R. B. WOLCOTT.

INCANDESCENT ELECTRIC LAMP SOCKET.

APPLICATION FILED MAY 13, 1916.

**1,322,989.** Patented Nov. 25, 1919.

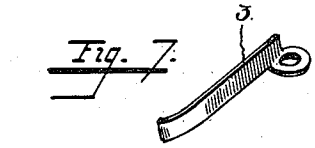



Fig. 7. Fig. 8.

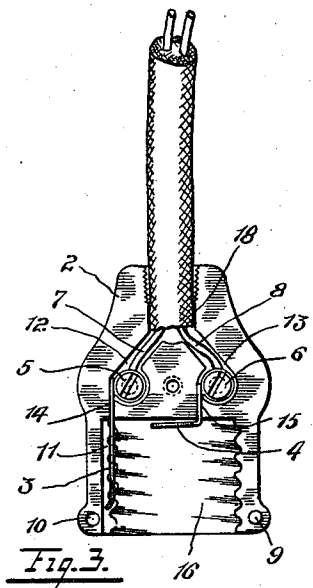



Fig. 3.

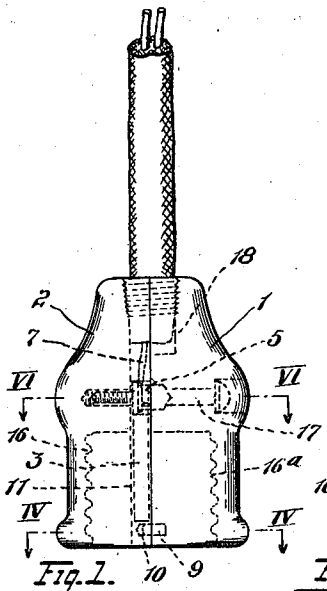



Fig. 1.

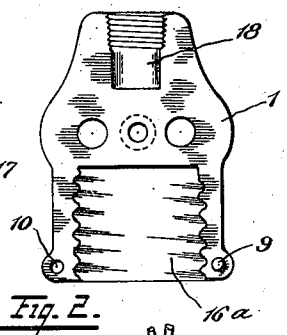



Fig. 2.

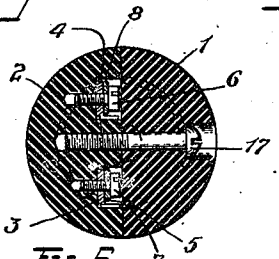



Fig. 6.

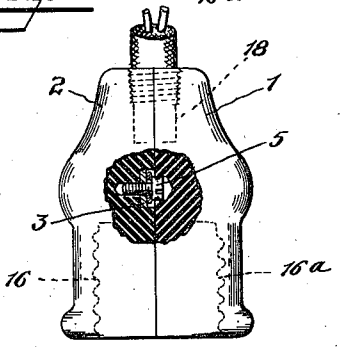



Fig. 8.

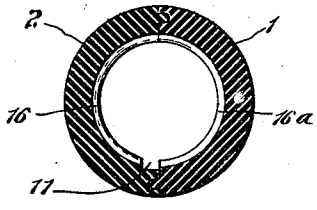



Fig. 5.

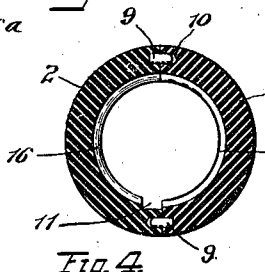



Fig. 4.

Inventor:
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by Frank L. Greening,
his Attorney

# UNITED STATES PATENT OFFICE.

ROBESON B. WOLCOTT, OF CLEVELAND, OHIO, ASSIGNOR TO THE CHASE COMPANIES, INC., OF WATERBURY, CONNECTICUT.

## INCANDESCENT-ELECTRIC-LAMP SOCKET.

1,322,989. Specification of Letters Patent. Patented Nov. 25, 1919.

Application filed May 13, 1916. Serial No. 97,310.

*To all whom it may concern:*

Be it known that I, ROBESON B. WOLCOTT, a 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 Incandescent-Electric-Lamp Sockets, of which the following is a specification.

My invention has for its object the provision of a lamp socket, in which the shell or body portion, constituting the lamp support, is composed entirely of insulation divided longitudinally into two complemental parts with means for holding the parts together. Another object of my invention is to provide a socket which may be quickly and securely wired. Another object of my invention is to provide a socket in which the number of metal parts and the weight of the metal employed shall be a minimum, and in which all of the metal parts, with the exception of the means employed for securing the two halves of the shell or body together, are those which are necessary for making contact with the lamp terminals, and with the conductors to which the lamp socket is connected.

Still another object of my invention is to provide a mechanically strong and electrically safe socket which may be manufactured at low cost, and employ the least amount of material consistent with such mechanical strength and electric safety.

Referring to the drawings which accompany these specifications, Figure 1 is a side elevation of one of my improved sockets.

