S. TROOD.

LAMP SOCKET.

APPLICATION FILED MAR. 5, 1912.

1,054,652.

Patented Feb. 25, 1913.

Fig. 1.

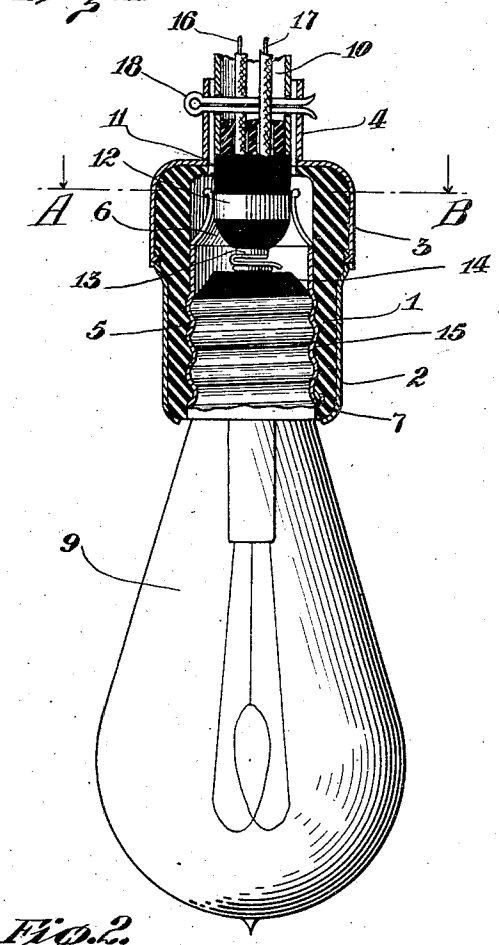
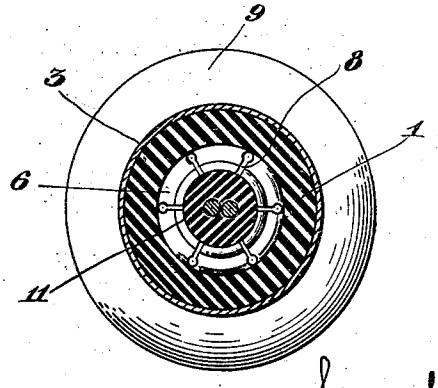


Fig. 2.



Witnesses:
C. S. Ashley
J. J. Donohue

Samuel Trood Inventor

By Attorney
Ralph Julian Sachers

UNITED STATES PATENT OFFICE.

SAMUEL TROOD, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO PLUG CONNECTION ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

LAMP-SOCKET.

1,054,652. Specification of Letters Patent. Patented Feb. 25, 1913.

Application filed March 5, 1912. Serial No. 681,848.

To all whom it may concern:

Be it known that I, SAMUEL TROOD, a citizen of the United States, and resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Lamp-Sockets, of which the following is a specification.

The common form of electric sockets, used in connecting the wires of an electric circuit to a translating device, such as an electric lamp, or to an attachment plug or other electric connector, consists of a suitable insulating socket and a threaded shell therein, forming one terminal of the circuit, and a centrally located contact point, secured to the socket and forming the other terminal of the circuit.

The present invention refers to an electric fitting which is unipolar, *i. e.* having means for connecting with one terminal only, of an electric circuit, while the means for connecting with the other terminal of the circuit, are supplied by a separate element, entirely independent of the fitting itself.

It is one of the objects of the present invention to provide a unipolar electric fitting which is of extreme simplicity of construction and of great durability and can be manufactured at a fraction of the cost, at which similar sockets were made heretofore.

