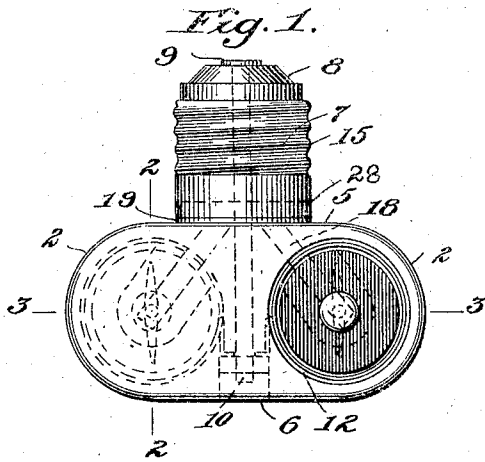
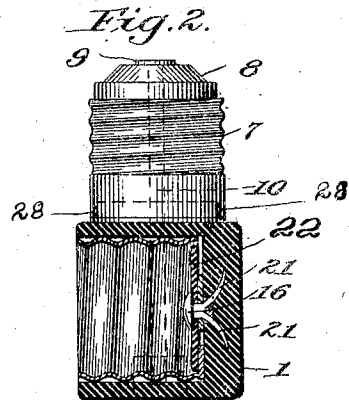
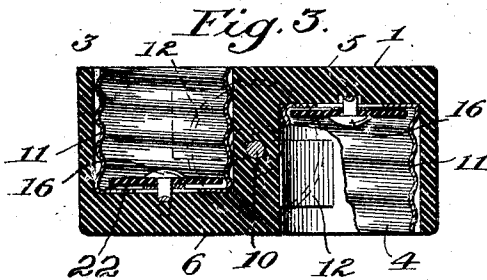
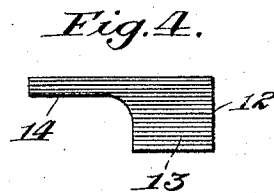
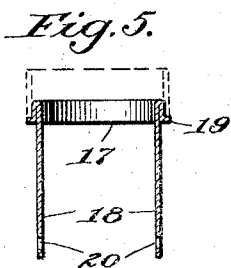
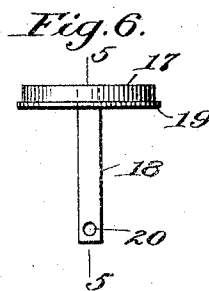
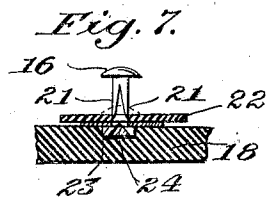
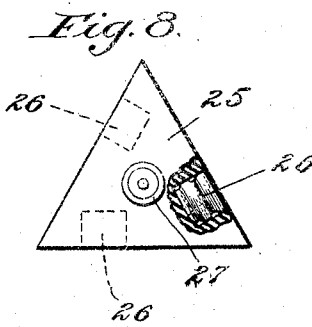


F. W. MINOR AND R. H. WOOD.
 PLURAL LAMP SOCKET.
 APPLICATION FILED FEB. 8, 1919.

1,333,182.

Patented Mar. 9, 1920.



Inventors:
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UNITED STATES PATENT OFFICE.

FRANK W. MINOR AND ROBERT HOMER WOOD, OF RICHMOND, VIRGINIA, ASSIGNORS OF
ONE-THIRD TO OSBOURNE WATTSON, OF RICHMOND, VIRGINIA.

PLURAL LAMP-SOCKET.

1,333,182.

Specification of Letters Patent.

Patented Mar. 9, 1920.

Application filed February 8, 1919. Serial No. 275,798.

To all whom it may concern:

Be it known that we, FRANK W. MINOR and ROBERT HOMER WOOD, citizens of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented a new and useful Improvement in Plural Lamp-Sockets, of which the following is a specification.

This invention relates to sockets for holding a plurality of electric lamps, and has for its object to improve and simplify the construction of such sockets, reduce the cost of manufacture thereof, and produce them in more convenient form for carrying and use.

