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PLUG-IN DEVICE

Filed June 18, 1930

Fig. 1

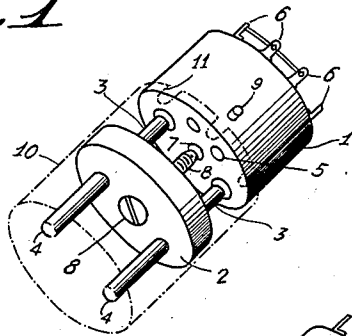
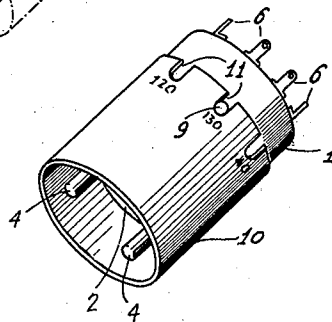


Fig. 2



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PLUG-IN DEVICE

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This invention relates broadly to an adjustable power plug-in device and more specifically to a plug having means for connecting a power source to optionally different transformer windings.

Many arrangements which must be operated with a constant operating voltage require that the input terminals thereof be conveniently adapted to be connected to different line voltages or voltage variations of the line supply. If the input is through a transformer, the primary winding of the transformer will be provided with various taps.

The present invention is directed to a plug-in connecting device whereby the two plugs may be connected in simple manner with the ends of different groups of windings leading to the plug.

This is accomplished in accordance with the present invention in the manner that the connecting parts for the ends of the various circuit elements (windings or taps of windings) are disposed in one part of the plug device and the plugs for the connection with the current source in a second part which may be turned, relative to the first part, for the purpose of the selective change of the connection. The device is provided with a contact protection-housing on the order of a collar plug.

The invention will be better understood from a reading of the following specification in conjunction with the drawing in which,

Figure 1 shows an embodiment of my invention when the plug is open; and,

Figure 2 shows the plug closed.

In the drawing, an insulating piece 1 has disposed therein the connecting points for the ends of the various circuit elements, provided on the one side with soldering clips 6 for connecting the windings while ending on the other side in sockets 5. A second insulator piece 2 contains the plugs 4 for providing connection with the current source. These plugs traverse the insulator plate and end on the other side likewise in two plugs 3. By means of a screw 8 disposed in the insulator part 2 engaging a corresponding female thread 7 in the insulator part 1 both parts 1 and 2 may be rigidly attached to one another. The connecting points for the dif-

ferent windings are arranged in a circle in the manner that each two corresponding end points are disposed diametrically opposite one another. The possibility is given thereby to insert the plugs 3 by twisting the parts 1 and 2 in the various sockets corresponding to one another. The plug device is surrounded by a housing 10 in order to prevent a contact of live parts. The relative position, corresponding to the different voltages, of the two parts 1 and 2 with respect to one another is marked by cuts 11 disposed in the collar 10 and by a pin 9 disposed in part 1. The value of the voltage in question is marked under the individual cuts. If the device is to be set for another voltage, screw 8 must be loosened so far that the plugs 3 may be drawn out of the sockets 5. The part carrying the plugs is then twisted with respect to the other part so far until the pin 9 is disposed over the cut which belongs to the desired voltage. Subsequently the plugs 3 are again inserted in the sockets and held firmly in this position by the tightening of screw 8. It is suitable to block the screw 8 in part 1 in such manner that it can be screwed out so far only that a twisting of the two parts with respect to one another is possible but that a complete separation of the parts is prevented.

I claim:

1. An electrical circuit selector plug-in device comprising, a base of non-conducting material and an attaching member, a plurality of sets of terminals carried by said base, a set of cooperating contacts on said attaching member, said latter being adapted to selectively engage with any desired set of said terminals, a housing for said attaching member and means on said housing cooperating with means on said base for indicating and fixing the position of said attaching member contacts with respect to said terminals.

2. An electrical circuit selector plug-in device comprising, a base and an attaching member, a plurality of sets of terminals carried by said base, a set of cooperating contacts on said attaching member, said latter being adapted to selectively engage any desired set of said terminals, means for attaching said member to said base comprising a

holding device adapted to maintain said base and said attaching member in fixed relation when said set of cooperating contacts are engaged with a set of said terminals and for
5 maintaining said attaching member attached to said base while moving said set of terminals from one set of contacts to another.

3. An electrical circuit selector plug-in device comprising, a base and an attaching
10 member, a plurality of sets of terminals carried by said base, a set of cooperating contacts on said attaching member, said latter being adapted to selectively engage any desired set of terminals, a housing for said attaching
15 member, and means on said housing cooperating with means on said base for indicating and fixing the position of said attaching member contacts with respect to said terminals, means for attaching said member to said
20 base, comprising a holding device adapted to maintain said base and said attaching member in fixed relation when said set of cooperating contacts are engaged with one of said sets of terminals and for maintaining said
25 attaching member attached to said base but permitting movement between them while moving said set of terminals from one set of contacts to another.

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