The invention comprises, in substance, an insulating socket, having an interior shell secured thereto which is provided with means, on the one hand, to make contact with one terminal of a leading-in circuit and, on the other hand, with one contact of a translating device, such as an electric incandescent lamp, or one terminal of an electric connector, such as an attachment plug or other device. In the employment of this unipolar socket, the leading-in wires are secured to a separate and independent terminal plug, having a centrally located terminal contact and a peripherally located contact ring. This terminal plug is inserted into one end of the socket and mechanically held thereon by any suitable device, such as a cotter pin, a bayonet lock, screw connection or other means, so that the contact ring of the plug makes contact with the inner shell of the socket, while the center terminal point of the plug, affords the second contact, necessary in continuing the electric circuit to the translating of the connecting device, held in the socket.

The accompanying drawing illustrates the invention, as applied to a lamp socket, and Figure 1, shows an elevation of the invention and in part in longitudinal cross section, and Fig. 2, a horizontal cross section in the line A—B, of Fig. 1.

The insulating socket is represented at 1, and is provided with an outer shell 2, preferably of metal, having an upper portion 3, locked or otherwise secured to the lower portion, and provided with a tubular neck 4. The conducting member of the socket is shown as an inner shell, having a cylindrical threaded portion 5, for receiving the shell terminal of the base of an electric incandescent lamp or of an attachment plug, and an upper preferably conic portion 6, for making contact with the contact ring of the terminal plug of the leading-in circuit. This inner shell may be secured to the insulating body by a tongue 7, locking in a suitable recess, or any other means provided for this similar purpose. The conic portion 6, of the inner shell is provided with slits 8, thereby forming a number of resilient tongues, for yieldingly making contact with the contact ring. An electric incandescent lamp 9, or other translating or connecting device is screwed into the shell in the usual way. The terminal plug of the leading-in circuit consists of a tube 10, having at its end an insulating portion 11, conveniently secured thereto and provided with a peripherally contact ring 12, as one terminal of the leading-in circuit, and a, preferably resilient, central contact 13, as the other terminal of the circuit. The center contact 14, of the electric lamp or the attachment plug, makes contact with the center contact 13, of the terminal plug, while the threaded portion 15, of the lamp base, makes contact with the corresponding portion of the inner shell of the socket. The leading-in wires of the terminal plug, are shown at 16 and 17. A cotter pin 18, penetrating the neck 14, of the outer shell of the socket and also the tube 10, of the terminal plug, provides the mechanical connection between the plug and the socket.

It will be seen that this unipolar electric fitting is eminently adapted for connecting a main circuit to derived circuits, eliminating thereby all soldered or other connec-

tions that heretofore had to be employed in devices of this general character, and the fitting is so simple of construction that even unskilled labor may be employed in using it in all kinds of electrical wiring and systems of electrical distribution.

What I claim and desire to secure by Letters Patent of the United States, is—

1. The combination in a unipolar socket, with an insulating member, of a conducting member therein, comprising a rigid cylindrical portion and a resilient portion.

2. The combination in a unipolar socket, with an insulating member, of a conducting member therein, comprising a rigid cylindrical portion being threaded and a resilient portion.

3. The combination in a unipolar socket, with an insulating member, of a conducting member therein, comprising a rigid cylindrical portion and a resilient conic portion.

4. The combination in a unipolar socket, with an insulating member, of a conducting member therein, comprising a rigid cylindrical portion being threaded and a resilient conic portion.

5. The combination in a unipolar socket, with an insulating member, of a conducting member therein, comprising a rigid cylindrical portion and a resilient conic portion, and a detachable member, having a peripheral terminal adapted to contact with said resilient portion and a second terminal affording a center contact.

6. The combination in a unipolar socket, with an insulating member, of a conducting member therein, comprising a rigid cylindrical portion and a resilient conic portion, a detachable member, having a peripheral terminal adapted to contact with said resilient portion and a second terminal affording a center contact, and means for securing said detachable member to said socket.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses, at New York, in the county of New York and State of New York, this 29th day of February 1912.

SAMUEL TROOD.

In presence of—

W. EUGENE BLAUVELT,

RALPH J. SACHERS.