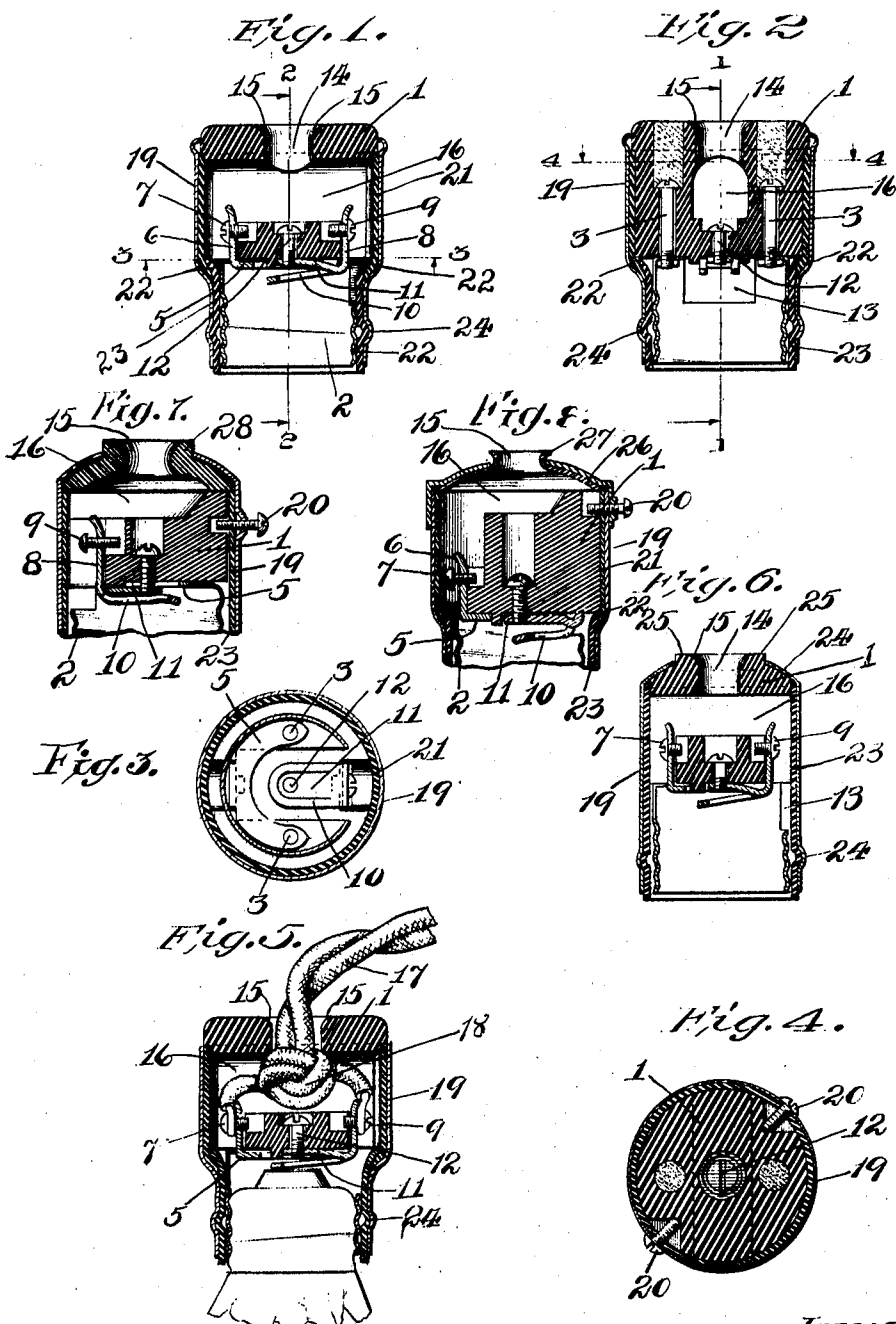


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PATENTED FEB. 18, 1908.

R. B. BENJAMIN.
ELECTRIC LAMP SOCKET.
APPLICATION FILED FEB. 29, 1904.



Witnesses:
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UNITED STATES PATENT OFFICE.

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ELECTRIC-LAMP SOCKET.

No. 879,724.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed February 29, 1904. Serial No. 195,829.