Fig. 2 is an interior view of one of the halves of the shell or body portion which is made entirely of insulation, and Fig. 3 is an interior view of the other half of the shell or body portion which is suitably recessed for the reception of the metal contact members of the socket.

Fig. 4 is a section on line IV—IV, of Fig. 1.

Fig. 5 is a sectional view similar to Fig. 4, with the exception that in Fig. 5 the dowel pins are molded integrally with the shell body, whereas in Fig. 4 they are shown as separate members secured in the shell.

Fig. 6 is a section on line, VI—VI, of Fig. 1.

Figs. 7 and 8 are views of the detached metal contact members.

Fig. 9 is a section similar to that shown in Fig. 6 showing the heads of the binding post screws entering holes in the opposite half of the shell, and serving as dowel pins to hold the two halves of the shell in alinement.

Referring to the form of socket shown in the drawings, 1 represents a half of the shell or body member which receives the metal contact members. 2 is the opposite or cover half of the shell or body member. It will be observed that both halves, 1 and 2, are capable of being molded independently of each other, and that when placed together the various apertures will register properly. 3 is the metal contact member which conducts current to the shell or threaded portion of the lamp base. 4 is the metal contact member which conducts current to the central contact of the lamp base. 5 and 6 are binding screws for securing the circuit conductors, 7 and 8, to the metal contact members, 3 and 4 respectively. 9, 9 are dowel pins permanently fixed in, or molded integrally with the shell portions. 10, 10 are holes in the shell portions for the reception of dowel pins, 9, 9. 11 is a slot formed in the shell portion, 2, for the reception of the spring metal contact member, 3. Recesses, 12 and 13, are formed in the shell member, 2, for the reception of the leading-in wires, 7 and 8, and of the binding screws, 5 and 6. Small slots, 14 and 15, are formed in the shell member, 2, connecting recesses, 12 and 13, with the aperture for the lamp base, for the reception of portions of the metal contacts, 3 and 4. The contact members, 3 and 4, are made of spring metal such as brass or phosphor bronze and are adapted to make yielding contact with the lamp base terminals. Contact member 3 is formed so that it stands, normally, in the path of the threaded metal shell of the lamp base, when a lamp is being screwed into the socket, and yields outwardly into slot, 11, making electric contact with the lamp base shell as the lamp base enters the socket.

Internal threads, 16, 16ª, are formed in the lamp base aperture of the shell or body portion, those formed in the half member, 1, registering properly with those formed in the half member, 2, when the shell halves are assembled together. 17 is a machine screw which passes through a hole in the half member, 1, and is threaded into a corresponding hole in the half member, 2, for the purpose of securing the two half members together as may readily be seen in Fig. 6.

An aperture 18 is formed in the half member 1 to accommodate half of the thickness of the leading-in wires.

To connect a socket to the conductors of a lamp cord, the shell halves are separated after first removing screw 17. The conductor wires, 7 and 8, are then secured to the metal contact members, 3 and 4, by means of binding post screws, 5 and 6, which are threaded into the members 3 and 4 respectively. The metal contact members, 3 and 4, may be secured in the recesses formed in the half member 2 by molding them in place, although it is not necessary to secure them in this way, as, after the wires, 7 and 8, are attached to them, and the shell members have been secured together by means of the screw, 17, these metal contact members, 3 and 4, are sufficiently secured in place.

It will be seen that the major portion of my improved socket is composed of insulating material which is particularly desirable not only from the standpoint of electrical safety, but in the matter of cost, as these insulations can be produced cheaper than any form of metal, or of combination, metal and insulation, lamp socket shells with which I am familiar. It will be seen also that my improved socket comprises few parts, all of which are simple and readily manufactured, that the wiring of the socket is easily and quickly accomplished, and the complete socket when wired, is substantial and attains the objects above set forth.

Modified forms of my invention may be made without departing from its scope.

I claim:

1. In a socket for incandescent electric lamps, a shell composed of insulating material divided longitudinally into two complemental parts, a threaded aperture for the reception of a lamp base at one end of said shell, part of said threaded aperture being formed in each of the two parts of said shell, metal contacts mounted on one of the parts of said shell and projecting into said aperture to make contact with the terminals of an incandescent lamp base when it is screwed into said aperture, and means for securing the parts of the shell together.

2. In a socket for incandescent electric lamps, a shell composed of insulating material divided longitudinally into two complemental parts, a threaded aperture for the reception of a lamp base at one end of said shell, part of said threaded aperture being formed in each of the two parts of said shell, metal contact members carried by one of the parts of said shell, means for securing electrical conductors to said metal contact members, said metal contact members extending into said threaded aperture and being adapted to make electrical contact with the terminals of a lamp base when the latter is screwed into said socket.

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

ROBESON B. WOLCOTT.

Witnesses:
HERBERT W. WOLCOTT,
FRANCES K. MANN.