Nov. 12, 1935. I. LITNER 2,020,691

ELECTRIC SOCKET AND SHADE FIXTURE

Filed Feb. 18, 1935

Fig. 1.

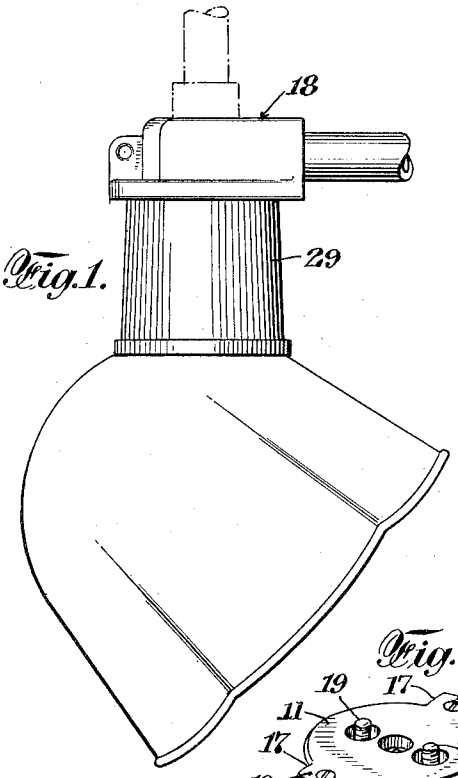



Fig. 2.

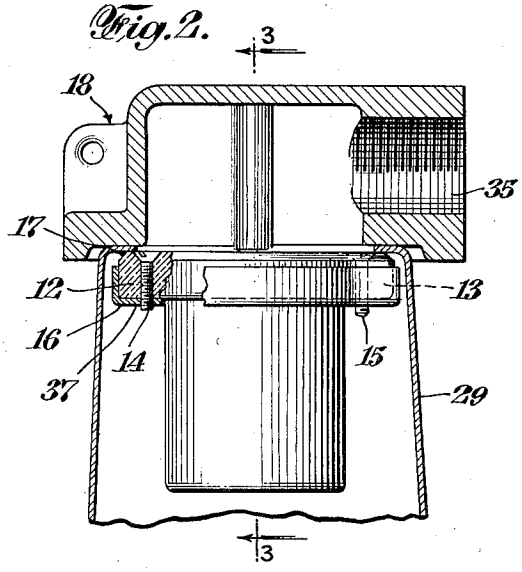



Fig. 6.

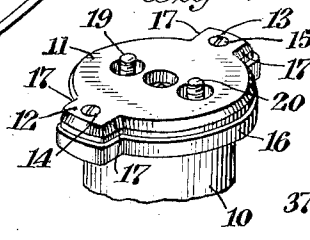
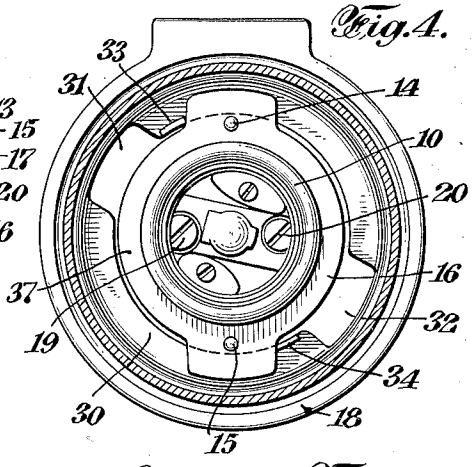



Fig. 4.



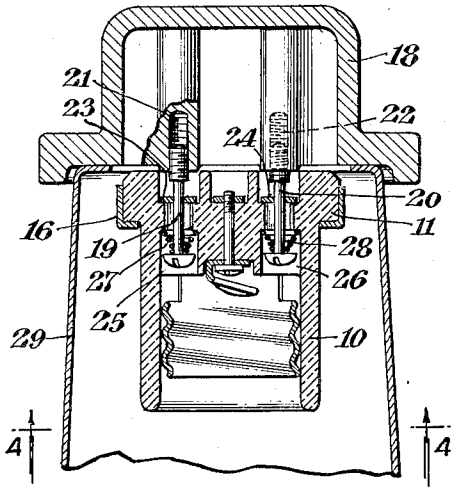
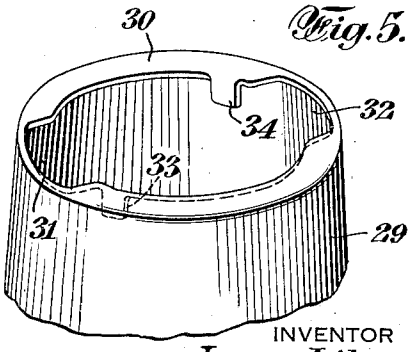




Fig. 3.

