

J. C. TOURNIER.
CLUSTER SOCKET.
APPLICATION FILED MAR. 5, 1909.

1,010,465.

Patented Dec. 5, 1911.

Fig. 1.

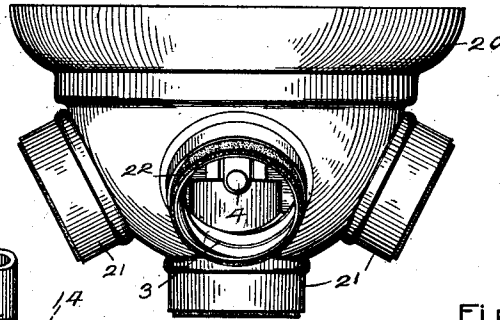


Fig. 2.

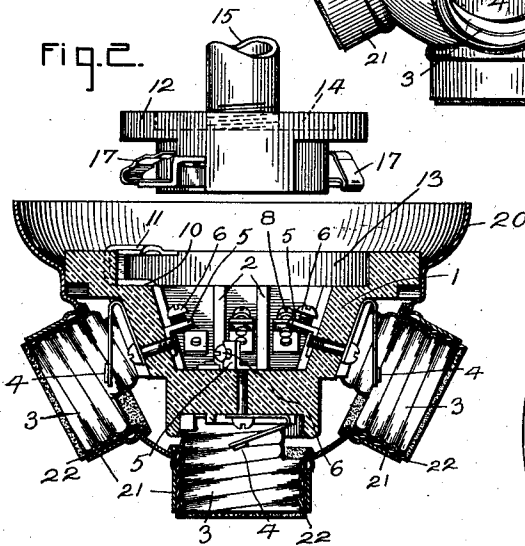


Fig. 3.

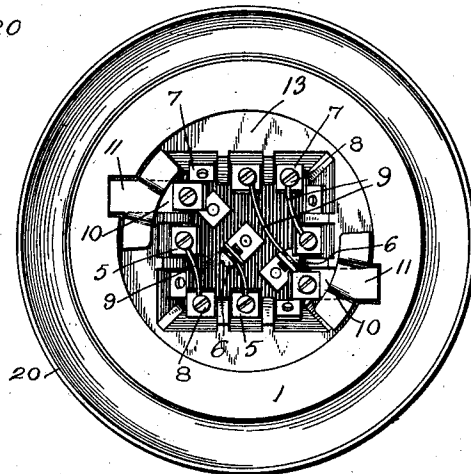


Fig. 5.

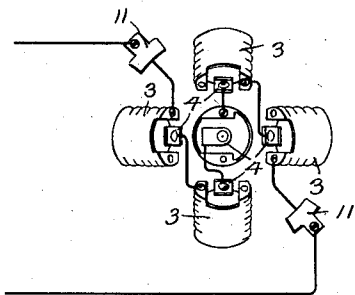
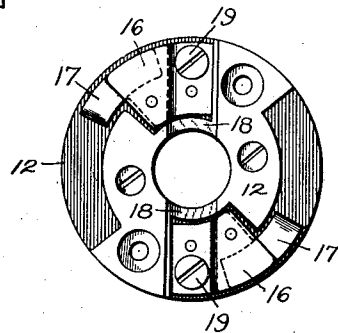


Fig. 4.



WITNESSES:

W. Ray Taylor.
J. Ellis Allen.

INVENTOR:

JULIUS C. TOURNIER

BY *Alfred H. Davis*

ATTY.

UNITED STATES PATENT OFFICE.

JULIUS CH. TOURNIER, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

CLUSTER-SOCKET.

1,010,465.

Specification of Letters Patent.

Patented Dec. 5, 1911.

Application filed March 5, 1909. Serial No. 481,399.

To all whom it may concern:

Be it known that I, JULIUS C. TOURNIER, a citizen of the United States, residing at Schenectady, in the county of Schenectady, State of New York, have invented certain new and useful Improvements in Cluster-Sockets, of which the following is a specification.

This invention relates to electric lighting devices, and its object is to provide a simple and inexpensive cluster socket in which the pairs of contacts in the several sockets can be connected by short pieces of wire, whereby the lamps can be grouped in series or in multiple or in any other combination desired.

