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O. E. MARVEL

MULTIPLE POINT PLUG

Filed March 12, 1923

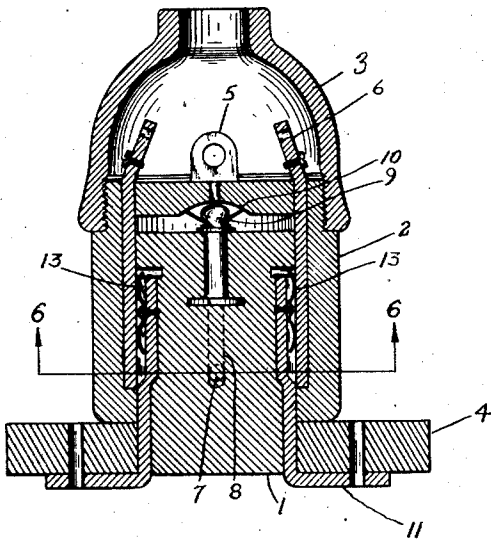


Fig. 1.

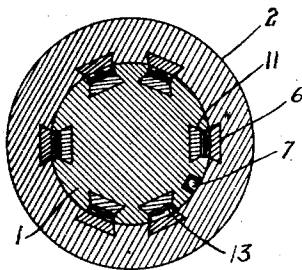


Fig. 6.

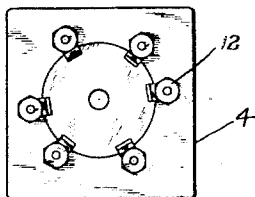


Fig. 5.

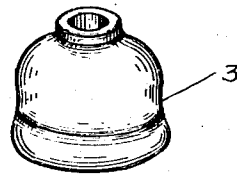


Fig. 4.

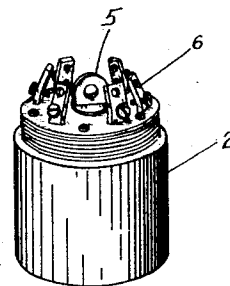


Fig. 3.

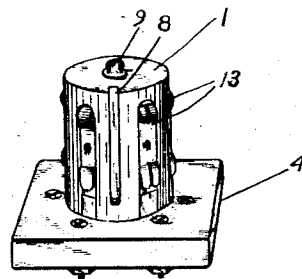


Fig. 2.

INVENTOR
ORIN E. MARVEL

BY

Robert H. Young ATTORNEY

UNITED STATES PATENT OFFICE.

ORIN E. MARVEL, OF DAYTON, OHIO.

MULTIPLE-POINT PLUG.

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This invention relates to connection plugs of the type used in making or breaking one or more electrical circuits.

The object of this invention is to provide a plug which will be easily accessible for connecting the wires, simply and compactly constructed, and capable of handling a large number of circuits in a comparatively small space. Further objects will be more fully set forth in the annexed specification and claims.

In the drawings:

Fig. 1 is a vertical section of my device.

Fig. 2 is a perspective view of the bottom member of the plug.

Fig. 3 is a perspective view of the intermediate member.

Fig. 4 is a perspective view of the upper member.

Fig. 5 is a bottom view of the plug.

Fig. 6 is a section on line 6—6 of Fig. 1.

The plug consists of three pieces, a lower part 1, an intermediate part 2 which fits over part 1, and the upper part 3, through which the wires are led before being led through the lug 5 and connected to the six contacts 6, by means of suitable screws. These contacts 6 are in the form of brass or copper strips and extend down through the top of part 2, so as to lie flush with the inner cylindrical surface of the same. The slots in the inner surface of part 2, which hold the contacts 6, are preferably constructed with a smaller front opening than the inside width and the contacts 6 correspondingly made so that they may be slid down through the slots and thus held against lateral movement.

The lower member 1 is mounted on a base 4 in any suitable manner and is provided on one side with a groove 8 in which fits the pin 7 on the inner cylindrical surface of the part 2, to assure the assembly of parts 1 and 2 in their proper relation. On the upper face of the part 1 is a button 9 similar to an ordinary glove button which coacts with a fastener 10 in the part 2 to hold the parts assembled until they are intentionally separated. Inset from the surface of the part 1 and spaced around the cylindrical surface of the same are strips of a suitable conducting metal 11, which extend down to the bottom of the base 4, where they are bent over and

secured to the terminals 12. Riveted or screwed to the conducting strips 11 are the spring contact strips 13, which cooperate with the strips 6 of the member 2.

When the member 2 is placed over the part 1, the pin 7 must enter the groove 8 before contact is made by the contact strips, thus preventing the possibility of wrong connections and short circuits. When assembled, the different circuits are completed through the contact strips, diametrically opposite contacts being used for complete circuits, and the contacts for completing circuits of higher voltages being separated by greater distances from the adjacent lower voltage contacts, when circuits of different voltages are used.

It will be obvious that my invention renders it possible to have a large number of comparatively high voltage circuits completed in a small plug by having the contacts on the outside of one cylindrical part and the inside of the other cooperating part. By my arrangement, the contacts are all accessible at all times and the assembly of the constituent parts of the plug structure is a very simple matter.

I claim:

1. An electrical plug comprising a substantially cylindrical member and an outer hollow cylindrical shell section within which said member fits, said member and said shell section being made of a suitable insulating material, a plurality of longitudinally extending conducting strips embedded below the cylindrical surface of said member, a plurality of elongated longitudinally extending flat contact strips embedded in said shell section to be flush with the inner surface thereof, and a springy contact member screwed to each conducting strip so as to be substantially flush with the outer cylindrical surface to register with the said contact strips when the plug is assembled.

2. An electrical plug as set forth in claim 1 together with an end cap threaded on one end of said shell section, the contact strips being dovetailed in said member and said shell section.

3. An electrical plug as set forth in claim 1 having spring retaining means centrally

located at the end of said member to keep the member and shell section in assembled relation.

4. The plug as set forth in claim 1, said
5 conducting strips extending beyond the end of the cylindrical member for connection directly to the wires of an external circuit,

and said contact strips extending beyond the end of the shell section for connection directly to the wires leading to the said shell 10 section.

In testimony whereof I affix my signature.

ORIN E. MARVEL.