Fig. 5.




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# UNITED STATES PATENT OFFICE

2,020,691

## ELECTRIC SOCKET AND SHADE FIXTURE

Isaac Litner, Brooklyn, N. Y., assignor to Bright Light Reflector Co. Inc., Brooklyn, N. Y.

Application February 18, 1935, Serial No. 7,011

4 Claims. (Cl. 240—143)

This invention relates to a combination electric socket and shade fixture, particularly of the type adapted for rotatably supporting a lamp shade,—one of the objects of my invention being to permit a quick asembly of the socket and shade, and another to enable a rotary manipulation of the shade without impairment to the socket.

After a lamp socket is secured in place to a fixture support, upon the completion of the wiring thereof, it is frequently a problem to conveniently position thereover a shade without the necessity of detaching the socket or performing some time-consuming or relatively complicated assembling operation; and it is hence to solve this problem that I have conceived this invention, whereby just such an easy assembling operation can be effected, at the same time permitting the shade, acting as an angle reflector, to be rotatably manipulated through an angle of 180°.

It is still another object of my invention to protect a socket, particularly of the porcelain variety having thereon oppositely positioned perforated ears, from breaking especially during the rotary manipulation of the shade.

Other objects, features and advantages will appear from the drawing and the description hereinafter given.

Referring to the drawing,

Figure 1 is a side view of the device containing my invention, the socket being concealed within the shade.

Figure 2 is an enlarged vertical fragmentary section of the assembly of Figure 1, part of the flange of the socket being shown broken away.

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

Figure 4 is a bottom sectional view of Figure 3 taken along line 4—4.

Figure 5 is a fragmentary perspective view of the lamp shade showing the opening in the base thereof with two stops thereon adapted for coaction with the guard around the socket, and

Figure 6 is a fragmentary perspective view of the socket, showing the protecting guard embracing the flanged portion thereof.

In the drawing the socket 10, which may be a porcelain unit, contains thereon the annular flanged portion 11 having the oppositely positioned, outwardly extending perforated ears 12 and 13, the holes in the said ears being adapted to receive the screws 14 and 15 which are in threaded engagement with the bottom flanged portion 37 of the circular guard or band 16 embracing the lateral surface and undersides of the flange 11 and its said ears. The upper outer peripheral edge 17 of the flange 11 is preferably bevelled off to substantially the upper peripheral edge of the guard, although only that portion of said edge at the ears 12 and 13 need be so bevelled for the purposes of this invention.

The socket 10 is attached to the fixture 18, generally made of metal, by means of the two screws 19 and 20 which extend through suitable openings in the body of the socket into the tapped holes 21 and 22, respectively, of the said fixture. The upper threaded terminal portions of said screws are of enlarged diameters, and the washers 23 and 24 are mounted over the shanks of the screws below said enlarged terminal portions thereof to prevent the screws from dropping out when they are not in threaded engagement with the fixture. Interposed between the heads of the screws and the corresponding seats therefor within the recesses 25 and 26 of the body portion of the socket are the helical springs 27 and 28, preferably of conical shape to permit a greater movement of the screws during compression.

The shade 29 has a flanged base 30 thereon containing a central opening communicating with the recesses 31 and 32 which are sufficiently wide to clear the said ears 12 and 13 when the shade is being assembled in its operative position. The said flanged base 30 also contains, preferably integral therewith, the downwardly extending prongs or stops 33 and 34, which, as will hereinafter be explained, serve to limit the rotary movement, and hence the ultimate position of the shade.

After suitable lead wires are extended through the opening 35 in the support 18 and operatively attached to the terminals of the socket 10 in the usual way, said socket is affixed to the support 18 by manipulating the screws 19 and 20. The shade 29 is then placed in its operative position by inserting it over the socket so that the recesses 31 and 32 clear the ears 12 and 13 and the flanged base 30 is superimposed and rests upon the top surface of the socket. The shade is then rotated until the stops 33 and 34 come into engagement with the armoured sides of the said cars,—at which point the shade is at one of its extreme positions, such as is shown in Figure 4. Where an angle reflector is employed, such as is shown in Figure 1, and it is desired to have it positioned at an angle of 180° from that shown in Figure 4, the reflector (or shade) is simply inserted at 180° from the other position and rotated in the opposite direction,—thereby permit-

ting it to be positioned in almost any position that may be required.

Inasmuch as the said stops **33** and **34** extend downwardly, and not inwardly in a radial direction into the central opening in the base of the shade, they do not constitute obstructing elements,—thereby permitting the ready insertion of the shade in place.

