

- [54] **ARRANGEMENT OF REPLACEABLE CORD FOR ELECTRICAL APPARATUS**
[76] Inventor: **Edward M. Grandinetti**, 2815 Los Flores Blvd., Lynwood, Calif. 90262
[22] Filed: **Aug. 16, 1973**
[21] Appl. No.: **388,823**
[52] **U.S. Cl.** **339/106**
[51] **Int. Cl.**..... **H01r 13/58**
[58] **Field of Search** 339/103, 105, 106, 107, 339/208

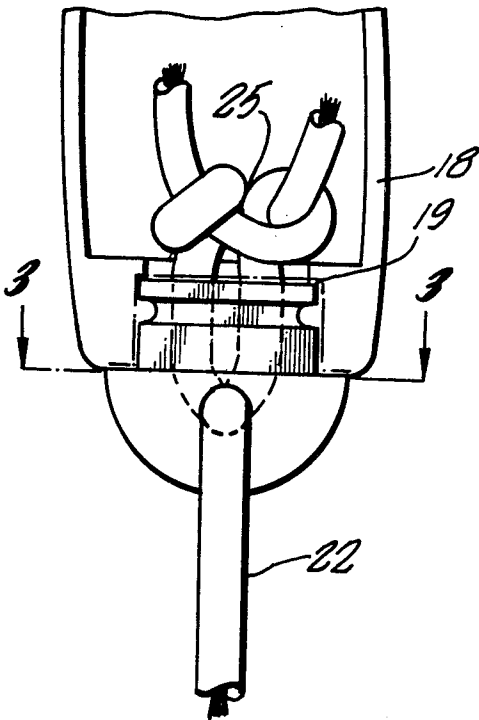
Primary Examiner—James T. McCall
Assistant Examiner—Lawrence J. Staab
Attorney, Agent, or Firm—Lyon & Lyon

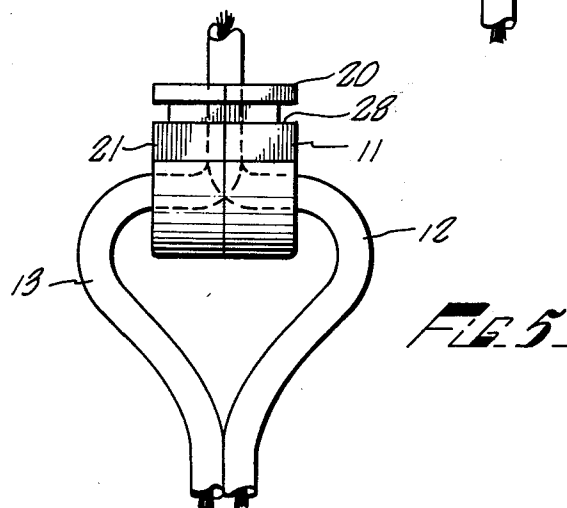
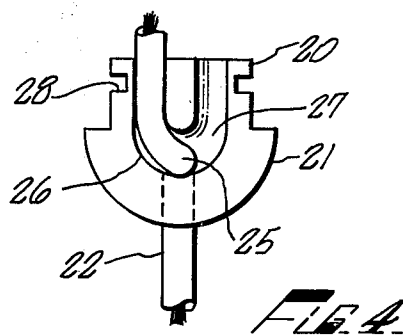
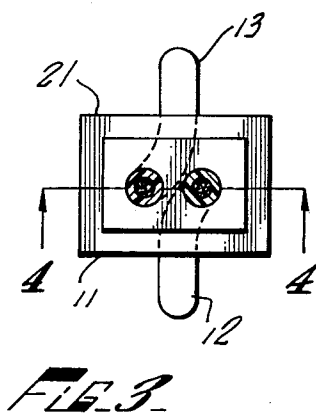
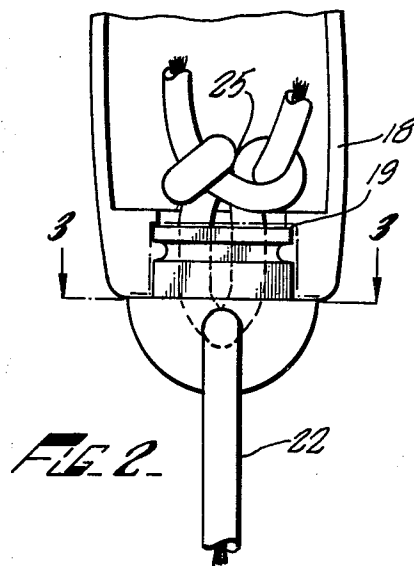
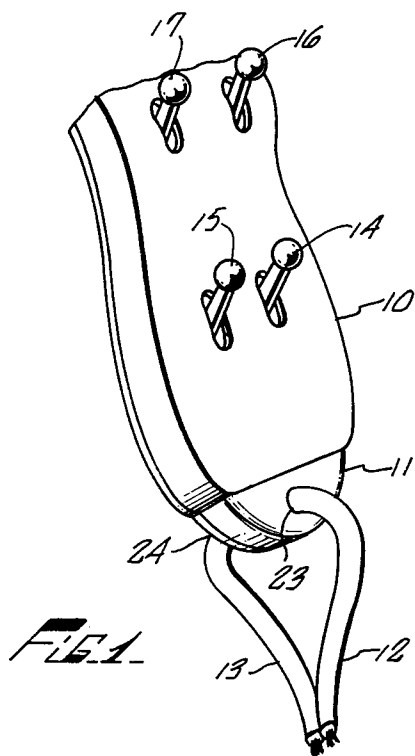
ABSTRACT

