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ADHESIVELY SECURED ELECTRICAL DEVICES

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Fig. 1

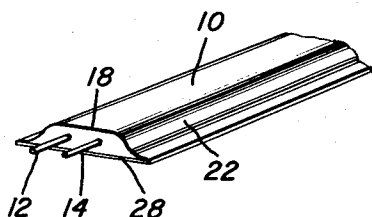


Fig. 2

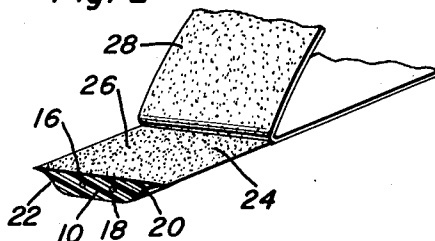


Fig. 3

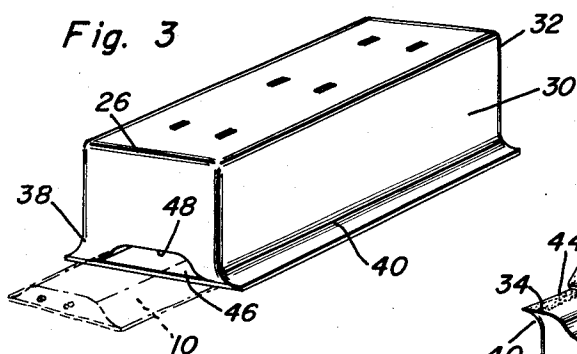


Fig. 4

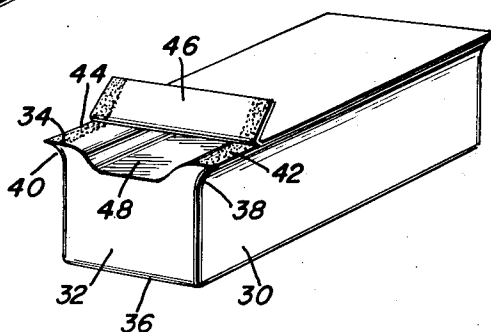


Fig. 5

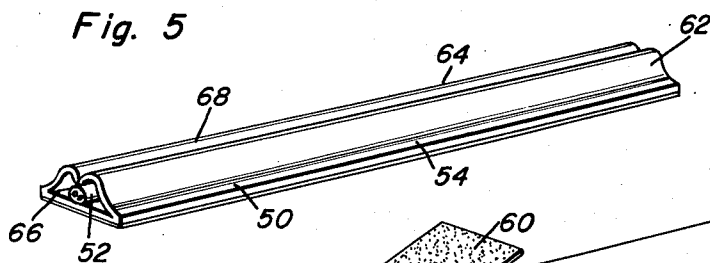


Fig. 6

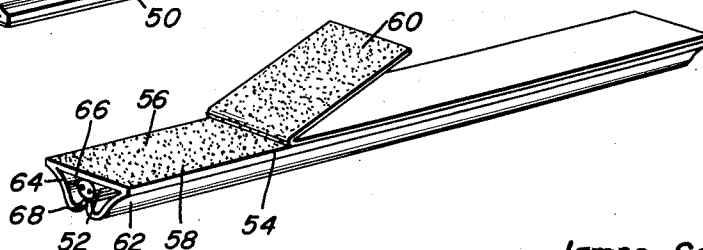
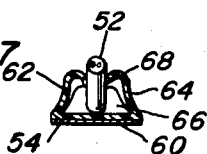


Fig. 7



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ADHESIVELY SECURED ELECTRICAL DEVICES

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3 Claims. (Cl. 174-97)

This invention relates to electrical devices, for instance conductors, receptacles, and conduits, and more particularly to such devices which are held in a fixed position by means of an adhesive on a surface thereof.

An object of the invention is to provide an electrical device as aforesaid which is considerably easier to install because it does not require any type of fastener such as the usual staples, nails, screws or clamps and yet, the electrical device may be adhered to any type of surface.

One of the important features of the invention is the cleanliness of design, being smooth and having no sharp corners that are likely to be snagged, and it does not have crevasses of the type which would accumulate dust and dirt.

There are numerous uses of electrical devices constructed in accordance with the invention. These are not only domestic but commercial and for any type of electrical system, appliance or device.

A more specific object of the invention is to provide an electrical device with a film of pressure sensitive adhesive substance on at least one of its surfaces, the adhesive substance preferably being protected by a strip which may be peeled therefrom to expose the film of pressure sensitive adhesive. Thereafter the device may be pressed onto a supporting surface and will remain in place due to the adhesive thereon.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a fragmentary perspective view of a conductor made in accordance with the invention.

FIGURE 2 is a fragmentary perspective view showing the protective strip being peeled from the adhesive film on the back of the conductor in FIGURE 1.

FIGURE 3 is a perspective of a receptacle made in accordance with the invention.

FIGURE 4 is a perspective view showing the protective strip being peeled from the adhesive on the receptacle of FIGURE 3.

FIGURE 5 is a perspective view of a strip conductor conduit within which an electrical conductor may be retained.

FIGURE 6 is a perspective view showing the strip being peeled from the adhesive on the back of the conduit.

FIGURE 7 is a cross sectional view of the construction in FIGURE 5.

