it downwardly to the lower end of the jacket. This opening in the jacket end is preferably concealed from view by a lip 45 on a washer 46 shaped to follow the contour of the jacket and held in place by the lock nut 35 on the projecting stem 23 of the enclosed dimmer and socket element. The washer 46 is preferably seated in a shallow recess in the bottom of the jacket, as shown.

In using the electric fixture for the lighting of a room it is desirable that there be provision for connecting it to a source of potential either by means of wires from the electric circuit of the building from an outlet directly in rear of the support 11 or if the fixture is placed apart from such outlet the circuit wires may lead to it and connection be made by means of the usual plug. Accordingly there is preferably provided within the bracket, terminal bars which are adapted to receive leads 33 and 34 from the dimmer and socket and to afford connection for both leads from the main or house circuit, and the blades of an electric plug.

Referring particularly to Figs. 1 and 4, there is shown a connecting means 47 of insulating material secured to a molded projection on the inner wall of the bracket 11 by means of a screw 48 and to which are secured terminals or bus-bars 49 and 50, each carrying two screw binding posts 51 and 52 and a spring contact 53 of the type commonly employed in electric sockets to receive plug blades. The leads 33 and 34 from the dimmer are connected to the binding posts 52—52 and the circuit to the lamp and dimmer will be completed either by connecting leads

from the house circuit to the other posts 51—51 or by inserting the blades of a plug into the spring contacts 53—53. A supporting bar 54 extending across and secured by means of a rivet 55 to the inner face of the insulating means 47, is threaded to receive the screw 48 and thereby secure the parts described to the bracket 11.

The spring contacts 53—53 project into openings in the bracket wall and they are thereby adapted for engagement with the blades of a plug inserted in said openings. While these contacts may be of any of the commonly employed forms, I have found that a particularly simple and efficient construction is obtained by providing opposing stationary members 56 preferably having laterally extending flanges 57 along their bottom edges which project beneath the fingers 53. The members 56 are arranged back to back and lie in engagement with the side walls of the apertures in the bracket 11. The plug blades when inserted in said apertures slide into place on the flanges 57 against the strips 56 and a good electrical contact is obtained by virtue of the spring pressure of the blades 53.

In accordance with the provisions of the patent statutes the principle of the invention has been described, and illustrated by the portrayal of a structure which in practice has proved to be a satisfactory embodiment thereof, but it is desired to have it understood that the structure shown is merely illustrative, and that the invention may be carried out in other ways.

The invention having been described, what is claimed as new and desired to be secured by Letters Patent is as follows:

1. A lamp fixture comprising a porcelain wall member having a hollow projecting neck portion provided with an aperture, a hollow porcelain lamp socket member having an aperture at one side and provided with a recess on its outer wall surrounding the aperture, of two exteriorly threaded metallic members projecting through said apertures and provided with heads engaging the walls of the porcelain members in rear of the apertures, an interiorly threaded coupling connecting the two metallic members and extending into said recess and a spring vasher located between the coupling and the bottom of the recess.

2. A lamp fixture comprising a porcelain base having a hollow outwardly extending projection provided with an aperture and an angularly shaped interior recess surrounding it, a second hollow porcelain member adapted to hold a lamp socket having a laterally opening recess and provided with interior and exterior recesses surrounding it, two tubular members extending through said apertures provided with heads fitting the interior recesses and having exterior screw threads, a

coupling threaded internally and connecting the two tubular members by engagement of the exterior threads of one of the tubular members and abutting the outer face of the base and extending at its opposite end into the exterior recess in the second hollow member.

3. In an electric fixture, the combination with a base and a lamp socket jacket, each having walls of appreciable thickness provided with an aperture for the passage of electrical conductors, and each provided with an angularly shaped recess in its inner surface surrounding its aperture, of concentric tubular members comprising heads engaging the walls of the recesses and angularly shaped substantially similarly to the recesses in which they engage, and body portions extending through the apertures in the jacket and base respectively, and a coupling joining said members together, each angularly shaped recess coacting with the head engaging therein to prevent rotation of the tubular members when the coupling is joined to said members.

4. In an electric fixture, the combination with a lamp socket jacket having an aperture and formed with recesses in its inner and outer surfaces surrounding said aperture, a base having a similar aperture and members for connecting the base and jacket, comprising threaded stems extending through the apertures, and heads engaging the inner surface of the base and the inner recess of the jacket, and a coupling uniting said stems and extending into the outer recess of the jacket, said inner recess of jacket and head engaging therein being angularly shaped to coact with one another to prevent turning of the jacket after said coupling is locked into position.

5. In a lamp fixture, the combination with a tubular jacket for a lamp socket open at one end and having a laterally extending aperture in its side, and also provided with a slot extending inwardly from one end and meeting said aperture, and a jacket-supporting member having an aperture corresponding to the aperture in the side of the jacket, of threaded tubular members having heads, one member being seated in the slot of the jacket and extending through said side aperture, and the other engaging the inner wall of the support and extending through its aperture, and a coupling member extending between the proximate surfaces of the jacket and supporting members and connecting the two tubular members.

6. In an electric lamp fixture, the combination with hollow porcelain base and lamp socket members having corresponding apertures and each provided with interior recesses, one of said members also having an exterior recess, of a connecting element comprising separate stems extending through the apertures and each having a head engaging

the interior recess in its respective member, and a coupling uniting said stems having one end engaging one of the first mentioned members and its opposite end extending into the exterior recess of said other member.

7. In an electric lamp fixture, the combination with two hollow base and lamp socket members provided with side walls of appreciable thickness, each having an aperture with an interior surrounding angularly shaped recess, and one of them being also provided with an exterior recess, of a connecting element comprising separate stems extending

through the apertures, each having a head lying in the interior recess in its respective member and angularly shaped substantially similarly to said recess to prevent its rotation, and a coupling attached to one of the stems with one end in contact with the outer face of that member and attached to the other stem, with its other end extending into the exterior recess of said other member.

This specification signed this 25th day of March, 1926.

ELMER A. ERMOLD.