A replacement cord for an electrical appliance has the conventional two wire cord split to give two separate insulated conducting wires. The two wires carry a common plug and are attached to the plug by passing each wire through a separate hole formed in opposite sides of the plug. The wires extend out of said plug and are tied together in an underwriter's knot. Each wire carries on its inner end a male plug receivable in a female socket carried by wires within the handle of the appliance which in turn each leads to a switch. The plug has a flange receivable in a groove formed in the interior of the handle which serves to retain the plug when the plug is seated in the handle with its flange positioned in the groove and the two halves of the handle are connected by nuts and bolts to each other.

- [56] **References Cited**
UNITED STATES PATENTS
1,974,297 9/1934 Benander..... 339/106 X
2,756,402 7/1956 Haworth et al. 339/103 R
FOREIGN PATENTS OR APPLICATIONS
24,441 12/1914 United Kingdom..... 339/103 R
17,626 8/1898 United Kingdom..... 339/103 R
717,607 2/1942 Germany 339/106

1 Claim, 5 Drawing Figures





ARRANGEMENT OF REPLACEABLE CORD FOR ELECTRICAL APPARATUS

BACKGROUND OF THE INVENTION

This invention relates to a replaceable cord for an electrical apparatus together with means associated with the cord and the apparatus to make the cord easily replaceable and to secure the cord in the apparatus with sufficient certainty to pass the underwriter's laboratory requirements.

These and other features, advantages and objects will be apparent from the appended specification in which:

FIG. 1 is a perspective view of the handle of a hairdryer with the invention applied thereto.

FIG. 2 is a view of the same device shown in FIG. 1 with one-half of the shell of the dryer removed.

FIG. 3 is a section taken along the lines 3—3 of FIG. 2.

FIG. 4 is a view taken along the lines 4—4 of FIG. 3, and

FIG. 5 is a plan view of a plug embodying the present invention separate from the appliance.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now more particularly to the drawings, there is shown in FIG. 1 a handle of a hairdryer indicated by the numeral 10 and the present invention is attached thereto as shown at 11. The cords 12 and 13 indicate conventional electrical wires which will be in use connected to the house electrical supply system. The numerals 14, 15, 16 and 17 indicate switches for the various settings connected with a conventional hairdryer and form no part of the present invention.

FIG. 2 shows the present invention as applied to a hairdryer. The shell 18 is hollow and adjacent the bottom opening thereof there are formed in the plastic casting a slot 19 which is arranged to receive a flange 20 on the adapter or plug 21 for the cord. It can be appreciated that the shell 18 is in two halves held together by nuts and bolts in normal use.

The cord 22 is conventional and leads through the wires 12 and 13 which form the cord through openings 23 and 24 to the interior of the adapter plug. The two wires thus brought together within the adapter plug extend therefrom and are tied together in an underwriter's knot 25. Each of the wires 12 and 13 carries a male plug (not shown) and in the interior of the shell there are two other wires which lead to the various switches which other wires carry mating sockets adapted to receive the male plugs just described.

Referring now more particularly to FIG. 4, it will be

seen that the plug consists of a plastic member having a hole 25 therein adapted to receive the cord 22 and the two separate wires forming the cord 22 are accommodated in portions 26 and 27 of the plug from which they lead to the various connections. A groove 28 is formed in the adapter which groove receives the flange 20 which is seated in the shell with the flange 20 extending into the slot 19. It will be appreciated that the structure just described is duplicated in the other one-half of the shell so that when the replacement cord is placed in the dryer and the two halves of the shell brought together by the associated nut and bolt, that the flange 20 will be seated in the groove 19 and retained therein.

The just described device permits a replacement cord to be quickly and readily placed in the appliance by anyone having a minimum of technical skill, as the only electrical connection is by means of the male plug and the female socket. The underwriter's knot 25 is conventional and the whole assembly including the nut, the plug, the groove and the flange, is for the purpose of securely holding the dryer together while it passes an underwriter's test in which a thirty-five pound weight is attached to the cord 22 to see if the cord will pull out. This it will not do because of the just described structure.

While there has been described what at present is considered a preferred embodiment of the present invention, it will be appreciated by those skilled in the art, that various modifications and changes can be made therein without departing from the spirit of the invention.

What is claimed is:

1. A replacement cord assembly for an electrical appliance comprising a pair of insulated wires for conducting electricity from a source to an appliance, the inner end of each of said wires carrying a male plug receivable in a female socket in the handle of said appliance; a plug adapted to be carried by said appliance, said plug having an external flange receivable in a groove formed in the interior of said handle, said flange and said groove cooperating to retain said plug in said handle, a pair of electrical wire inlet apertures, a pair of electrical wire outlet apertures, and a pair of channels, each of said channels communicating one of said inlets with one of said outlets, said inlets being disposed on opposite sides of said plug from one another and said outlets being disposed on a third side of said plug; said electrical wires entering said plug through said inlet apertures, exiting said plug through said outlet apertures and being tied together in an underwriters knot between said outlet apertures and said male plugs.

* * * * *