

April 14, 1936.

N. CHIRELSTEIN

2,037,562

ELECTRIC PLUG

Filed Sept. 14, 1933

Fig. 1.

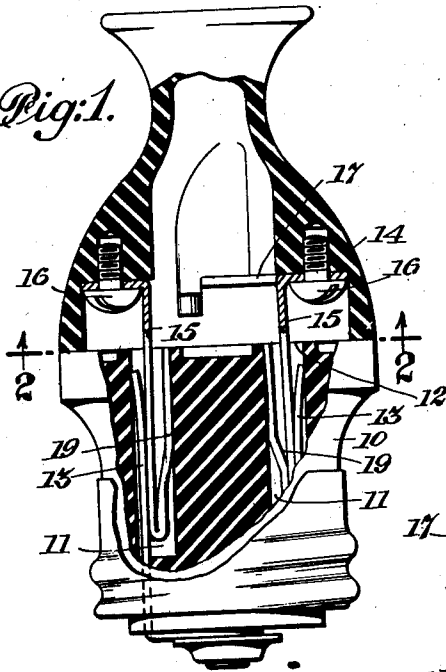
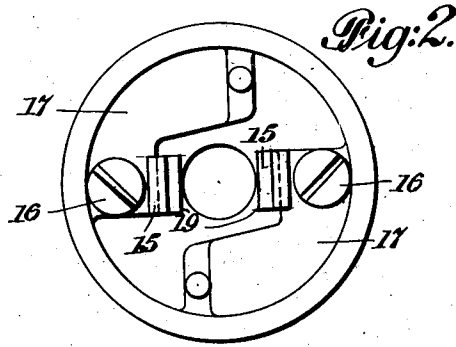


Fig. 3.

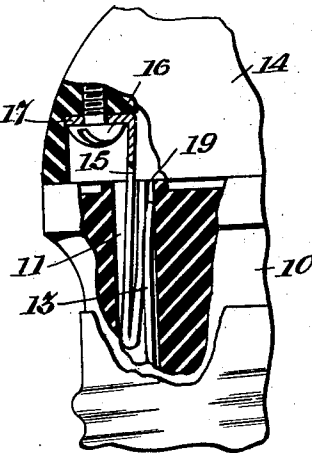


Fig. 4.

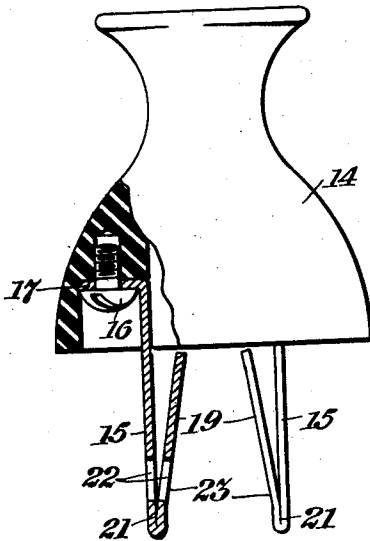
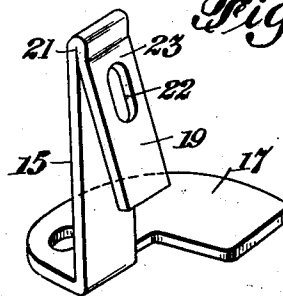


Fig. 5.



INVENTOR
Nathan Chirelstein
BY
Ashley & Ashby
ATTORNEYS

UNITED STATES PATENT OFFICE

2,037,562

ELECTRIC PLUG

Nathan Chirelstein, Newark, N. J.

Application September 14, 1933, Serial No. 689,357

1 Claim. (Cl. 173—361)

My invention relates to electric socket plugs. The object of my invention is to provide an improved attachment plug embodying means for holding the contact members of the male and female portions of the plug in firm contact over a considerable surface to effect perfect transmission of an electric current therethru.

in after referred to as the legs or as the blades. The legs are fastened to the body portion by screws 16 which extend thru the plate portions 17 in the usual way, or they may be attached in any other satisfactory manner.