To all whom it may concern:

Be it known that I, REUBEN B. BENJAMIN, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Electric-Lamp Sockets, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to electric lamp sockets, and more particularly to sockets adapted to indoor pendent work.

One of the objects of my invention is to provide an improved form of socket, whereby the usual metallic cap having an opening therethrough for the leading-in wires and an insulating bushing in said opening is avoided.

Another object of my invention is to provide an improved form of insulating lining for the socket, and to this end I provide a two piece lining having the adjacent ends overlapping to form a continuous and unitary insulating member, whereby the lining may be more readily inserted in the casing of the socket, and may be more cheaply manufactured.

I have illustrated my invention in the accompanying drawings, in which:

Figure 1 is a sectional elevation of my socket; Fig. 2 is a section taken on the line 2—2 of Fig. 1; Fig. 3 is a section taken on the line 3—3 of Fig. 1; Fig. 4 is a sectional view taken on the line 4—4 of Fig. 2; Fig. 5 is a view similar to Fig. 1, showing the manner in which the leading-in wires are secured; Fig. 6 is a sectional view of a modification of my socket; and, Figs. 7 and 8 show additional modifications of my socket.

In the preferred construction of my invention, I provide an insulating base 1, preferably made of porcelain or like material, upon the lower face of which a threaded lamp receiving shell 2 is secured by means of screws 3 which pass downwardly through apertures formed in the base and engage in a U-shaped contact 5, disposed in the bottom of the shell. The upper portion of the apertures through which the screws 3 pass are preferably filled with cement in the usual manner after the screws have been placed in position. The U-shaped contact plate 5 has an upwardly extending portion 6 which extends through the shell and projects in a

side recess formed in the base. A suitable binding screw 7 is carried by the upwardly extending portion 6 to which one of the leading-in wires may be secured. An upwardly extending portion 8 carrying a binding screw 9 fits in a similar recess formed on the opposite side of the base, and has an inwardly bent portion which rests in a position in front of the bottom face of the base 1, and slightly out of engagement therewith to form a center spring contact 10. A narrow strip or tongue 11 is preferably struck up from this spring contact by means of which the contact is secured in place upon the base 2 by a screw 12. A centrally disposed longitudinal opening 14 having rounded or flared side walls 15 is formed in the upper portion of the base 1 to accommodate the leading-in wires of the socket. This opening communicates with a transverse opening 16 which extends through the base, whereby after the wires have been drawn through the opening 14, they may be drawn to one side and a knot formed therein to support the socket, as shown in Fig. 5.

A metallic casing 19, preferably formed from a single piece of metal is secured to the base and incloses the socket as shown. This casing is secured to the base by means of screws 20 which enter recesses formed in the base. The casing has arranged therein an insulating lining which is interposed between the casing and the threaded shell, and binding post to insulate the same from the metallic casing and prevent danger of short circuits and the like. This lining is preferably formed of two members, one of the members 21 being disposed between the binding post and casing, and having inwardly turned lower edges 22 which overlap the outwardly turned upper edges of the second lining member 23, which is disposed between the casing and the shell. A bead 24 is formed in the lower end of the shell into which fits a bearing formed on the lining. The insulating base extends preferably slightly above the casing and forms a cap or covering for the socket.

In the modified form of my invention illustrated in Fig. 6, the insulating lining 23 is formed from one piece of material, and the casing has an inturned flange 24 which fits over the upper surface of the base to support the casing in position. A neck or shoulder

25 is formed on the insulating base which extends above the flange 24, and thereby insulates the same from the leading-in wires.

In the modification shown in Fig. 7, the base 1 is secured within the casing 19 by means of a screw 20, which extends through the casing, and fits in an aperture in the base, and the insulating lining 19 is formed of one piece of material. An insulating washer or button preferably formed of porcelain is disposed within the top of the casing 19, and has an upwardly extending neck 28 which insulates the leading-in wires from the casing. This button is provided with a central aperture having flared side walls to accommodate the leading-in wires, and a recess 16 is formed between the base and the washer to receive the knot formed in the leading-in wires. In the structure shown in Fig. 8 a metal cap is arranged to fit over the top of the casing 19, being held in position thereon by a screw 20. A disk or lining of insulating material 27 is disposed within the cap and has the edges of a centrally disposed aperture turned back and extending through the aperture formed in the cap 26 to insulate the leading-in wires from the casing.

