

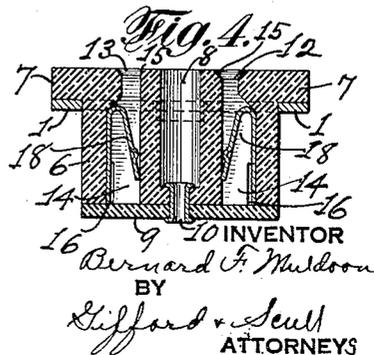
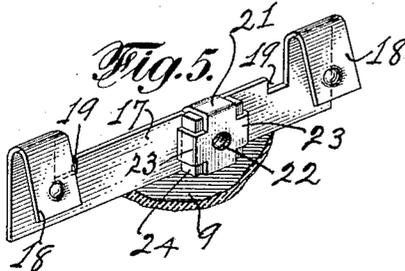
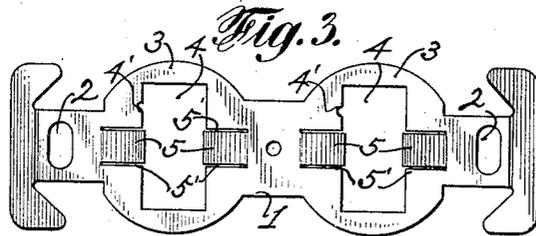
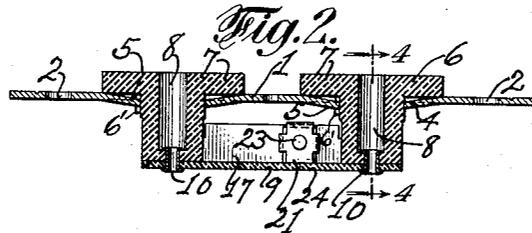
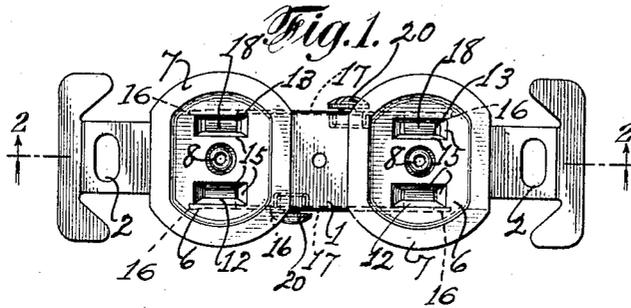
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RECEPTACLE FOR ELECTRIC PLUGS

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RECEPTACLE FOR ELECTRIC PLUGS

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This invention relates to a receptacle for a plurality of electric plugs, which can be manufactured very rapidly and economically and assembled very conveniently. It comprises a metallic plate into which a plurality of sockets for plugs can be inserted and will be retained firmly in place. The ends of the sockets that have been inserted through the metallic plate are connected by an insulating strip and a pair of terminal strips with spring contacts extend into the sockets in such positions that the terminals of a plug will come into contact therewith when the plug is inserted.

The invention will be understood from the description in connection with the accompanying drawing in which Fig. 1 is a plan view of an illustrative embodiment of the invention; Fig. 2 is a section along the line 2—2 of Fig. 1; Fig. 3 is a plan view of the metal plate; Fig. 4 is a section along the line 4—4 of Fig. 2, and Fig. 5 is a perspective view of one of the terminal strips.

In the drawing reference character 1 indicates a metal plate that is provided with openings 2 near the ends thereof for the purpose of conveniently connecting the device to an outlet box in the well known manner. Enlarged circular portions 3 are provided intermediate the ends of the plate 1 and a hole 4 through which a socket may be caused to project is provided in each circular portion 3. The holes 4 are shown as being rectangular, but other shapes of holes may be provided to correspond to the external shape of the sockets that are inserted. Tongues 5 made by slitting the metal of the strip 1 as indicated at 5', are provided so that the ends of the tongues 5 project slightly beyond the edges of the holes 4 for a purpose to be described below. A pair of tongues 5 is preferably provided for each opening, these tongues being along opposite sides of the opening.

A socket 6 of insulating material having a

shank of the shape of the hole 4 is pushed through the hole 4 in the plate 1, thus springing the ends of the tongues 5 in the direction in which the socket 6 is pushed, until the flange 7 at the end of the socket 6 comes into contact with the surface of the plate 1. Any tendency to withdraw the socket 6 causes the tongues 5 to bind the socket in position and prevent it from being displaced. This results in causing the tongues to pivot about the point where they join the main body of the metal, thus clamping the socket 6 firmly.

Each socket 6 is provided with a central hole 8 extending from the flanged end of the socket almost to the other end thereof. An insulating plate 9 is placed across the ends of the sockets 6 as most clearly shown in Fig. 2, and this insulating plate 9 is attached to the sockets 6 by means of rivets 10, one end of each of the rivets 10 extending into the hole 8 of the socket 6. The ends of the sockets 6 are made flat for the strip 9, and since the strip 9 is securely riveted to the ends of the sockets and the sockets are held in the holes 4, they will be rigidly retained in place without the danger of becoming loose.