It will be noted that the abutments for said stops are the oppositely positioned ears **12** and **13** which, inasmuch as they are generally constructed of porcelain, might readily be subject to breakage due to the impact of said stops during the rotary manipulation of the shade. In order to prevent such an occurrence the annular band or guard **16** is employed, this consisting preferably of a laterally enclosed open-ended band of metal shaped to conform with the flanged portion of the socket and the ears thereof, the bottom of the guard containing a flanged portion **37** adapted to underlie the flange and ears and receive the said screws **14** and **15** for securing it in place. This guard not only protects the flange **11**, and particularly the ears **12** and **13**, thereof from the impact of the stops **33** and **34**, but also serves as a retaining member to hold together any broken portions of said ears which may become cracked due to the manipulation of the screws **14** and **15** or other reasons. In other words, even if one of said ears should break, no broken portion thereof can become detached due to the fact that it will be retained in place by the walls of said guard. As previously stated, it is desirable to bevel off the upper edges of the flange **11**, particularly above at the ears thereof, up to or near the upper edge of the guard, so as to prevent any exposed portion of the flange from breaking off.

The attaching means employed for securing the socket **10** to the fixture **18** enables a ready and firm attachment to be effected, and yet provides a yieldable method, by the use of the springs **27** and **28**, of compensating for irregularities in the thickness of the top flanged base **30** of the shade. Inasmuch as the pressure of these springs is directed against the body of the socket, it will be yieldably yet firmly held clamped against the fixture **18**. It should further be noted that the socket is directly attached to the fixture **18** without the use of any intermediary plates or other elements,—the only units being the assembly of socket and screws, the shade **29** and the fixture **18**.

It will also be seen that the shade can readily be detached, without manipulating any screws or other attaching elements, and without affecting the assembly of socket and fixture.

It is of course understood that the structure above described and shown in the drawing is illustrative of my invention and not employed by way of limitation, inasmuch as numerous changes and modifications may be made within the scope of the appended claims without departing from the spirit of this invention.

What I claim is:

1. The combination of electric socket and shade, comprising a socket containing a plurality of outwardly extending flanged ears thereon, an annular guard encircling the socket and embracing the lateral walls of said ears, means to fasten the guard to the ears, the upper outer peripheral edge of the socket being bevelled off to substantially the upper peripheral edge of the guard, a shade having a flanged base with an opening therein communicating with a plurality of recesses positioned to correspond with said ears and shaped to clear the ears upon an operative positioning of the shade, said flanged base being superimposed upon and supported by the top of the socket and slidably engageable therewith upon a rotary manipulation thereof, a plurality of stops extending downwardly from said base and abuttable with said guard over said ears upon a rotary movement of the shade, and means to secure the socket to a suitable fixture.

2. The combination of electric socket and shade, comprising a socket containing a plurality of outwardly extending flanged ears thereon, a protecting band embracing the lateral walls of said ears, a shade having a flanged base with an opening therein communicating with a plurality of recesses positioned to correspond with said ears and shaped to clear the ears upon an operative positioning of the shade, said flanged base being superimposed upon and supported by the top of the socket and slidably engageable therewith upon a rotary manipulation thereof, a plurality of stops extending downwardly from said base and abuttable with the band on said ears upon a rotation of the shade to limit the movement thereof, and means to secure the socket to a suitable fixture.

3. The combination of electric socket and shade, comprising a socket containing a plurality of flanged perforated ears thereon, an annular guard encircling the socket and embracing the lateral walls and undersides of said ears, fastening means inserted through the perforations in said ears and operatively engageable with that portion of the said guard underlying the ears, a shade having a flanged base with an opening therein communicating with a plurality of recesses positioned to correspond with said ears and shaped to clear the ears upon an operative positioning of the shade, said flanged base being superimposed upon and supported by the top of the socket and slidably engageable therewith upon a rotary manipulation thereof, a plurality of stops extending downwardly from said base and abuttable with said guard over said ears upon a rotary movement of the shade, and means to secure the socket to a suitable fixture.

4. In an electric socket and shade fixture, the combination of a socket and means to yieldably secure the socket to a suitable support, said means comprising a plurality of screws extending through the body of the socket, each of the screws having a shank with an enlarged threaded terminal portion adapted for threaded engagement with the said support, a washer underlying the said terminal portion of the screw, and a conical coil spring mounted over the shank of the screw and positioned intermediate the head thereof and the body of the socket; said socket containing a plurality of outwardly extending flanged ears thereon, an annular guard encircling the socket and embracing the lateral walls of said ears, means to fasten the guard to the ears, a shade having a flanged base with an opening therein communicating with a plurality of recesses positioned to correspond with said ears and shaped to clear the ears upon an operative positioning of the shade, said flanged base being superimposed upon and supported by the top of the socket and slidably engageable therewith upon a rotary manipulation thereof, and a plurality of stops extending downwardly from said base and abuttable with said guard over said ears upon a rotary movement of the shade.

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