Dec. 13, 1955 R. A. CUCCARO 2,727,089

INSULATOR HOLDER FOR TELEVISION LEAD-IN WIRE

Filed March 1, 1954

FIG. 1

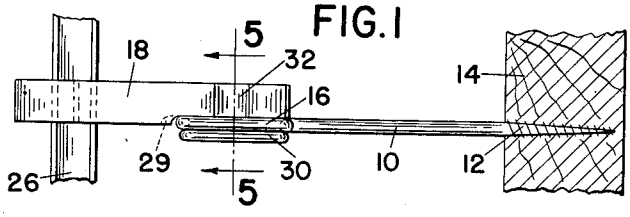


FIG. 4

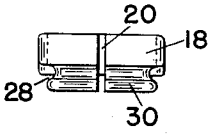


FIG. 2

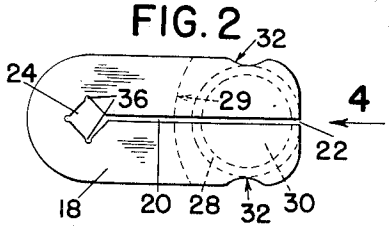


FIG. 3

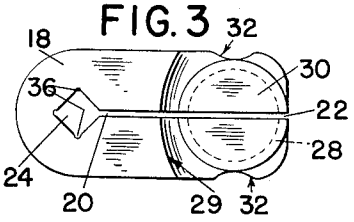


FIG. 5

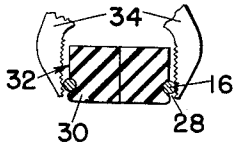


FIG. 6

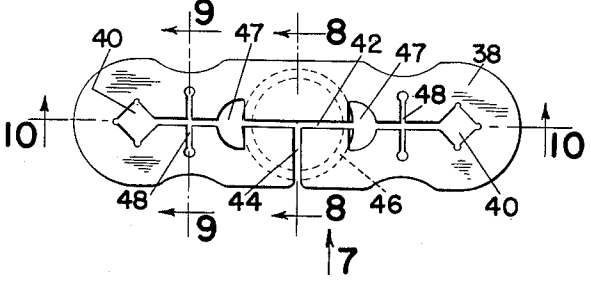


FIG. 8

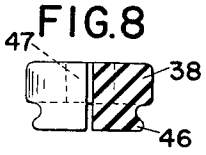


FIG. 7

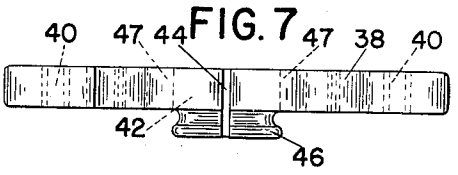


FIG. 9

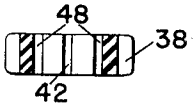


FIG. 10

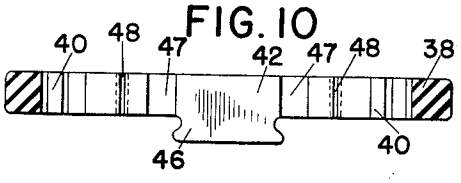
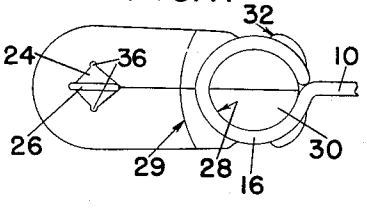


FIG. 11



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INSULATOR HOLDER FOR TELEVISION LEAD-IN WIRE

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Application March 1, 1954, Serial No. 413,000

3 Claims. (Cl. 174—164)

This invention relates to a new and improved stand-off of the insulator eye type for holding and supporting television lead-in wire, whether U. H. F. or V. H. F., and the principal object of the invention provides an insulated insert particularly adapted for U. H. F., the eye or stand-off being of metal and holding the lead-in wire insulator at a point remote from any metal of the stand-off itself.

