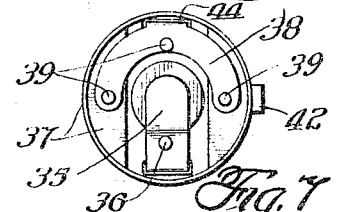
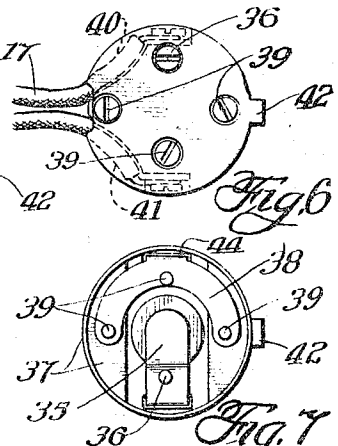
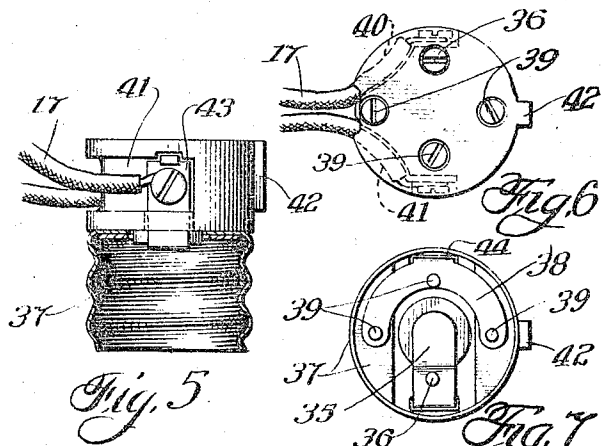
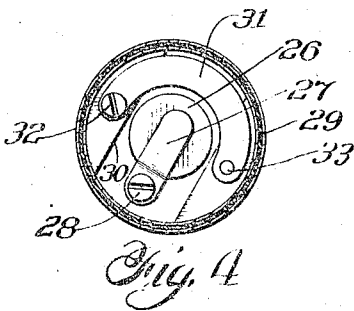
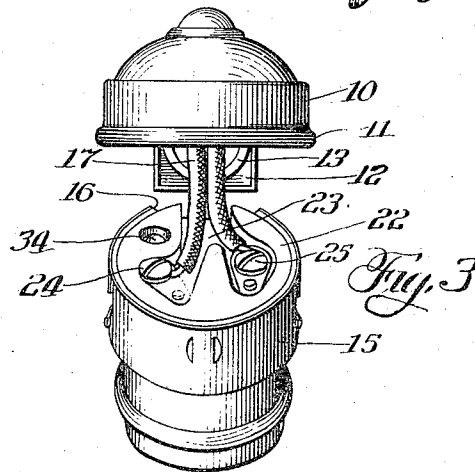
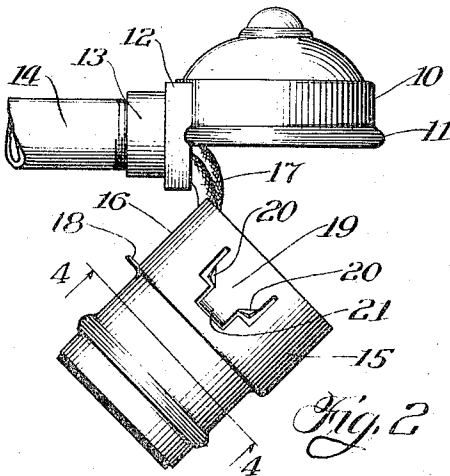
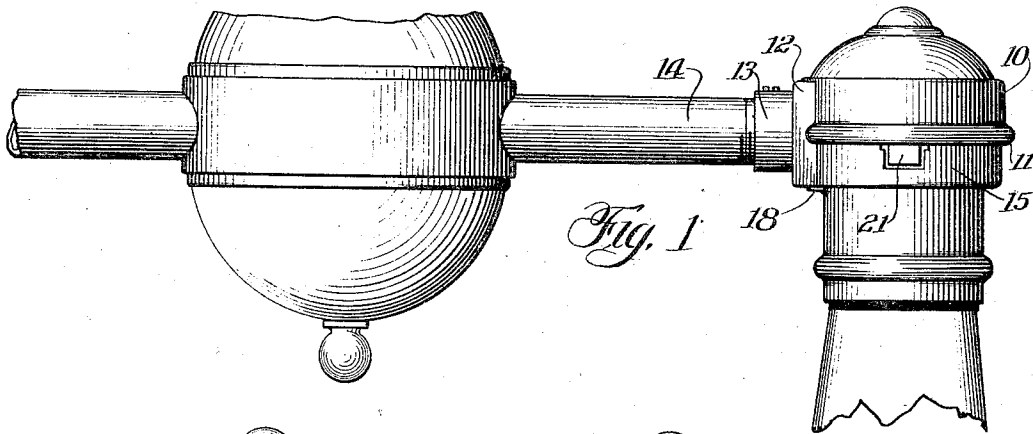


