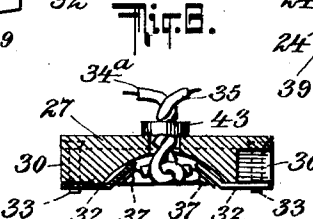
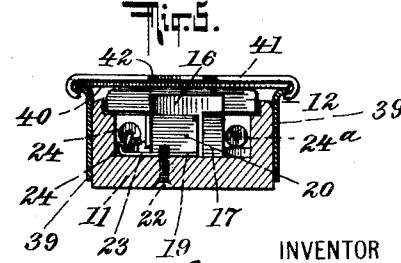
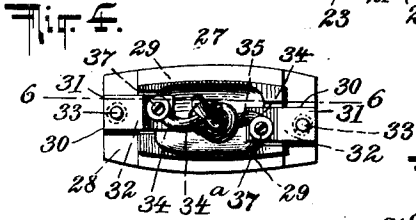
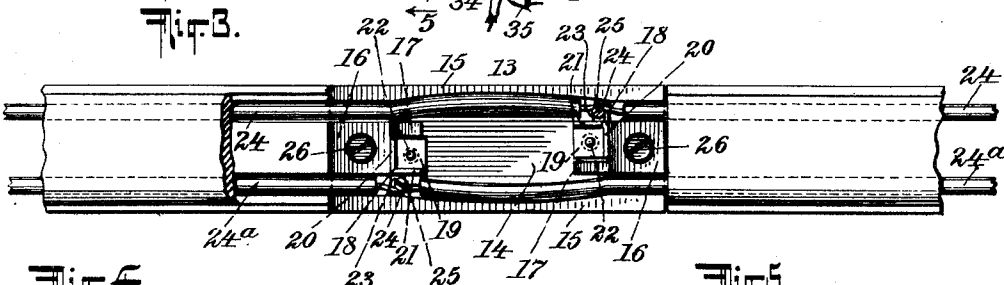
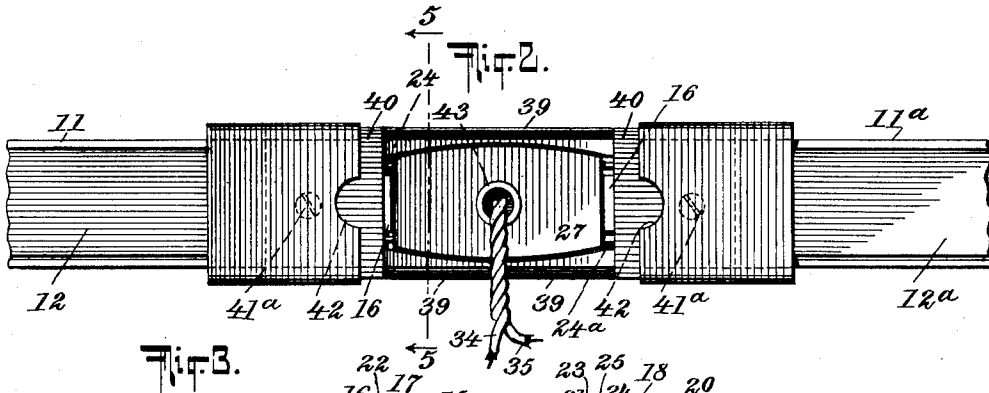
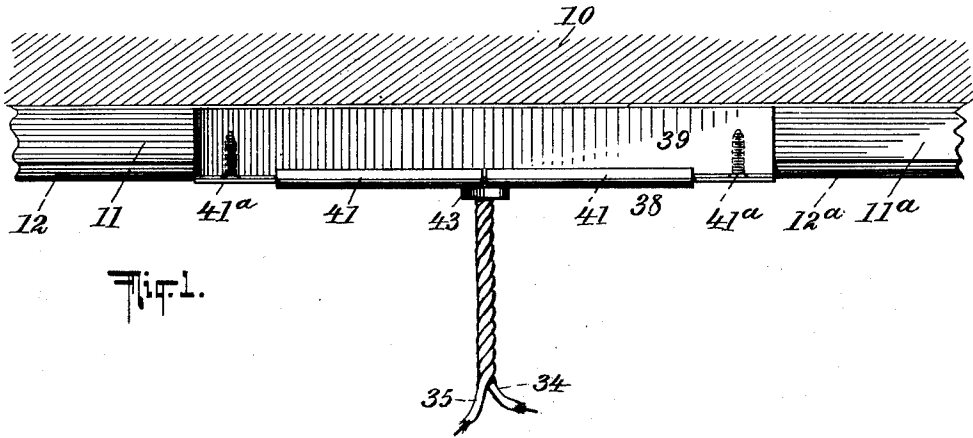