Another object is to eliminate the danger of breakage should the socket be dropped on a stone or tile floor.

A further object is to improve and simplify the electric connections from the main plug to the branch sockets, said connections being from the outside of the plug to the center of each of the branch sockets and from the center of the plug to the outside of each socket.

It is also the aim of this invention to produce a two-lamp socket which is much more compact than those heretofore designed, and which not only economizes space in carrying, as in the pocket of a workman, but also reduces or shortens the space occupied by the lamps when attached to the socket, which is an important consideration especially in table lamps.

Other objects will appear as the description proceeds.

The invention will first be hereinafter described in connection with the accompanying drawings, which constitute part of this specification, and then more specifically defined in the claims at the end of the description.

In the accompanying drawings, wherein similar letters of reference are used to designate corresponding parts throughout the several views—

Figure 1 is a side elevation of a two-lamp socket constructed substantially in accordance with this invention.

Fig. 2 is a cross section on the line 2—2 of Fig. 1.

Fig. 3 is a section on the line 3—3 of Fig. 1.

Fig. 4 is a detailed view of the blank from which one of the connectors from the center

bolt of the main plug to the outside of each branch socket is made; the blank as shown being flat prior to being properly shaped for use as a connector.

Fig. 5 is a sectional view, on the line 5—5 of Fig. 6, of the connector ring and arms for coupling the outside of the main plug electrically to the centers of the branch sockets, the lower end portion of the outside contact shell of the plug being shown in dotted lines as it fits over said connector ring.

Fig. 6 is a side elevation of said connector ring and arms.

Fig. 7 is a detailed section of the base of one of the branch sockets, showing more clearly how the end of each connector arm from the connector ring is fastened to the contact button in the center of each branch socket, and the manner of securing said contact button to the casing, and

Fig. 8 is a plan view of a modified form of socket for carrying three lamps.

The casing or block 1 of the socket is preferably made of fiber or other suitable insulating material, and is generally elliptical in vertical longitudinal section, the ends being rounded at 2 to conform to the walls of the branch sockets 3 and 4, while the lateral faces 5 and 6 of said casing are preferably parallel. One of the branch sockets opens on each of said lateral faces of the casing or insulation block 1. As illustrated in the drawings, the branch socket 3 opens on the lateral face 5, and the branch socket 4 opens on the lateral face 6 of the casing or block 1. The main plug 7 is attached to the top of the casing 1 centrally thereof and equidistant from the two branch sockets 3 and 4. It will be observed that the branch sockets are arranged close together, so that almost half of each underlies the plug 7, Fig. 1, and that said sockets overlap each other, thereby reducing the width of the casing block to the minimum and shortening the length of the fixture from lamp tip to lamp tip when the lamps (not shown) are attached to the branch sockets, as will be readily understood.

The plug 7 is provided with a non-breakable button tip or washer 8, preferably made of fiber, as is also the body portion of the said plug, so that there is no danger of the socket being broken in case it should fall on a hard surface. The contact button 9 of the

plug 7 is formed as the head of a bolt 10 which extends centrally through said plug and down between the branch sockets 3 and 4 in the block 1. This bolt 10 is electrically connected to the outer contact shell 11 of each of the branch sockets by a connector 12, Figs. 3 and 4, which consists of a plate portion 13 lying in contact with the shell 11, and a reduced extension finger 14 passed through the partition between the sockets in the block 1 to the bolt 10.

The outer contact shell 15 of the plug 7 is electrically connected to the central contact buttons 16 of the branch sockets 3 and 4 by means of a connector ring 17 having integral diametrically arranged arms 18 one of which extends to each branch socket. The ring 17 is preferably provided with a flange 19 around its lower edge to fit between the lower end of the shell 15 and the top of the block 1. The arms 18 of said ring are bent, as shown in dotted lines in Fig. 1, to extend to the centers of the respective sockets. Each arm has a perforation or hole 20 in its extremity for attachment to the central contact button 16 of the corresponding socket.