In the accompanying drawings there are several modifications of the electrical devices demonstrating that the principles of the invention are applicable in a number of different capacities. FIGURES 1 and 2 illustrate flat conductor 10 made of a comparatively flat body of electrically insulating material, for instance rubber or plastic, in which two electric wires 12 and 14 are embedded. The cross section of the body (FIGURE 2) presents a bottom straight edge 16, an opposing approximately parallel edge 18 shorter than edge 16, and smoothly curved side edges 20 and 22 which join to the edges 16 and 18. This provides a streamlined smoothly curved appearance with the back wall 24 of conductor 10 flat. The conductor back wall 24 is provided with a film 26 of commercially available pressure adhesive which is protected

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by a peel-off strip 28 of flexible plastic, cloth or the like. In use of conductor 10, the strip 28 is peeled from the back wall 24 thereby exposing the film of pressure sensitive adhesive 26 so that the conductor may be simply stuck onto a supporting surface and will remain in place because of the presence of adhesive 26.

FIGURES 3 and 4 show an electrical receptacle 30 having conventional internal conductors (not shown). The receptacle is made of a body 32 of electrically insulating substance, such as plastic, plastic-like insulating materials, rubber, etc. The illustrated receptacle is a three plug receiving receptacle and diagrammatically represents a receptacle having any conventional pattern of plug prong receiving openings or other analogous devices. When viewing the end of body 32, there appears an edge 34 whose lateral end portions are parallel to edge 36, and portions of the side edges 38 and 40 are smoothly curved to have an outwardly flared part of the body 32 at edge 34. The reason for this is the same as the reason for having a similar construction for conductor 10 and that is, to have a large or comparatively large bottom surface 42 on which pressure sensitive adhesive film 44 is disposed. A peel-off flexible strip 46 is adhered to the adhesive 44 and is adapted to be removed when attaching the receptacle to a supporting surface.

A tunnel 48 is in the bottom surface of body 32 and is of a shape essentially identical to the cross sectional shape of conductor 10 so that the conductor 10 may be fitted therein with the wires 12 and 14 thereof operatively connected to binding posts, terminals or the like that are in or attached to body 32. In this way the conductor 10 is ideally suited for receptacle 30, although conventional conductors may be used. In other words, the conductor of FIGURE 1 may be used with or without receptacle 30, and receptacle 30 may be used with or without conductor 10. The receptacle 30 is applied to a supporting surface by peeling the strip 46 from the pressure sensitive film and pressing the receptacle carried film onto the supporting surface.

Reference is now made to FIGURES 5-7. These figures illustrate a conduit 50 within which a conventional electric conductor 52 may be housed. Conduit 50 has an edge appearance quite similar to conductor 10, and is made of a body 54 of electrically insulating elastomeric substance such as rubber or plastic. The bottom surface 56 of the conductor has a film 58 of pressure sensitive adhesive protected by the peel-off strip 60 of flexible material. The two sides 62 and 64 have portions which also constitute the top wall of the conductor, and each is made of a flat strip integrally joined with the bottom of the body 54 to form a tunnel 66 in which conductor 52 is supported. The conductor 52 may be of any type that is, it may be flat, circular, oval, etc., and it may have one or more wires therein.

An elongate slot 68 is formed between the adjacent edges of sides 62 and 64, and the slot constitutes an entrance through which the conductor 52 may be pushed. The parts of the sides 62 and 64 adjacent to slot 68 are arched in order to form a guideway for the wire 52 while it is being inserted. In inserting the wire the sides spring apart slightly, but the inherent elasticity of the material from which the sides are made, return the sides to the rest position at which the slot 68 is closed (FIGURE 5). This contains the conductor 52 in tunnel 66. In applying the conduit, the strip 60 is peeled back exposing the adhesive on the bottom of the body of the conduit. The body of the conduit may then be pressed firmly against a supporting surface and held in place by the action of the adhesive.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous

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modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. Means for mounting an electric conductor on a support, comprising an elongate tubular body for receiving the conductor longitudinally therein and retaining same, said body including a flat base for attachment to the support and further including upwardly converging, resilient sides integral with the longitudinal marginal portions of said base, the upper longitudinal marginal portions of said sides being reversely transversely bent, free and in abutting engagement with each other for providing a normally closed slot and a generally V-shaped guide thereto for the insertion of the conductor.

2. Means for removably mounting an electric conductor on a support, said means comprising an elongate, flexible tubular body for receiving the conductor, said body including a flat base for attachment to the support, an adhesive on the base and a removable protective strip on the adhesive, said body further including upwardly converging, resilient side walls integral with the longitudinal marginal portions of the base, said side walls comprising free, downwardly curved, abutting upper longitudinal marginal portions providing a normally closed longitudinal slot and a generally V-shaped guide thereto for

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the insertion of the conductor and, further, for deflecting an inserted conductor away from the slot.

3. Means for removably mounting an electric conductor on a support, said means including an elongated resilient tubular body for receiving a conductor, said body comprising a flat base, an adhesive on the base for securing the body on a support, a removable protective strip on the adhesive, said body further comprising upwardly convergent, resilient side walls integral with the longitudinal edges of the base and including free, reversely and downwardly curved, abutting upper longitudinal marginal portions extending toward but spaced from the longitudinal center of the base and providing a normally closed slit and a generally V-shaped external guide there-to for the insertion of the conductor and further providing means for deflecting an inserted conductor laterally in either direction away from the slit.

References Cited in the file of this patent

UNITED STATES PATENTS

2,701,819	Hirtle	Feb. 8, 1955
2,704,302	Budd	Mar. 15, 1955
2,885,460	Borresen et al.	May 5, 1959

FOREIGN PATENTS

215,873	Great Britain	May 22, 1924
977,878	France	Nov. 15, 1950
1,033,825	France	Apr. 8, 1953
1,135,514	France	Dec. 17, 1956
1,145,892	France	May 13, 1957