March 30, 1937. E. J. TE PAS 2,075,674

TERMINAL PLUG FOR ELECTRIC CORDS

Filed Aug. 8, 1933

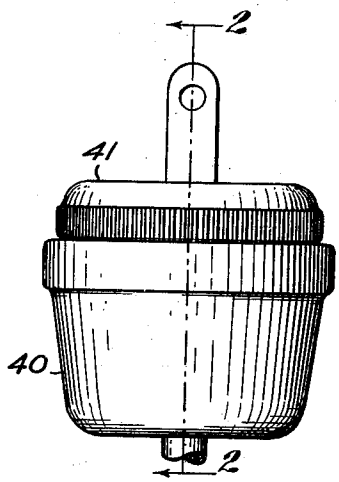


Fig. 1

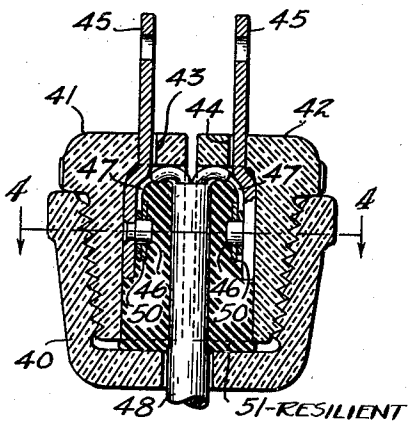


Fig. 2

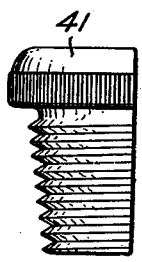


Fig. 3

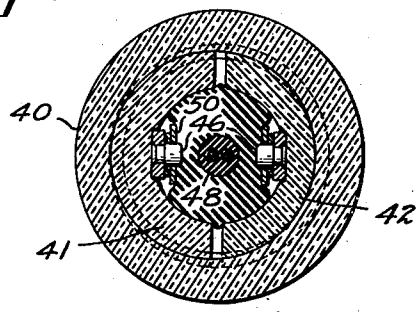


Fig. 4

INVENTOR

Edmund J. Te Pas

Patented Mar. 30, 1937 2,075,674

UNITED STATES PATENT OFFICE

2,075,674

TERMINAL PLUG FOR ELECTRIC CORDS

Edmund J. Te Pas, Rocky River, Ohio, assignor to Walter A. Frantz, Cleveland Heights, Ohio

Application August 8, 1933, Serial No. 684,193

3 Claims. (Cl. 173—361)

This invention relates to electrical connectors as for example the terminal plug caps of attachment plugs for electrical cords and it has for its object the provision of a device of this character which is not liable to breakage, which is not liable to electrical short circuiting, and which is not apt to become detached from the cord or to have the electrical connection broken between the plug contacts and the conductor strands of the cord, the aforesaid objects being accomplished through the use of a simple and inexpensive form of plug cap construction which can be readily attached to an electric cord by persons unskilled and inexperienced in the construction of electrical devices and appliances.

With these and other objects in view, the invention consists in the novel construction, arrangement and combination of parts, hereinafter illustrated and described in some of its embodiments in the accompanying drawing, and particularly pointed out in the appended claims.

In the drawing Figure 1 is a side elevational view of one form of plug cap illustrative of the invention; Figure 2 is a sectional view taken on line 2—2, Figure 1; Figure 3 is a detail view of one of the parts of the plug cap shown in Figures 1 and 2; and Figure 4 is a sectional view taken on line 4—4, Figure 2.

In the device shown the plug cap comprises a hollow cup-shaped body 40 and a pair of complementary end parts 41 and 42. The end parts 41 and 42 are externally threaded and the body part 40 is provided with complementary internal threads whereby the aforesaid plug parts may be detachably assembled together. The members 41 and 42 are provided with apertures 43 and 44 for loosely receiving the contact prongs 45. These prongs are provided at their inner end with posts 46 about which the conductor strands 47 of a cord 48 are wound and washers 50 are fitted over the ends of the conductor strands.

The end portion of the cord 48 which is received in the plug is surrounded by a loosely fitting member 51 formed from a soft rubber-like material which fills the space within the plug and when the plug parts are drawn together the member 51 is compressed and grips the cord while at the same time forcing the washers 50 and the adjacent conductor strand ends into good electrical contact with the contact prongs 45. By the provision of the aforesaid elements the tightening of the plug parts anchors the plug cap to the cord prevents the cord from twisting in the plug cap while at the same time effecting the connection between the cord strands and the contact prongs of the plug.

The plug cap just described is of simple and inexpensive construction and it provides a plug cap that may be readily attached to an electric cord by even the most inexperienced person and by the simple expedient of screwing the cooperating plug cap parts together the electrical connection is made and the plug is securely anchored to the cord.

Furthermore it is to be understood that the particular forms of apparatus shown and described, and the particular procedure set forth are presented for purposes of explanation and that various modifications of said apparatus and procedure can be made without departure from this invention as described in the appended claims.

Having thus described my invention what I claim is:

1. An attachment plug cap for use in connection with a flexible electric cord having conductor strands comprising contact terminal blades connected to the strands of the cord, a hollow cup shaped member having an aperture for receiving the cord, a soft rubber-like body carried in said member and having a passageway for receiving the cord, and a cover having relatively displaceable sections threadably received in the open end of said cup-shaped member, said contact terminal blades projecting from said cover and having their inner ends held in contact with the conductor strands by pressure exerted on said rubber-like body upon securing said cover to said cup-shaped body.

2. An attachment plug cap for use in connection with a flexible electric cord having conductor strands comprising a hollow cup-shaped member having an aperture for receiving the cord, a soft rubber-like body carried in said member and having a passageway for receiving the cord, a cover having relatively displaceable sections threadably received in the open end of said cup-shaped member for compressing said body, and contact terminal blades projecting through said cover; the strands of the cord being held in contact with said blades by said body.

3. An attachment plug cap for use in connection with a flexible electric cord having conductor strands comprising a hollow cup-shaped member having an aperture for receiving the cord, a soft rubber-like body carried in said member and having a passageway for receiving the cord, a cover formed from a plurality of segments threadably received in the open end of said cup-shaped member for compressing said body, and contact terminal blades in contact with the conductor strands and projecting from said cover; contact between the conductor strands of the cord and said blades being maintained by said rubber-like body.

EDMUND J. TE PAS.