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MOLDING SOCKET AND PLUG.
APPLICATION FILED JUNE 11, 1910.

1,043,054.

Patented Oct. 29, 1912.



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MOLDING SOCKET AND PLUG.

1,043,054.

Specification of Letters Patent.

Patented Oct. 29, 1912.

Application filed June 11, 1910. Serial No. 566,361.

To all whom it may concern:

Be it known that I, GEORGE BROOKE, a subject of the King of Great Britain, residing at the city of New York, borough of Manhattan, in the county and State of New York, have invented certain new and useful Improvements in Molding Sockets and Plugs, of which the following is a full, clear, and exact specification.

My invention relates to improvements in electrical cut-outs, and the same has for its object more particularly to provide a simple, efficient and reliable receptacle and plug which may be readily connected to electric conductors disposed within a molding.

Further, said invention has for its object to provide a device which may be secured in position, and connected to the conductors without necessitating the cutting or severing of said conductors.

Further, said invention has for its object to provide a device which may be readily secured in place between the adjacent or separated ends of molding sections in such manner that the device shall be substantially flush with said molding.

Further, said invention has for its object to provide a socket and plug, and means for completely inclosing the same, which inclosing means shall also serve to secure the plug in position within the socket member of the device.

To the attainment of the aforesaid objects and ends, my invention consists in the novel details of construction, and in the combination, connection and arrangement of parts hereinafter more fully described and then pointed out in the claims.

In the accompanying drawings forming part of this specification, wherein like numerals of reference indicate like parts, Figure 1 is a side view showing a separated section of electrical molding with a socket and plug constructed according to and embodying my invention applied thereto; Fig. 2 is a face view thereof showing the movable cover portions of the housing separated to disclose the detachable plug in position within the socket member; Fig. 3 is a view similar to Fig. 2 with the housing and detachable plug removed to show the interior construction of the socket member, and its position relatively to the adjacent ends of the molding sections; Fig. 4 is an inverted plan view of the plug; Fig. 5 is a trans-

verse section taken on the line 5—5 of Fig. 2 looking in the direction of the arrow, and Fig. 6 is a detail longitudinal section of the plug taken on the line 6—6 of Fig. 4.

In said drawings 10 designates a ceiling or other suitable support to which is secured, in the usual manner, an electric molding comprising two separated sections 11, 11^a, provided with the usual capping strips 12, 12^a. Intermediate the separated ends of said molding sections is disposed a socket member 13 made of porcelain, or other suitable insulating material, and corresponding in cross-sectional area with the molding sections 11, 11^a and the capping strips 12, 12^a thereon. The socket member 13 consists of a flat base 14 provided along its opposite longitudinal edges with upwardly extending walls or side members 15, 15, and at the opposite ends of the base 14 intermediate said side walls or members 15, 15 are provided integral supports 16, 16 having their upper edges flush with the upper edges of the side walls 15, 15. At the inner edges of the supports 16, 16 are provided inwardly extending projections 17, 17 which have their upper edges partly cut away. The intermediate portions of the said walls or members 15, between the supports 16, 16, are slightly curved longitudinally while their ends are straight and arranged parallel with the longitudinal sides of the supports 16, 16.

