

J. H. GOEHST.
ELECTRIC LAMP SOCKET.
APPLICATION FILED APR. 4, 1910.

968,147.

Patented Aug. 23, 1910.

FIG. 1.

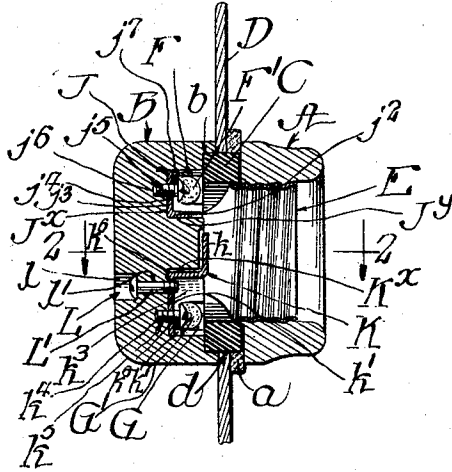


FIG. 2.

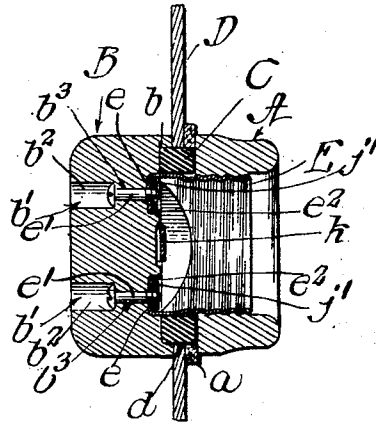


FIG. 3.

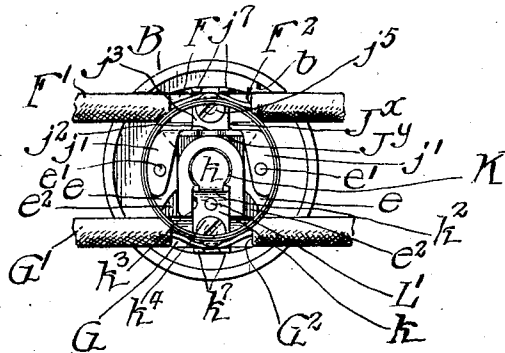


FIG. 4.

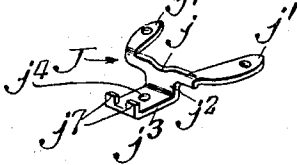
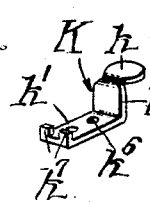


FIG. 5.



Witnesses:
J. H. Goehst
L. R. Wilkins

Inventor
John H. Goehst
by Poole & Brown
Atty

UNITED STATES PATENT OFFICE.

JOHN H. GOEHST, OF CHICAGO, ILLINOIS, ASSIGNOR TO FEDERAL ELECTRIC COMPANY,
OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

ELECTRIC-LAMP SOCKET.

968,147.

Specification of Letters Patent. Patented Aug. 23, 1910.

Application filed April 4, 1910. Serial No. 553,179.

To all whom it may concern:

Be it known that I, JOHN H. GOEHST, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric-Lamp Sockets; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in electric lamp sockets and refers more particularly to an improved construction for attaching the socket to the support therefor and for insulating said socket from said support.

My improvements, as herein illustrated, are applied to a lamp socket adapted for use in places where it is desired to support the socket on relatively thin supporting bodies, such as sheet metal, and is more particularly intended for use with electrically illuminated signs.

The object of the invention is to provide a socket of this kind of simple and economical construction which may be quickly and readily attached to the supporting body or detached therefrom and which provides for an easy and convenient attachment of the line wires.

The invention consists further in the matters hereinafter described and more particularly pointed out in the appended claims.

In the drawings:—Figure 1 is a section through the longitudinal central axis of the socket. Fig. 2 is a section through Fig. 1 on the line 2—2 thereof. Fig. 3 is a top plan view of the rear socket member. Figs. 4 and 5 are perspective views of the terminals to which the line wires are connected.

My improved socket is made in two sections, a front section A, and a back section, B. Said socket sections are preferably made of porcelain or of some similar composition. The back section B is provided with an annular recess *b* in its front face to receive a fiber ring C.

D indicates the supporting body which is provided with a perforation *d*. The outer diameter of the ring C is such that it will fit nicely within the perforation *d*.

E is a shell contact which is internally and externally screw-threaded. Said shell

contact is provided at its base with short in-turned flanges *e e* by means of which it is secured to the back socket section B. The back section B is provided with longitudinal openings *b¹ b¹* extending through it, having parts of different diameters, as represented at *b² b³*,—the latter to receive the shanks and the former to receive the heads of screws *e¹* which are threaded through the flanges *e* of the screw-threaded shell E.

The front section A of the socket consists of an annular ring provided on its inner surface with a screw-thread by means of which it may be screwed upon the externally threaded shell E with its inner face abutting against the fiber ring C. Said inner face is larger in diameter than the ring C so as to clamp against the supporting plate. A gasket *a* of leather or other suitable material is preferably interposed between the projecting edge of the front socket member and the supporting body D. By means of this construction the two socket members are drawn against the supporting body so as to retain them in rigid engagement therewith.