In the accompanying drawing, Figure 1 is a side elevation of a cluster socket embodying my improvements; Fig. 2 is a longitudinal section, showing the lamp-supporting element disconnected from its hanger; Fig. 3 is a top plan view of the lamp-supporting element; Fig. 4 is a bottom plan view of the hanger, and Fig. 5 is a diagram of circuits, showing the sockets connected in series.

The cluster socket shown is arranged to hold five lamps, four at equal distances apart around its sides, and one in the center at the bottom. The number of lamps may be other than this, however, and the selection of five for illustration is merely incidental.

The body 1 is of suitable insulating material, such as molded porcelain, and its shape is substantially that of an inverted truncated cone. In its upper side is a hopper-shaped recess, having inclined sides provided with upright ribs 2, dividing each side into three shallow recesses. In each recess is a nut meshing with the end of a screw, said screws serving to hold in place the shell contacts 3 and the center contacts 4 of the several lamp sockets, which are grouped around the outside of the body 1. The bottom socket contacts are secured by screws which pass up through the lower end of the body 1 and are provided with nuts.

On each of the nuts 5 which fasten the center contacts in place is a flange having a tapped hole to receive a binding screw 6. One of each pair of nuts 7 which hold the shell contacts to the body is likewise provided with a flange in which is a tapped hole to receive a binding screw 8. By means

of short pieces of insulated wire 9 the shell and center contacts in the several sockets can be connected together in any suitable or desired grouping of the lamps.

At diagonally opposite corners of the recess in which the nuts and binding screws are located are two metallic strips 10, each clamped by one of the nuts engaging a screw which fastens the shell contact of the socket on that side of the body 1. The upper end of each strip is fashioned into a clip 11 which lies parallel with the upper surface of the body 1. The hanger comprises a block 12 of insulating material, circular in shape, to fit into a circular countersink 13 in the upper end of the body 1. A metallic nut 14 is let into the upper side of the block, to receive the end of a pipe or other supporting member 15. The sides of the block are cut away to accommodate two plates 16 having resilient tongues 17 which are adapted to engage under the clips 11 when the body 1 is closed up against the block and given a partial rotation; the action being that of the well-known bayonet joint. The branch leads from the line are brought down through the pipe 15 and carried out through the grooves 18 to the binding screws 19 on the contact plates 16. It follows that when the body is connected to the block the circuit is completed through the lamps; the tongues 17 serving not only to support the body and its lamps but also to act as circuit closers.

A casing or canopy 20 of spun sheet metal with apertures corresponding to the lamp contacts having sheet metal collars 21 spun therein, incloses the body 1 and the lamp contacts, being insulated from the shell contacts by interposed sleeves of insulating material 22, having their inner ends flared outwardly to engage shoulders at the inner ends of the collars.

This cluster socket is simple in construction, and can be easily assembled. After the connections are made by the short wires 9, the recess in which they are located can be filled with wax to prevent short circuits and the entrance of dirt and moisture. This filling extends, of course, only up to the top of the hopper-shaped recess, leaving the circular countersink open to receive the block 12.

I do not desire to restrict myself to the particular form or arrangement of parts

herein shown and described, since it is apparent that they may be changed and modified without departing from my invention.

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

1. A cluster socket for electric lamps, comprising an insulated hanger having
10 contact tongues adapted for connection with line wires mounted thereon, an insulating base having a recess in its upper side and a plurality of lamp contacts mounted on the under side, binding posts secured in the
15 recess of said base by screws extending through the base and engaging said lamp contacts, conducting clips secured to the upper surface of said base and adapted to engage the contact tongues of said hanger,
20 and short conductors arranged to detachably

connect said binding posts whereby the sequence of connection between the lamp contacts may be changed at will.

2. A cluster socket for electric lamps, comprising a body of insulating material 25 having a recess in its upper side, lamp contacts located on the outside of said base, binding posts located on the inside of said base, metallic securing means extending through the base and connecting each lamp 30 contact with a binding post, and parallel ribs formed on the inner and outer surface of said base for holding said binding posts and lamp contact in fixed position.

In witness whereof, I have hereunto set 35 my hand this second day of March, 1909.

JULIUS CH. TOURNIER.

Witnesses:

HELEN ORFORD,
BENJAMIN B. HULL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."