18, 18 denote contact members secured adjacent to the inner ends of the supports 16, 16. Each of said contact members comprises a base 19 having a vertical transverse side 20 arranged upon the inner transverse side of one of the supports 16, 16 while the longitudinal vertical side 21, is arranged at right angles thereto and parallel with the projections 17, 17 extending from the inner edges of supports 16, 16. The contact members 19, 19 are secured in position upon the base 14 of the socket member by screws 22, 22 extending from below, through the base 14 of the socket members and into the base portions 19, 19 of said contact members. Each contact member 18 is provided at its base with an integral laterally projecting portion 23 having its outer end 24 turned upwardly and arranged in close proximity to the inner side of one of the walls 13, 13 of the socket member.

24, 24^a denote electrical conductors dis-

posed within the longitudinal grooves of the molding and extending through the socket member 13 intermediate the walls 15, 15 and supports 16, 16 thereof. The conductors 24, 24^a each have a portion of the insulating covering removed therefrom at a point directly above one of the transversely extending portions 22, of the contact members 18, 18, which bared portion is secured to said projection by a screw 25. The supports 16, 16 are provided with vertical apertures to receive screws 26, 26 whereby said socket member may be secured in position upon the ceiling or other support, intermediate the adjacent ends of the molding sections 11, 11^a.

27 denotes a detachable plug comprising a plate 28 having its longitudinal edges conformed to the inner sides of the walls or side members 15, 15 of the socket 13, and its ends adapted to lie intermediate the supports 16, 16, and upon the projections 17, 17 extending therefrom. The plug 27 is provided upon its under side with depending longitudinal projections 29, 29, and adjacent to the opposite ends of said plug are arranged lugs 30, 30 and extending intermediate the depending longitudinal projections and upon said lugs 30, 30 are secured metallic contact members 31, 31, each comprising a top portion 32 from which extend side members 34. The contact members 31, 31 are secured upon the lugs 30, 30 by screws 33, 33 extending through the top plate 28.

34^a, 35 denote flexible conductors which are twisted together, and have their inner ends extending through an opening 36 in the center of the plug 27, and secured by screws 37, 37 to the contact members 31, 31. The contact members 31, 31 arranged upon the under side of the plug 27 are slightly staggered in order to conform to and fit intermediate the longitudinal sides of the contact members 18, 18 upon the base 14, and the projections 17, 17 extending inwardly from the supports 16, 16 on said base.

38 denotes a housing comprising a pair of longitudinal members 39, 39 adapted for contact with the vertical edges of the molding sections 11, 11^a, and the outer side of the walls 13, 13 of the socket member 13. The upper edges of said longitudinal members are bent outwardly and united at the opposite ends by separated transverse sections 40, 40. The longitudinal members 39, 39 are of such height as to fit upon the molding sections 11, 11^a, and permit the transverse connecting sections 40, 40 to contact with the outer sides of the capping pieces 12, 12^a, and be secured in position upon said molding sections by screws 41^a, 41^a. Upon the opposite ends of the housing 38 are arranged slidable cover plates 41, 41, which have their ends bent over the projecting edges of the side members 39, 39. The opposing edges

of the cover plates 41, 41 are provided with semi-circular recesses 42, 42 which jointly form a circular opening when the cover plates 41, 41 are brought together to receive the central boss 43, provided upon the outer side of the plug 27, and through which the opening 36 in the plug 27 also extends.

In order to attach the plug 27, it merely becomes necessary to insert the same within the socket member 13, whereby the contact members 31, 31 on the side of the plug 27 are caused to engage with the contact members 18, 18 arranged upon the base of the socket 14, and form electric connections therewith. Thereupon the cover plates 41, 41 are moved inwardly toward each other until their opposite edges are brought into contact and thereby confine the plug 27 in position within its socket 14.

