

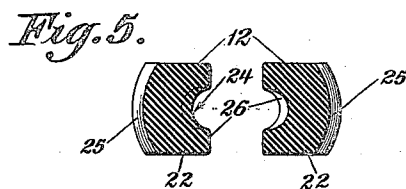
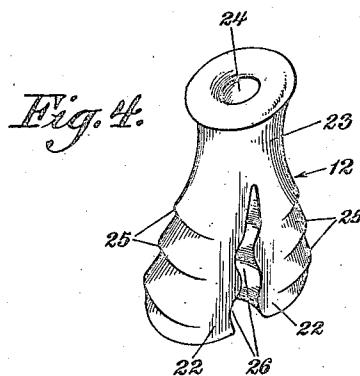
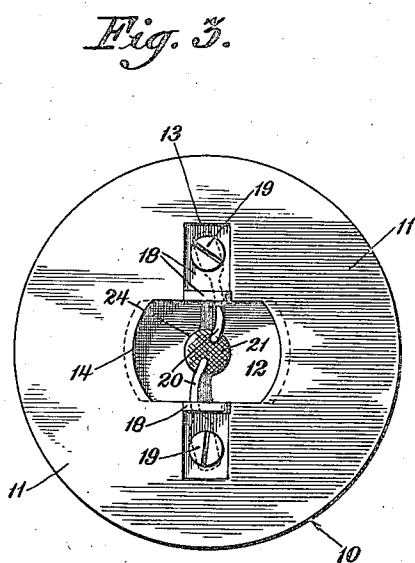
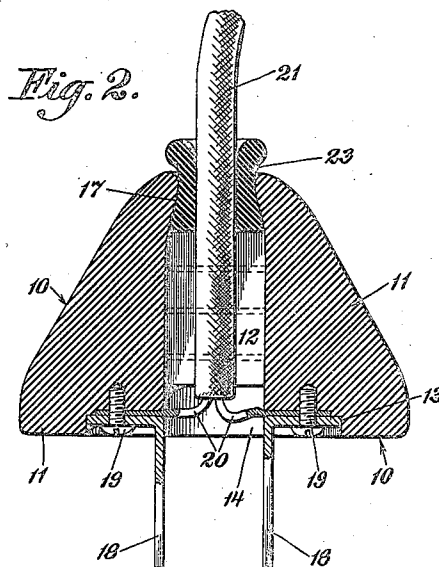
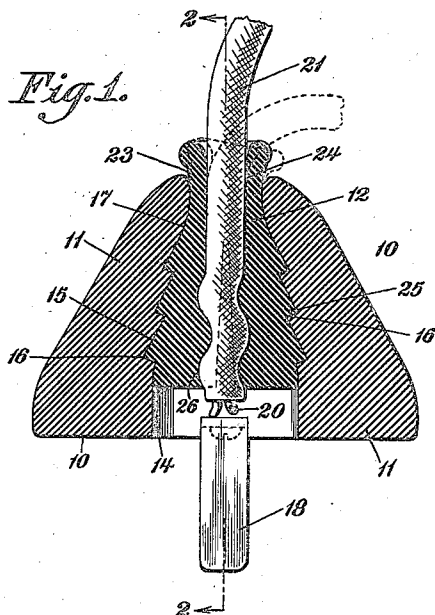
Sept. 28, 1926.

1,601,255

A. MARRA

ELECTRICAL ATTACHMENT PLUG

Filed Oct. 11, 1924



Lynn Brodton
WITNESS:

Anthony Marra
INVENTOR
BY *Victor J. Evans*
ATTORNEY

UNITED STATES PATENT OFFICE.

ANTHONY MARRA, OF BROOKLYN, NEW YORK.

ELECTRICAL ATTACHMENT PLUG.

Application filed October 11, 1924. Serial No. 743,056.

This invention relates to electrical attachment plugs and has for its primary object the provision of a plug which may be removed from an electric socket by pulling upon the electric cord leading to the plug, without the fear of the conducting wires pulling away from the terminals of the plug.

Another object is to provide an attachment plug in which the end of an electric cord is inserted whereby the greater the pulling action upon the cord, the greater is the clamping action between the cord and the plug.

A further object of the invention resides in an attachment plug, capable of performing the above functions which is simple in construction, cheap of manufacture and easy to assemble or disassemble.

With these and other objects in view, the invention resides in certain novel construction and combination and arrangement of parts, the essential features of which are hereinafter fully described, are particularly pointed out in the appended claims, and are illustrated in the accompanying drawing, in which:—

Figure 1 is a vertical sectional view of my improved attachment plug.