Each socket 6 is provided with a pair of spaced longitudinal holes or openings 12 and 13 extending entirely therethrough, the portions of the holes beyond the flange 7 being enlarged, as shown at 14. The holes 12 and 13 are made of different sizes to accommodate corresponding terminals of a plug so as to prevent mistake in the proper polarity of the connections. The entrances to the holes 12 and 13 are beveled as shown at 15 to enhance the appearance and make the entrances to the holes or openings of the same size.

Each socket 6 is slotted, as shown at 16, at the end opposite the flange 7, these slots extending from the ends of the sockets and communicating with the enlarged portions 14 of the holes 12 and 13 on both sides thereof to accommodate a pair of terminal strips 17, the slots on one side of the holes 12 and 13

accommodating the strips when the socket 6 is in one hole 4 and the slots on the other side of the holes 12 and 13 accommodating the strips when the socket is in the other hole 4. The sides of the holes 4 in the strip may be provided with recesses 4' and the sockets 6 with extensions or projections 6' to fit these recesses, so as to make it certain that the sockets 6 will be correctly inserted in the holes 4 and thus avoid the danger of reversing the polarity of the terminals. Either socket 6 can be placed in either hole 4 without becoming reversed and will accommodate the strips 17.

One of the terminal strips 17 is shown in detail in Fig. 5 and the strips are shown in dotted line in assembled relation in Fig. 1. Each strip is provided with a spring contact 18 for each socket 6 by having extensions along the edge of the strip and bending the same back as indicated. Notches 19 are provided in one edge of the strip adjacent the contacts 18 and these notches 19 fit over the ends of the slot 16 when the parts are assembled.

A binding screw 20 is provided for each strip 17. In view of the fact that the metal of the strip 17 may be too thin to provide the proper number of threads for the binding screws 20, provision is made for retaining a nut in position next to the side of the strip 17 into which the binding screws can be screwed. For this purpose a tongue 21 is provided along one edge of the strip 17 between the contacts 18 and this tongue is bent twice at right angles, so that its main portion lies parallel to the side of the strip 17 and spaced a sufficient distance therefrom to permit a nut to be inserted. The portion of the tongue 21 lying parallel to the side 17 may be provided with a hole 22 into which the end of the binding screw 20 may extend. The edges of the tongue 21 may be provided with extensions 23 that may be bent at right angles as shown at Fig. 5, so that the ends of these extensions contact with the side of the strips 17 or nearly so. In this way the tongue 21 and the extensions 23 provide a pocket into which the square nut 24 may be introduced and prevented from turning when the screw 21 is inserted. The strips 18 and the nuts 24 will, of course, be put in place in the slots 16 before the insulating strips 9 are riveted to the ends of the sockets 6.

Changes and modifications may be made without departing from the spirit or scope of the invention.

I claim:

1. A receptacle comprising a plate having a plurality of spaced openings therein, a pair of separate insulating socket members received within said openings, means for attaching said socket members to said plate, an insulating strip attached to said socket members and interconnecting the latter, each

of said socket members being formed with a plurality of openings for receiving plug blades, a pair of terminal strips positioned between said plate and said insulating strip, each of said terminal strips having the ends thereof extending into corresponding openings of said socket members, and spring contact portions at the ends of said strips received within said openings in said socket members.

2. A receptacle comprising a plate having a plurality of spaced openings therein, a pair of separate insulating socket members received within said openings, means for attaching said socket members to said plate, an insulating strip attached to the rear faces of said socket members and interconnecting said members, each of said socket members being formed with a plurality of openings for receiving plug blades, and a pair of conducting strips each having the ends thereof extending into corresponding openings of said socket members, said insulating strip being adapted to retain said conducting strips in position, and said conducting strips being disposed between said insulating strip and said plate.

3. A receptacle comprising a member having a pair of openings therein for receiving fastening means whereby said member may be attached to a support, said member being formed with another pair of spaced openings, a pair of separate socket members received within said last mentioned openings and extending rearwardly of said member, means for attaching said socket members to said first member, an insulating strip interconnecting the rear portions of said socket members, and terminal members extending into said socket members positioned between said first mentioned member and said insulating strip.

4. A receptacle comprising a metal plate having a plurality of openings therethrough and tongues extending into opposite sides of said openings and beyond the end edges of said openings, a socket member in each of said openings, the edges of said tongues abutting the side walls of said socket members, and an insulating strip interconnecting said socket members.

5. A receptacle comprising a metal plate having a plurality of openings therethrough and tongues extending into opposite sides of said openings and beyond the end edges of said openings, a socket member in each of said openings, the edges of said tongues abutting the side walls of said socket members, an insulating strip interconnecting said members, and a pair of terminal strips having spring contacts extending into said socket members.

6. A receptacle comprising a plate having a plurality of spaced openings therein, a pair of separate insulating socket members

received within said openings, means for at-
taching said socket members to said plate,
each of said socket members being formed
with a plurality of openings for receiving
5 plug blades, a pair of contact strips each
having the ends thereof extending into the
corresponding openings of said socket mem-
bers, and insulating means overlying and se-
cured to the rear faces of said socket mem-
bers, and said conducting strips being dis-
10 posed between said insulating means and
said plate.

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