Feb. 23, 1932. J. P. T. DONAHUE 1,846,251

ATTACHMENT PLUG

Filed Sept. 11, 1929

Fig. 1.

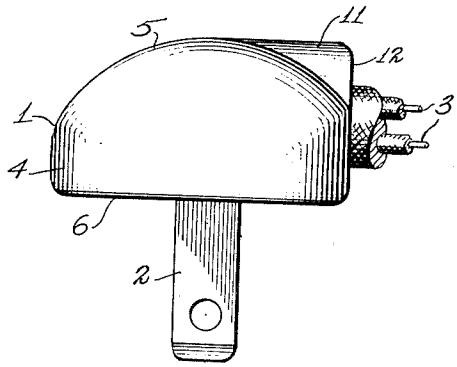


Fig. 3.

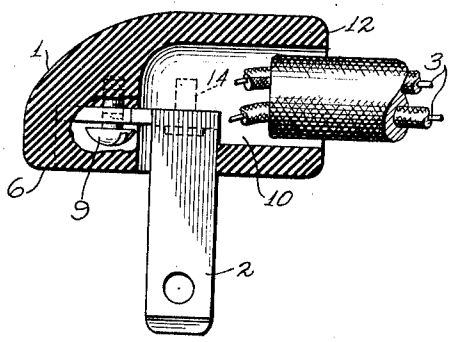


Fig. 2.

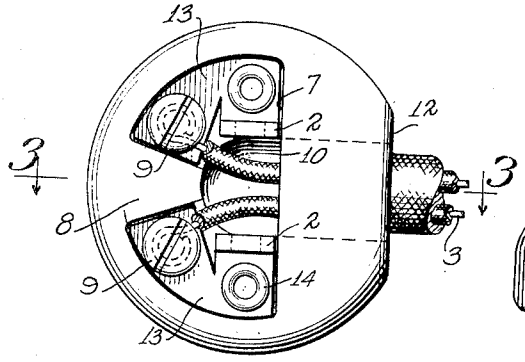
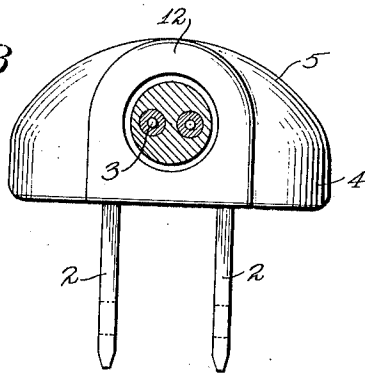


Fig. 4.



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UNITED STATES PATENT OFFICE

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ATTACHMENT PLUG

Application filed September 11, 1929. Serial No. 391,910.

This invention relates to electrical terminal plugs.

Terminal plugs heretofore in use have generally consisted of a substantially dome shaped body of insulating material having a centrally located opening in its back for admitting the conductor wires which were attached to the contact elements secured to the body. That type of plug was objectionable for many reasons. When the conductor extends through the back of the plug it forms a convenient handle which the user is tempted to employ in removing the plug from its socket, with the result that the wires are frequently jerked from the contact blades and the blades are loosened, thereby damaging the plug and often causing a short circuit. Frequently the wires and plug have been damaged by an unintentional jerking of the conductor, as for instance when the plug has been used in connection with a moving appliance such as a vacuum cleaner, flat iron, curling iron, soldering iron and the like. Such prior types of plugs were also objectionable in cases where it was necessary that the wires extend laterally from the plug, for the reason that the frequent bending of the wires adjacent the plug ruptured the insulation and often caused a short circuit. The weight of the conductor also sometimes caused the plug to tilt so as to loosen it from the socket.

The main objects of this invention are to provide an improved form of terminal plug which is constructed so as to compel the use of the plug body as a handle grip in removing the plug from its socket thereby preventing the damage to the plug and wires resulting from the jerking of the conductor; and to provide a plug of this kind which will prevent the necessity of bending the conductor wires thereof when they extend radially from the plug.

An illustrative embodiment of this invention is shown in the accompanying drawings, wherein:

Figure 1 is a side elevation of an improved terminal plug, showing also a portion of a conductor.

Fig. 2 is a bottom plan of the same.

Fig. 3 is a transverse section taken on the line 3—3 of Fig. 2.

Fig. 4 is a side elevation of the plug, taken from the right of Fig. 1 and showing the conductor in section.

In the construction illustrated, the improved terminal plug comprises a body 1, on which is mounted a pair of contact blades 2 connected to conductor wires 3.

The body 1 is made of any suitable insulating material and may be of any desired shape, although the dome shape illustrated in the drawings is preferred. Extending around the body 1, is a bearing portion 4, which forms a convenient finger grip in the handling of the plug. The dome-shaped back 5 of the body is completely closed and the face 6 is provided with a recess 7 forming a seat for the contact blades. A partition 8 extends radially inwardly from one side of the body to form an insulation between a pair of binding posts 9 to which the wires 3 are attached.

Formed within the body 1, is a radially disposed passageway 10 for the wires 3. The dome-shaped back 5 of the body is enlarged adjacent the passageway to form a boss 11 having a substantially flat side wall 12 in which the inlet of the passageway is located. The passageway is disposed substantially in alinement with the partition 8, so as to permit the wires 3 to extend radially from the binding posts so as to avoid the objectionable bending of the wires.

The contact blades 2 project beyond the face 6 in substantially parallel spaced relation to each other, and are provided with base portions 13 which are secured to the body 1 by rivets 14 and by the binding posts 9.

With this improved form and arrangement of parts, the conductor wires cannot effectively be used as a handle for withdrawing the plug from its socket. The user must grip the body 1 in handling the plug. Also, when this improved plug is used in connection with a wall socket, the conductor may hang in close proximity to the wall without bending.

Although but one specific embodiment of this invention has been herein shown and de-

scribed, it will be understood that certain details of the construction shown may be altered or omitted without departing from the spirit of this invention as defined by the following claims.

I claim:

1. A terminal plug comprising a substantially semi-spherical body having a closed back, a pair of spaced contact members mounted on said body and projecting beyond the face thereof, a pair of terminals secured to said contact members for the attachment of conductor wires, said body having a portion disposed between said terminals to form a partition, and a radially disposed passageway formed in said body and having an inlet opening in one side of said body for admitting the wires, said passageway being in radial alinement with said partition, said terminals and said inlet opening being disposed on respectively opposite sides of said contact members.

2. A terminal plug comprising a body having a closed back, a pair of spaced contact members mounted on said body and projecting beyond the face thereof, a pair of terminals secured to said contact members for the attachment of conductor wires, said body having a portion disposed between said terminals to form a partition, and a radially disposed passageway formed in said body and having an inlet opening in one side of said body for admitting the wires, said passageway being in radial alinement with said partition, said terminals and said inlet opening being disposed on respectively opposite sides of said contact members.

Signed at Chicago this 7th day of September, 1929.

JAMES P. T. DONAHUE.