R. B. BENJAMIN,
ELECTRIC LAMP SOCKET.
APPLICATION FILED DEC. 9, 1908.

1,062,139.

Patented May 20, 1913.



Witnesses:
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UNITED STATES PATENT OFFICE.

REUBEN B. BENJAMIN, OF CHICAGO, ILLINOIS, ASSIGNOR TO BENJAMIN ELECTRIC MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

ELECTRIC-LAMP SOCKET.

1,062,139.

Specification of Letters Patent.

Patented May 20, 1913.

Application filed December 9, 1908. Serial No. 466,733.

To all whom it may concern:

Be it known that I, REUBEN B. BENJAMIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements 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.

This invention relates to sockets for incandescent electric lamps and provides a socket peculiarly adapted for use in situations where it is desirable that the socket extend at right angles to the main portion of its support.

In wiring a building, it is very often desirable to support a lamp socket from a conduit in such manner that it will extend approximately at right angles therefrom. This is usually effected by the addition to the end of the conduit of a screw-threaded elbow, into the outer arm of which is screwed one end of a stub pipe the other end of which is screwed into a threaded collar extending from the center of the socket cap. This method has several disadvantages, chief among which is the loss of time entailed in assembling the various parts and in drawing the lead wires through the bend at the end of the conduit.

One of the objects of my invention is the provision of an electric lamp socket which, when directly attached to a conduit or the like, will extend substantially at right angles therefrom.

It is another object of my invention to construct a socket of this character in such a manner that the binding terminals within the socket may be very readily accessible at any time.

To these ends I form the socket in two readily separable parts, viz, a shell for containing the terminal-carrying base and a cap detachably secured to the shell, the cap being so formed that the conduit can be secured to the side thereof.

For an understanding of my invention

reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is an elevational view showing the socket attached to one arm of a chandelier; Fig. 2 is a similar view, showing the shell detached from the cap; Fig. 3 is an end view of the socket, showing the shell detached from the cap; Fig. 4 is a section on the line 4—4 of Fig. 2, looking in the direction of the arrows; Fig. 5 shows a modified form of insulating base and the parts carried thereby; Fig. 6 is a plan, and Fig. 7 an inverted plan, of the parts shown in Fig. 5.

Like reference numerals refer to corresponding parts throughout the specification and drawings.

Referring to Figs. 1 to 4 of the drawings, the cap 10 is provided with a peripheral bead 11 at its edge, adapted to engage projections on the shell, as will be hereinafter described. The cap 10 is also formed with a hollow boss 12 of sufficient size to carry an internally screw-threaded bushing 13 for receiving the end of the conductor-carrying conduit 14, the boss 12 being extended below the lower edge of the cap, as shown in Figs. 1, 2 and 3.

The shell 15 is formed with a longitudinal recess 16 for receiving the boss 12 and enabling the conductors 17 to enter the shell and be secured to the binding terminals. In forming the recess 16 a projecting portion 18 is left at the lower end thereof, to form a stop adapted to abut against the lower end of the boss. Spring tongues 19 are formed, by stamping, in the shell, and have upwardly turned corners adapted to engage beneath the bead 11 of the cap and retain the shell in connection with the latter. The tongues 19 are also formed with front extensions 21, which are curved so as to be readily operable by hand to bend the tongues 19 inward and release the upturned corners 20 from the bead 11, when it is desired to detach the shell from the cap.

The shell 15 contains an insulating base 22,

formed with a forked channel 23 in its upper face, in the arms of which channel are located the binding terminals 24 and 25. The base 22 is also formed with a central boss 26 at its lower end, upon which boss lies the center contact 27 of the socket. A screw 28, passing longitudinally through the base, connects the contact 27 with the shank of the binding terminal 24, as shown in Figs. 3 and 4.

