

W. C. TREGONING.
 SOCKET SUPPORT FOR ELECTRIC LAMPS.
 APPLICATION FILED MAR. 5, 1910.

966,623.

Patented Aug. 9, 1910.

Fig. 1.

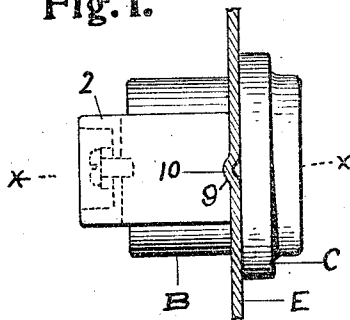


Fig. 2.

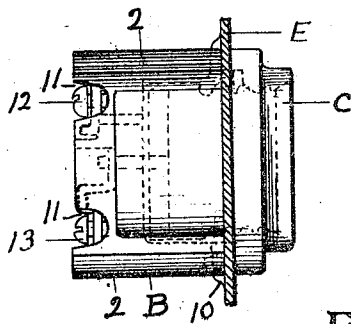


Fig. 3.

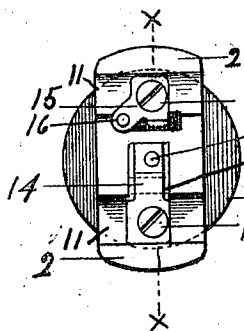


Fig. 4.

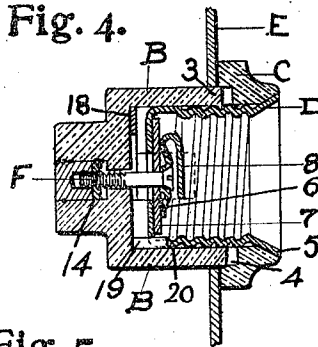


Fig. 5.

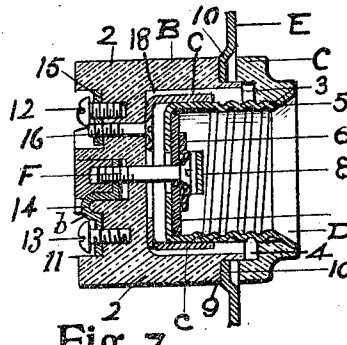


Fig. 6.

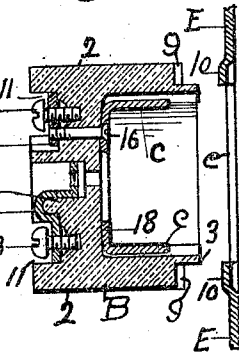


Fig. 7.

Fig. 8.

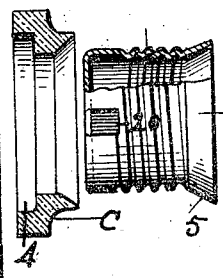


Fig. 9.

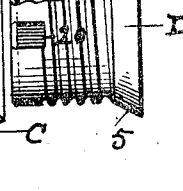
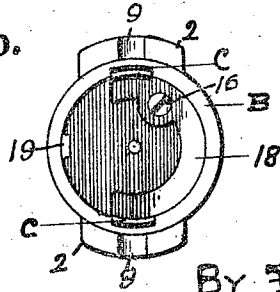


Fig. 10.



ATTEST
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UNITED STATES PATENT OFFICE.

WILLIAM C. TREGONING, OF CLEVELAND, OHIO.

SOCKET-SUPPORT FOR ELECTRIC LAMPS.

966,623.

Specification of Letters Patent.

Patented Aug. 9, 1910.

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To all whom it may concern:

Be it known that I, WILLIAM C. TREGONING, citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Socket-Supports for Electric Lamps, of which the following is a specification.

My invention relates to socket supports for electric lamps and particularly for the style of lamps used in illuminated signs, all substantially as shown and described and particularly pointed out in the claims:

In the accompanying drawings, Figure 1 is a side elevation of my improved socket, and Fig. 2 is a corresponding elevation a quarter turn farther around. Fig. 3 is a rear or inner end elevation. Fig. 4 is a longitudinal sectional elevation of Fig. 1, and Fig. 5 is a longitudinal sectional elevation of Fig. 2. Fig. 6 is a central sectional elevation of the body member on line $w-x$, Fig. 1, and Figs. 7, 8 and 9 are corresponding elevations of the supporting plate for the socket, the cap or ring and the thimble respectively, all of which are shown separated in these views but assembled in Figs. 1, 2, 4 and 5. Fig. 10 is an inside or bottom view of the body of the socket looking into its open end.

The device as thus shown comprises three main parts, a body or inner member B, a ring shaped cap or outer member C and a thimble or shell D. The said body and ring or cap are usually made of porcelain but may be of any equivalent material, and thimble D is of a good conducting metal, say of copper.

E represents a sign plate, assuming that the sockets are used in sign display work, and that said plate serves as a support for the sockets as shown herein.

Now, as to the details of said several parts, it will be seen that in the main said details are original and peculiar to this particular socket and that they promote simplicity of construction and ease and convenience in assembling or in replacing parts and in making needed repairs, as the case may be.