While I have described certain preferred forms of my invention, it will be understood that modifications and changes may be made in the same, without departing from the spirit of my invention as set forth in the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a pendent lamp socket, the combination with a one-piece insulating base having an opening in the top thereof to accommodate the leading-in wires, and a transverse opening therein communicating with said top opening, and recesses formed on either side thereof, of a threaded shell carried on the under face of said base, a binding post carried on one of said side recesses and electrically connected with said shell, a center contact also carried on the under face of said base, and a binding post carried on the other recess formed in said base, and electrically connected with said center contact, a metallic inclosing casing detachably connected to said base, and a lining interposed between said casing and binding post and threaded shells.

2. In a pendent lamp socket, the combination with a one-piece insulating base having an opening in the top thereof to accommodate the leading-in wires, and a transverse opening therein communicating with said top opening, and recesses formed on either side thereof, of a threaded shell carried on the under face of said base, a binding post carried on one of said side recesses and electrically connected with said shell, a center contact also carried in the under face of said base, and

a binding post carried on the other recess formed in said base, and electrically connected with said center contact, a metallic inclosing casing detachably connected to said base, a two part insulating lining having the coinciding edges overlapping.

3. In a pendent lamp socket, the combination with an insulating base, said base having an opening formed therein for the leading-in wires, said opening having flaring walls, of a lamp receiving shell carried by said base, a metal casing of two diameters for said base and shell, a ring or strip of insulating material having an inwardly extending flange formed upon the lower edge thereof and disposed between the casing and said base, and a second ring or strip of insulating material having an outwardly extending flange formed upon its upper edge, disposed between said casing and said shell, the inwardly and outwardly extending flanges carried by said insulating strips or rings co-acting to form a continuous insulating member.

4. In a pendent lamp socket, the combination with an insulating base, said base having an opening formed therein for the leading-in wires, said opening having flaring walls, of a lamp receiving shell carried by said base, a U-shaped plate disposed in the bottom of said shell and bolts or screws extending through said base and engaging said plate to secure said shell in position, said plate having a turned up portion disposed in a recess formed in said base, a strip having a portion struck up therefrom, a bolt or screw passing through said base and engaging said struck up portion to secure said strip in position, the free end of said strip being bent upwardly and disposed in a recess formed in said base, said strip constituting the center contact for the lamp, and a suitable casing for said socket.

5. A lamp socket comprising an insulating base, associated contacts carried by said base, an inclosing shell or casing of two diameters for said socket and an insulating sheath or lining for said casing, said lining consisting of two strips or rings of insulating material, the contiguous edges of said strips or rings having inwardly and outwardly extending flanges formed thereon, said flanges overlapping and interlocking to form a continuous insulating member.

6. In a lamp socket, the combination with a casing therefor formed with different sized diameters, of an insulating lining for said casing consisting of a strip or ring of insulating material for each of said diameters, the contiguous edges of said strips or rings of insulating material having outwardly and inwardly extending flanges formed thereon, said flanges being adapted to overlap each other to form a unitary insulating member.

7. In a lamp socket, the combination with a casing therefor formed with two diameters, of a ring or strip of insulating material for

each of said diameters, one of said strips or rings having an inwardly extending flange formed thereon, the other of said strips or rings having an outwardly extending flange
5 formed thereon, said flanges being adapted to interlock to form a continuous unitary insulating member.

8. In a lamp socket, the combination with an insulating base carrying associated parts,
10 of a casing therefor, and an insulating lining for said base consisting of more than one strip or ring of insulating material, the contiguous edges of said strips or rings having outwardly and inwardly extending flanges,
15 said flanges being adapted to overlap one with the other to form a continuous unitary insulating member.

9. In an incandescent lamp socket, an in-

sulating lining consisting of two sections of different diameters, the one of larger diam- 20 eter having its lower extremity turned inwardly and the one of smaller diameter having its upper extremity flared outwardly, whereby when the two sections are in proper relative positions the outward flare of the
25 lower section will overlap and contact with the lower extremity of the upper section to produce a continuous insulation, substantially as hereinbefore set forth.

In witness whereof, I have hereunto sub- 30 scribed my name in the presence of two witnesses.

REUBEN B. BENJAMIN.

Witnesses:

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E. A. OLSEN.