The legs normally extend straight from the body portion parallel with each other, and enter the socket recesses midway between the walls thereof, and the branch portions 19 extend from the free ends of the stems to the face of the body portion.

When the legs are used in a socket having its terminals located adjacent the inner walls, as shown in Figure 3, the stem portions bend or flex the greater distance, whereas when used as shown in Figure 1, the branch portion is bent more than the stem portion.

It will be noted that the branch portion is provided by bending the stem at 21 into the position and shape shown, and some metal is punched out to provide the slots 22. These slots weaken the stem and branch portions at these points, thus making them more flexible, and causes a sharper bending of the branch at 23, providing a shoulder to be formed automatically when the leg is forced into the socket.

The drawing illustrates the plug on a scale twice the size of the actual construction.

The metal stem and its branch are of equal thickness, about one-thirty-second of an inch, and this reduction in thickness relative to one-sixteenth of an inch as now generally used in standard plugs of this type, provides a plug having very flexible and resilient legs which accommodate themselves to socket constructions in which the walls of the recesses and the terminals are badly worn, making good contact with said terminals regardless of which side of the recesses they may be located adjacent to.

It will be noted that the branch portions are free ended and project from near the entering ends of the blades and extend toward the body portion a distance at least equal to the contacting length of the blades so that the free ends will not operate to lock or prevent uncoupling the plug by simple withdrawal. When coupled, each blade and its respective branch portion is wedged toward each other against the receptacle contacts, thereby obtaining spring pressed contact and good mechanical connection.

A considerable number of these plugs have been made and used successfully with both types of socket members, and the body portions of the plug are found to be firmly held together in use.

Having thus described my invention, I claim as new:

An attachment plug comprising a body portion of insulating material having a pair of flat contact blades extending therefrom, said blades being formed of resilient conducting metal and

A further object is to provide a male portion having blades or legs of less thickness than those of the standard type now in general use, to render them more resilient so that they will bend without breaking either the legs or the plastic material base to which they are attached, and also to permit them to bend easily in opposite directions from the median line thru the recesses of the female member, to effect contact over a considerable surface with the socket conductors, regardless of which side of the recesses they may be located in.

A further object is to provide a plug in which the contact members will be held together under constant spring pressure over a considerable area to effect a frictional engagement therebetween regardless of which side of the recesses the contacts may be located in the female member.

Referring to the drawing which forms a part of this specification;

Fig. 1 is a vertical sectional view of the plug, in which the male and female portions are united in current conduction relation.

Fig. 2 is a view of the inner end of the male portion looking in the direction of the arrows 2—2 of Fig. 1.

Fig. 3 is an illustrative view showing the leg as it appears when in contact with the conducting strip located on the inner side of the recess of the female member.

Fig. 4 is a view, partly in section, of the male portion of the plug.

Fig. 5 is a perspective view of a leg formed as shown in Fig. 4.

My invention is embodied in the male portion of the plug.

10 indicates the female or socket portion of the plug which is of the standard type, some of which have the conduction terminals located on the inner walls of the recess and some of which have them located adjacent the outer walls of the recesses.

In Fig. 1 the terminals are shown located adjacent the outer walls of the recesses 11, and 12 indicates the face of the body portion of the male member.

Fig. 3 shows a socket portion of a plug in which the contact members 13 are located adjacent the inner sides of the recesses.

14 indicates the body portion of the male member, which may be made of hard plastic or soft rubber in the usual manner.

15 indicates the male contact members, here-

spaced apart a distance corresponding to the separation between the socket openings of a standard receptacle, said blades each having a free ended branch portion integral therewith and projecting from near the entering end thereof toward said body portion a distance at least equal to the contacting length of the blade and said branch portion comprising an extension of said blade folded back in contact therewith at

the entering end and diverging away therefrom; the construction being such that each blade and its respective branch portion will be wedged toward each other against the receptacle contacts in the act of coupling the plug, thereby obtaining spring pressed contact and good mechanical connection.

NATHAN CHIRELSTEIN.