Thus, the body of base member B has opposite ribs or enlargements 2 lengthwise which abut against the plate E while the entire immediate edge 3 of said body projects

through a perforation or opening e in said plate, and ring or cap C has an annular recess 4 in its side adapted to engage over said edge 3 upon the opposite or front side of plate E, as seen in Figs. 4 and 5 and where the edge of said body projects through said plate for this purpose. As to this feature of the invention it may be further observed that the socket as a whole is supported on or in plate E through the said parts B and C and the flaring mouth 5 of thimble D engaging in the flaring seat in ring C, and the screw F which connects the said parts and is provided with a nut seated in a recess in the bottom of body B. Specifically the head of screw F is engaged in a metallic washer 6 in the bottom of thimble D and which is separated from said bottom by an insulating sheet 7, and an electrical spring contact lip 8 on washer 6 overhangs the head of said screw and is adapted to provide one terminal contact when a lamp is screwed into the socket. Further, the said body B contacts with plate E only at the ends of ribs 2 and not otherwise, and said ribs have indentations 9 adapted to seat on the short struck-up ribs 10 in plate E which serve to fix the socket against rotation on its seat when fastened in place. At the other or outer end of the body the said ribs form lateral outer walls to recesses extending across the body at that point and which are adapted to receive the binding screws 12 and 13 respectively. These screws are practically buried in said recesses, or may be covered with an insulating wax or cement, if preferred, and as is shown as to the outer extremity of screw or bolt F, Figs. 4 and 5. Connection is made by metallic strip or piece 14 between screw 13 and bolt F, and by washer 15 and screw 16 between screw 12 and contact segment 18, Fig. 10. Said segment or piece lies fixed in the bottom of body B and has its ends e turned up in spring relation against the side of the socket and in position to make double contact oppositely with thimble D, which, however, and preferably does not contact at its bottom with said segment 18 when drawn to its seat at flaring edge 5 by locking bolt E but only contacts at or with upturned ends e of the said segment. Electrical connection is then made with the lamp to be inserted by

means of the thimble at one side and through the said spring lip 8 at the other side. To separate the parts it is only necessary to remove screw F and then all the parts will be subject to separation as seen in Figs. 6 to 9, and they are assembled with equal ease and facility.

It will be seen that shell or thimble D is threaded to screw a lamp thereinto as usual, but said thread has no other use, and the ring C is engaged and held in working position exclusively by means of the flare 5 of said thimble.

Now, as to other features it is well known that usually the diaphragm or bottom portion of socket member B is rather frail and liable to be cracked or broken in clamping the parts together, and to avoid this weakness and danger I have strengthened said portion with a rib 7 and bent the terminal strip or piece 14 to conform to said bend and hook over or upon the same, and thus it follows that strain delivered through clamping screw 16 which otherwise would come on said diaphragm is in fact largely transferred to the end of said terminal 14, and which does not ordinarily contact with said diaphragm or bottom portion. It will also be observed that the body proper of member B has the same size in cross section as the hole or opening in plate E for the socket, and that ribs 2 constitute the sole stops to prevent projecting said body through the plate. The proportions of the body proper and said ribs and their disposition relatively are clearly seen in Figs. 1 and 3, and wherein it is seen that said ribs extend outward beyond said body proper proportionally about as shown. The transverse grooves or channels 11 in which the binding screws 12 and 13 are located are behind the ends of the said ribs looking from the outside. Again, the said segment or equivalent part 18 in the bottom of body B is especially material as herein shown because the end extensions c thereof have sufficient length to make a good contact with shell or thimble D even if plate E be unusually thick or heavy, and screw F has sufficient length to accommodate itself to such possible differences. This would also operate to make a difference in the depth to which the thimble D would extend into the socket in respect to the bottom thereof. A rib 19 on the interior of body B prevents screw shell D from turning when in place, a portion 20 being cut away from the bottom and side of the shell to make a sliding fit between said parts.

What I claim is:

1. A lamp socket comprising inner and outer members respectively, a threaded thimble seated therein having a flaring mouth fitting in a corresponding flare in said outer member and means to lock all said parts together.

2. A lamp socket having a body provided with side ribs, a plate having a hole through which said body projects and against which said ribs abut, an inner member having an annular recess suited to the corresponding edge of said body and flared at its outer edge, and a socket thimble having a flaring edge corresponding to the flared edge of the said inner member.

3. An electrical socket having a conducting piece laid in said socket having its ends bent at substantially right angles and resting next to the side wall of the socket, and a metallic thimble in adjustable contact with said members.

4. A two-part electrical socket, a conducting piece in the bottom thereof having extensions next to the wall of the socket and a conducting thimble in engagement with said extensions at varying depths, and a clamping screw locking said socket parts and said thimble together.

5. A socket for electric lamps having a bottom with a central cavity and a transverse groove on its outside and a rib between said cavity and groove, an electric terminal engaged in both said groove and said cavity and bent to substantially U shape over said rib, a thimble in said socket and a screw connection between said thimble and the end of said terminal in said cavity.

6. In an electrical socket, two separable body members, in combination with a conducting shell and a screw to clamp said members upon plates of different thicknesses, and an electrical contact mounted upon one of said members in slidable contact relation with said shell.

7. In an electrical socket, two separable body members and a conducting shell, one of said members having a perforated diaphragm and a terminal member mounted at the rear thereof and apart from said diaphragm, and a screw between said shell and terminal member to draw said body members together upon said diaphragm.

8. In an electrical socket, two separable body members and means to clamp said members upon a plate comprising a flanged conducting shell and a screw, and said shell having slidable interlocking engagement with one of said members adapting longitudinal movement in respect thereto and preventing independent rotation of said shell.

9. In an electrical socket, a hollow body member having an annular front edge, a ring having an annular recess to seat said edge and provided with an annular seat at its front for a flanged conducting shell, in combination with a conducting shell having a flanged portion at its open end, and means to unite said parts through the medium of said shell.

10. In an electrical socket, a plate having an opening therein and raised portions there-

on at the edges of said opening, in combination with two separable socket members adapted to be clamped upon opposite sides of said plate and a conducting shell mounted in one of said members and having a flaring mouth engaged in the other member, and one of said members having indentations to seat said raised portions of said plate to fix

the parts against rotation when clamped upon said plate.

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

WILLIAM C. TREGONING.

Witnesses:

E. M. FISHER,
F. C. MUSSUN.