Figure 2 is a vertical transverse sectional view on the line 2—2 of Figure 1.

Figure 3 is a bottom plan view.

Figure 4 is a detail perspective view of the wedge.

Figure 5 is a horizontal sectional view through the wedge.

Referring more particularly to the drawing, the reference numeral 10 designates my improved plug in its entirety and which includes but two parts, namely a cap 11 and a co-acting wedge 12.

The cap 11 is constructed of relatively hard insulating material, and has its underside recessed as at 13. A slot 14 is formed in the cap and the opposite end walls taper from the bottom to the top as at 15 and are formed with diametrically opposed teeth 16. The slot tapers so that a circular opening 17 is provided in the crown or top of the cap for a purpose to be hereinafter described. A pair of contacts 18 depend from the underside of the cap and are held thereto by screws 19 which serve as terminals for the connection with a pair of wires 20 of an electric cord 21.

The wedge 12 is constructed of a yield-

able insulating material such as rubber, the body of which is bifurcated to provide spaced diverging jaws or legs 22 between which the electric cord 21 is adapted to be clamped. The wedge is formed with a neck 23 having a smooth bore 24 therein and which neck is of a more flexible quality than the body of the wedge. The neck extends through the opening 17 in the cap and is formed with a bead at the mouth of the bore 24 for strengthening the mouth and which bead may be compressed when withdrawing the wedge from the cap. The outside surfaces of the jaws are formed with teeth 25 for co-action with the teeth 16 in the walls of the slot 14 while the inner co-acting faces of the jaws are corrugated as at 26 for clamping engagement with the electric cord 21.

In practice, the end of the electric cord is stripped to expose the leads or wires 20, after which the cord is inserted through the mouth of the wedge so that the wires extend a slight distance beyond the other end of the wedge. The neck of the wedge is now inserted through the wide end of the slot 14 until the neck projects from the cap, after which the same is given a pull to cause the inclined walls of the slot to compress the jaws 22 about the electric cord 21, thus causing a kink in the cord by reason of the co-acting corrugations. As the wedge is pulled through the slot, the teeth on the wedge will co-act with the teeth on the walls of the slot and serve to lock the wedge against removal. The wires 20 are then connected with the screws 19 when the plug is ready for use. It will now be seen that any pulling upon the electric cord will tend to set up a greater wedge action between the cap and the wedge and consequently between the jaws of the wedge and the electric cord.

When it is desired to disconnect the cord from the plug, the wires 20 are unfastened from their terminals and a sharp instrument inserted between the cap and the wedge through the wide opening of the slot to compress one of the jaws 22 to disengage the co-acting teeth. When the wedge is removed from the cap, the tendency of the jaws is to expand, thereby releasing the electric cord.

While I have described what I deem to be the most desirable embodiment of my invention, it is obvious that many of the details may be varied without in any way departing

from the spirit of my invention, and I therefore do not limit myself to the exact details of construction herein set forth nor to anything less than the whole of my invention
5 limited only by the appended claims. It will also be apparent that my invention may be used in various other capacities wherein it is desired to anchor the end of a flexible cable or rope.

10 What is claimed as new is:—

1. An attachment plug comprising a cap having a slot therein, a member having a bore for the passage of an electric cord, normally expanding jaws on said member, and
15 co-acting means on said member and cap for compressing said jaws about an electric cord upon the insertion of said member in the bore of said cap, and for locking said member and cap against separation, said co-acting means including opposed teeth on the
20 end walls of said slot, and teeth on the exterior faces of said jaws for engagement with each other.

2. An attachment plug comprising a cap
25 having a slot therein, the end walls of the slot tapering toward each other, a member having a bore therein for the passage of a flexible cable, jaws formed on said member

and co-acting corrugations formed on the co-acting faces of said jaws, the outer faces
30 of said jaws being inclined for co-action with the tapering end walls of the slot in said cap, to compress the jaws about the flexible cable, and co-acting teeth on the exterior of
35 said jaws and in the tapered end walls of the slot for locking the jaws in clamping engagement with the flexible cable.

3. An attachment plug comprising a cap having a slot extending therethrough, the
40 opposed end walls of the slot tapering toward each other and being provided with teeth, a member having a bore therein and being bifurcated to provide yieldable legs, the bore communicating with the bifurcation for the
45 passage of a flexible cable therethrough, the inner faces of said legs having co-acting corrugations formed thereon, and teeth formed on the exterior surface of said legs for co-action with the teeth on said cap for compressing said yieldable legs toward each
50 other to grip the cable and for locking said member with said cap.

In testimony whereof I have affixed my signature.

ANTHONY MARRA.