Resting against the lower end of the base is the upper end of a threaded contact sleeve 29 of ordinary construction. The sleeve 29 has a slot 30 formed in the upper end thereof into which the boss 26 extends, the slot being of such width as to give sufficient clearance between the metal of the contact sleeve 29 and of the center contact 27, to preclude any chance of sparking between them. The sleeve 29 is firmly maintained in position on the base by a crescent-shaped metallic plate 31 through the ends of which pass a screw 32, extending through the base and entering the shank of the binding terminal 25, to make contact between the latter and the contact sleeve 29, and a screw 33 which extends through the base and the head 34 of which rests in a depression formed in the upper surface of the base.

In attaching the socket to a conduit, the bushing 13 is screwed onto the end of the conduit and the lead wires are then pulled through the bushing and clamped on to the binding terminals 24 and 25. This may be very easily effected since there is no bend or other obstruction to the path of the wires. It is then only necessary to push the shell 15 into the cap 10 until the corners 20 of the catches 19 engage under the bead 11 of the cap, the shell being thereby securely retained in place. If it is desired to inspect the contacts for any purpose, it is only necessary to press with the fingers upon the extensions 21, whereby the corners 19 of the catches 20 are disengaged from beneath the bead 11, when the shell can be moved downward and swing backward as shown in Fig. 2.

In sockets as hitherto constructed the lead wires have entered through the center of the cap so that, when it was desired to remove the shell downward in order to inspect the binding terminals, the lead wires were usually subjected to considerable tension, with the result that, in some cases, the lead wires broke away from the binding terminals. This objection is entirely obviated by my device.

In the modified form of insulating base shown in Figs. 5-7, the center contact 35 is secured to the base by means of a screw 36 passing therethrough, the head of which screw is embedded in the upper surface of

the base. The threaded contact sleeve 37 is clamped in position by a crescent-shaped metallic plate 38, similar to the plate 31, which plate 38 is held in place by three screws 39 similar to the screw 36. The base is in this case formed with side recesses 40 and 41 which meet at a point which will be located adjacent the opening 16 of the shell when the base is inserted in the latter, a tongue 42 being formed on the base for the purpose of engaging projections on the shell in order to determine the position of the base therein. The center contact 35 is in this instance formed with an extension 43 extending upward into the recess 41 and provided with a binding terminal for receiving one of the lead wires. The plate 38 is also formed with an upwardly turned lug 44 which extends into the recess 40 and also carries a binding terminal to which is secured the other lead wire.

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

1. An electric lamp socket comprising a cap, a laterally extending supporting bushing secured to said cap, a shell detachably secured to said cap and supported thereby, said shell being formed with a recess registering with the inner end of said supporting bushing when said cap and shell are assembled, and a lamp-contact-supporting insulating base contained in said shell and supported thereby.

2. An electric lamp socket comprising a cap formed with a lateral boss extending below the edge thereof, a supporting bushing secured to said boss, and a shell connected to said cap and supported thereby, said shell being formed with a recess for receiving the projecting lower part of said boss when said cap and shell are assembled.

3. An electric lamp socket comprising a cap formed with a rectangular boss extending beyond the edge thereof, a supporting bushing secured to said boss, and a shell connected to said cap and supported thereby, said shell having a portion of its edge cut away to receive said boss when said cap and shell are assembled.

4. An electric lamp socket comprising a cap, hollow supporting means extending laterally from the cap, a shell connected to said cap and supported thereby, and an insulating base carried by said shell, said base being formed with a channel registering at its end with said supporting means when the said cap and shell are assembled.

5. An electric lamp socket comprising a cap, hollow supporting means extending laterally from the cap, a shell connected to said cap, and an insulating base carried by said shell, said base being formed with a channel

in its upper face registering at its end with said supporting means when said cap and shell are assembled.

5 6. An electric lamp socket comprising a cap, hollow supporting means extending from the side of said cap, a shell connected to said cap and supported thereby, said shell being formed with a recess registering with said supporting means when said cap
10 and shell are assembled, and an insulating

base carried by said shell, said base being formed with a channel registering at its end with said recess.

In witness whereof, I have hereunto subscribed my name in the presence of two 15 witnesses.

REUBEN B. BENJAMIN.

Witnesses:

CHARLES G. COPE,
M. R. ROCHFORD.