It will be noted that by means of my improved socket and plug, it merely becomes necessary to cut away a portion of the molding sufficient to accommodate the socket member 13, and then remove a small portion of the insulating covering of each conductor in order that an electric contact may be established between the conductor and the projections 25, 25 extending from the contact members 18, 18 on the base of the receptacle. Hereupon the cover plates 41, 41 of the housing 38 are brought together to close the opening in said housing and confine the plug properly in position within its socket member. The opening intermediate the transverse portions 40, 40 of the housing 38 is of sufficient size to permit of the plug 27 being readily passed therethrough and inserted into the socket member.

It will thus be obvious by means of my receptacle and plug, connections may be made at any desired point in the line, and as the socket and plug correspond in cross-sectional area with that of the molding and its capping piece, the same will not project beyond the outlines thereof, thus producing substantially flush attachment which is not subject to be disturbed after it has been properly adjusted and secured in place.

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

1. The combination of a molding comprising two separated sections, with a socket member disposed intermediate the separated ends of said molding sections, a detachable plug adapted to be fitted into said socket member, and means on said molding sections adapted to inclose said plug and positively secure the same in position within said socket member, substantially as specified.

2. The combination of a molding comprising two separated sections, with a socket member disposed intermediate the separated ends of said molding sections, a detachable

plug adapted to be fitted into said socket member, a housing secured to said molding sections, and means arranged upon said housing and cooperating therewith to inclose said plug and positively secure the same in position within said socket member, substantially as specified.

3. The combination of a molding comprising two separated sections, with a socket member corresponding in cross-sectional area with said molding, fitted intermediate the separated ends thereof, a detachable plug adapted to be fitted into said socket member, a housing for said socket member and plug, and covering means on said housing adapted to maintain said plug in position within said socket member, substantially as specified.

4. The combination of a molding comprising two separated sections, with a socket member disposed intermediate the separated ends of said molding sections, and conformed thereto a detachable plug adapted to be fitted into said socket member, a housing secured to the ends of said separated molding sections and provided with an opening, and cover plates movably arranged upon said housing adapted to maintain said plug in position within said socket member, substantially as specified.

5. The combination of a molding comprising two separated sections, with a socket member disposed intermediate the same, a detachable plug adapted to fit entirely within said socket member, a housing secured to the ends of said separated molding sections and provided with an opening to admit said detachable plug, and cover plates arranged upon said housing adapted to cover the opening therein and maintain said plug in position within said socket member, substantially as specified.

6. The combination of a molding comprising two separated sections, with a socket member fitted intermediate the opposing ends of said molding sections, a plug adapted to be fitted within said socket member, a housing secured at its ends to the separated

ends of said molding sections and inclose said socket member, said housing being provided with an opening to receive said plug, and cover plates slidably arranged upon said housing adapted to close the opening therein, and maintain said plug in position within said housing, substantially as specified.

7. The combination of a molding comprising two separated sections, conductors therein, with a socket member disposed intermediate the separated ends of said molding sections, contacts on said socket members connected to said conductors, a plug adapted to be fitted into said socket member, contacts on said plug adapted to engage with the contacts on said socket member, a housing secured to said molding sections having an opening therein to receive said plug, and cover plates arranged upon said housing to confine said plug and maintain the same in position within said socket member, substantially as specified.

8. The combination of a molding comprising two separated sections, conductors therein, with a socket member disposed intermediate the ends of said molding sections, contact members secured within said socket and connected to said conductors, a plug conformed to said socket and adapted to fit wholly within the same, contact members secured to said plug adapted to engage with the contact members on said socket member, a housing secured to the ends of said molding sections having an opening therein adapted to receive said plug, and cover plates slidably arranged upon said housing adapted to maintain said plug in position within said socket member, substantially as specified.

Signed at the city of New York, in the county and State of New York, this twentieth day of May, nineteen hundred and ten.

GEORGE BROOKE.

Witnesses:

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JOSEPH G. QUINN, Jr.