F, G are parallel open grooves or channels formed in the forward side of the back section B. Said grooves or channels extend entirely across the front face of said back section and open at their ends through the cylindrical side surface of said back section. They are adapted to receive the line wires *F¹ G¹*.

The angular flanges *e* of the shell contact E rest in shallow channels *e²* formed in the face of the back section of the socket at right-angles to the channels containing the line wires. Said shell contact is electrically connected to the shell terminal J which comprises a horse-shoe head *j* with laterally separated ends *j¹ j¹*, and a terminal extension *j³* located in different parallel planes and connected by a neck piece *j²*. The ends *j¹* of the terminal J rest upon top of the flanges *e* of the shell contact E and are screw-threaded to receive the ends of the screws *e¹*. The terminal extension *j³* lies transverse of the channel or groove F containing the line wire *F¹* in a groove *J^x*, and is provided with a screw-threaded recess *j⁴* to receive a binding screw *j⁵*. A recess *j⁶* is formed in the back section B to receive loosely the end of said binding screw. The neck piece *j²* of the shell terminal bears against a longitudinal shoulder *J^y* extending between the

bottoms of the groove J^x and the channels e^2 . Angular spaced shoulders j^7 are formed at the ends of the terminal extension j^3 to assist in holding the line wire in place. The insulation of the line wire is cut off a short distance on each side of the binding screw, as indicated at F^2 .

K is a central contact member which comprises the central contact head k and a terminal extension k^1 located in different parallel planes and connected by a neck k^2 . Said terminal extension k^1 is located in a radially extending channel k^3 which intersects the channel G, containing the line wire G^1 , so that said terminal extension lies below and projects across said channel G. It is provided at its end with spaced lugs k^7 . The neck-piece k^2 of the terminal bears against a longitudinal shoulder K^x located at the inner end of the channel k^3 and facing opposite the shoulder J^7 . A binding screw k^4 is threaded into said terminal extension, a recess k^5 being formed on the bottom of the channel G to receive the end of said binding screw. A longitudinal opening L extends from the rear face of the back section to the channel k^3 . Said recess is of different diameters L , L^1 , to receive, respectively, the head and shank of a screw L^1 which is screwed into a screw-threaded recess k^6 in the terminal extension k^1 of the central contact member to retain the central contact member in place. It will be apparent from this description that the shell contact and the central contact are both held in place by means of screws applied from the rear face of the block through recesses extending through said block.

The socket described is cheap and is easily applied and may be readily taken apart when repairs or rearrangement of the lights is necessary.

I claim as my invention:—

1. In combination with a relatively thin supporting body provided with a perforation, an electric lamp socket embracing a back section of insulating material lying against one side of said supporting body and provided with a recess on its front face, an insulating ring resting within said recess and projecting beyond said back section through said perforation, an internally and externally threaded shell contact secured to said back section and projecting beyond said ring, and a front section having a rear face of larger diameter than said ring and being internally screw-threaded to screw upon the end of said shell contact and clamp said socket sections against said supporting body.

2. In combination with a relatively thin supporting body provided with a perforation, an electric lamp socket embracing a back section of insulating material lying against one side of said supporting body and provided with a recess on its front face,

an insulating ring resting within said recess and projecting beyond said back section through said perforation, an internally and externally threaded shell contact secured to said back section and projecting beyond said ring, a front section having a rear face of larger diameter than said ring and being internally screw-threaded to screw upon the end of said shell contact and clamp said socket section against said supporting body, and a gasket surrounding said ring interposed between said supporting body and said front section.

3. In combination with a relatively thin supporting body provided with a perforation, an electric lamp socket embracing a back section of insulating material lying against one side of said supporting body and provided with open, parallel line-wire channels extending transversely through it, an internally and externally screw-threaded shell contact member secured to said back section and projecting through said perforation, said shell contact having in-turned flanges formed at its base, a terminal member for said shell contact having laterally separated ends in one plane engaging said flanges and a terminal extension in a different plane lying across one of said line wire channels, a central contact member having an extension lying across the other line wire channel, screws located in openings formed longitudinally through said back section adapted to retain said terminals and contact members in place, said screws being inserted from the rear, and a front section internally screw-threaded to screw upon the end of said shell contact member and clamp said socket sections against said supporting body.

4. In combination with a relatively thin supporting body provided with a perforation, an electric lamp socket embracing a back section of insulating material lying against one side of said supporting body and provided with open, parallel line-wire channels extending transversely through it, an internally and externally screw-threaded shell contact member secured to said back section and projecting through said perforation, said shell contact having in-turned flanges formed at its base, a terminal member for said shell contact having laterally separated ends in one plane engaging said flanges, a terminal extension in a lower plane, a neck-piece connecting said laterally separated ends and said terminal extension, a central contact member comprising a contact in one plane, a terminal extension in a lower plane and a neck connecting the two, said back section being provided with channels at right angles to said line-wire channels to receive said terminal extensions and with oppositely facing shoulders engaged by said neck-pieces of the terminals, means

removable from the rear for securing said
contacts and said terminals to said back
section, and a front section internally screw-
threaded to screw upon the end of said shell
5 contact member and clamp said socket sec-
tions against said supporting body.

In testimony that I claim the foregoing

as my invention I affix my signature in the
presence of two witnesses, this 30th day of
March A. D. 1910.

JOHN H. GOEHST.

Witnesses:

CLARENCE E. MEHLHOPE,

T. H. ALFREDS.