The central contact buttons 16 for the branch sockets are formed as the heads of rivets having prongs forming split stems or shanks 21 to be passed through the fiber washers 22 in the bottoms of said sockets, also through the holes 20 in the arms 18, and then spread or riveted in the portions of the block 1 at the ends of the sockets. As best shown in Fig. 7 a recess 23 is preferably formed in the block 1 centrally of the inner end of each socket to receive the split shank 21 of the corresponding rivet, and a wedge-shaped piece 24 is arranged in the middle of said recess 23 to spread said split shank so that it will be properly riveted in the block 1, as shown in dotted lines. This construction avoids the use of the ordinary bolt and nut which usually extends through the block 1 to the outside thereof and which is easily accessible and apt to cause unauthorized disconnection.

In addition to its being an electrical connector the bolt 10 also binds and securely holds the plug 7 to the casing or block 1, as is obvious.

Opposed indentations as at 28 on the plug shell 7 and connector ring 17, are provided for locking the plug shell in position about the upright flange of the ring. These indentations may be made after the device is assembled, if desired, by simply tapping the plug shell with the proper tool.

As suggested in Fig. 8, the socket block 25 may be made in different shapes to accommodate various numbers of sockets 26, but the connections (not shown) from the plug 27 to said sockets may be the same as already described, it being obvious that the

contact ring of Figs. 5 and 6, may have any number of contact arms, and any number of connectors 12, Fig. 4, may be attached to the bolt 10.

Having thus fully described our invention, what we claim as new and desire to secure by Letters Patent of the United States is:

1. In a plural lamp socket, the combination with a main plug having an outside contact shell and a central contact button, of a block having branch sockets provided with contacts, a ring extending around the surface of and in contact with the shell of the plug and having integral arms extending respectively to one of the contacts of each socket, and electric connections between the central contact button of the plug and the other contact of each socket.

2. In a plural lamp socket, the combination with a main plug having an outside contact shell and a central contact button, of a block having branch sockets provided with contacts, a ring extending up inside and around and in contact with the shell of the plug and having arms extending respectively to one of the contacts of each socket, and electric connections between the central contact button of the plug and the other contact of each socket.

3. In a plural lamp socket, the combination with a main plug having an outside shell contact and a central contact button, of a block having branch sockets provided with contacts, a ring extending around the surface of and in contact with the shell of the plug and having integral arms extending respectively to one of the contacts of each socket, a bolt extending from the central contact button of the plug, and connectors arranged respectively between the other contact of each socket and said bolt.

4. In a lamp socket, the combination with a casing, of a connector, and a button contact having a shank formed with prongs riveted through the connector with the prongs embedded in the interior of the casing.

5. In a lamp socket, the combination with a casing, of a connector having a hole therein, and a button contact having a shank formed with prongs passed through the hole in the connector and riveted to the interior of the casing, with the prongs of the rivet embedded therein.

6. In a lamp socket, the combination with a casing, of a connector having a hole therein, and a button contact having a shank formed with prongs passed through the hole in the connector and spread into riveted engagement with the interior of the casing, with the prongs of the rivet embedded therein.

7. In a lamp socket, the combination with a casing having a recess, of a connector hav-

ing a hole therein, a wedge in said recess in the casing, and a button contact having a shank formed with prongs passed through the hole in the connector and spread over the wedge into riveted engagement with the interior of the casing, the prongs of the rivet being embedded in said casing.

8. In a plural lamp socket, the combination with a main plug, of a block depending from said plug and having a plurality of lateral faces, there being branch sockets overlapping each other on their longitudinal axes arranged in parallel planes in said block, and opening on different ones of said lateral faces.

9. In a plural-lamp socket, the combina-

tion with a main plug, of a block depending from said plug and having parallel lateral faces and parallel branch sockets overlapping each other on their longitudinal axes and opening respectively on the opposite lateral faces of the block.

10. In a plural-lamp socket, the combination with a main plug, of a block depending from said plug and having lateral faces and parallel branch sockets opening respectively on the opposite faces of said parallel lateral faces of the block, the longitudinal axes of said sockets being parallel.

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