Other objects of the invention include the provision of a device of the class described which utilizes exactly the same eye or stand-off which is commonly in use for V. H. F. lead-in wire, and the present insulator which is usable for either U. H. F. or V. H. F. is particularly for use in the conventional stand-off but it is easily used for either conventional type insulators for V. H. F. or for the more recent U. H. F. lead wires.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which—

Fig. 1 is a view in elevation of one form of the invention shown in use, part being in section;

Fig. 2 is a plan view of the form of the insulator shown in Fig. 1;

Fig. 3 is a bottom plan view thereof;

Fig. 4 is an end view, looking in the direction of arrow 4 in Fig. 2;

Fig. 5 is a section on line 5—5 of Fig. 1 but showing the pliers in position securing the insulator in place;

Fig. 6 is a plan view of a modified form;

Fig. 7 is an edge view thereof, looking in the direction of arrow 7 in Fig. 6;

Figs. 8, 9 and 10 are sections on the respective lines as indicated in Fig. 6; and

Fig. 11 is a diagrammatic view illustrating how the conventional stand-off or insulator eye grips and closes the present device.

The conventional television lead-in wire stand-off or insulator eye is indicated at **10**, and it has a point **12** which is either driven into or screwed into a support **14** such as the side wall of a building. At the other end of the stand-off, it is provided with a ring or loop **16**, the same being open as is well known in the art and being adapted to enclose and grip a rubber or plastic insulator such as is well known in the art but does not form any part of the present invention.

The novel insulator of the present invention comprises a relatively elongated rubber or plastic body **18** preferably made of neoprene or the like so that it is resilient and somewhat rubbery in nature. This body is provided with a central longitudinal slot **20** extending almost the entire length thereof from one end **22**. The slot terminates inwardly adjacent the opposite end of the device in an enlarged opening **24** which is adapted to hold the lead-in wire **26** in either of two different positions, and of course the lead-in wire gains entrance to the enlargement **24** by means of the elongated slot **20**.

The insulator **18** may be of any thickness which is desired or convenient and is generally flat on the top and the bottom as is indicated in Figs. 4 and 5. Adjacent the end **22** at one side thereof, the insulator **18** is cut away as at **28** forming an undercut generally circular head or the like **30**, the slot **20** extending diametrically through this undercut head. Also the head **30** extends relatively below the bottom surface of the body of the insulator as is indicated in Fig. 4, and the head is inset slightly into the body **18** as by the cut away part **29**. In any event, the undercut head **30** is adapted to receive the loop **16** and it may be snapped thereinto as is customary in the art after the lead-in wire has been positioned in the enlargement **24**.

The body of the insulator **18** is preferably indented at **32** at either side thereof (see Fig. 2) for the application of the jaws of pliers **34** which engage the loop **16** at diametrically opposite points thereon and are used to squeeze the same to bring the sides of the slot more or less together, see Fig. 5, so as to clamp the lead-in wire in position as illustrated in the diagram in Fig. 11 or in a position at right angles thereto as located in the small notches **36**.

The application of this invention will be clear to those skilled in the art. The wire **26** is pushed along slot **20** to be positioned as stated, after the stand-off **10** has been applied to its support **14**. Then the head **30** is snapped into the eye **16** and the pliers are then used to clamp the parts in position. The wire **26** is located completely exteriorly of any metal parts of the stand-off but at the same time the benefit is achieved that the same stand-off which has been used heretofore for V. H. F. may now be used by the use of the present invention for U. H. F. lead-in wire.

In the prior art there have been suggested inventions and designs for holding and supporting U. H. F. lead-in wires but in all cases a completely new and different stand-off had to be designed in order to utilize the same.

The modification shown in Figs. 6 to 10 inclusive illustrates an elongated device generally indicated at **38** and this is double-ended, having a pair of enlarged openings **40** which are widely separated but are connected by a slot **42**. Also a cross slot **44** leads from slot **42** centrally of the modification and laterally thereof to open at an edge for reception of the respective wires, and it is believed that it is clear how the wires are separately moved into the respective enlargements **40**.

At the under side of the central portion of the modified device **38**, there is provided an undercut head **46** which is similar to that at **30**, but of course is cross-cut by slots **42** and **44** rather than by the single slot **20** as in Figs. 2 and 3. Also enlarged holes **47** are utilized for receiving the jaws **34** of the pliers in order to apply lateral pressure onto the opposite edges of the eye **16** which again is utilized in a manner similar to that described above as to the first modification, and holds the double-ended insulator in position in the same manner as above described except that two lead-in wires may be utilized rather than the single one of Figs. 1 to 5 inclusive. There may be provided extra slots at **48** and at other places for providing extra resilience and the device may be shaped as desired to provide for the smallest amount of weight of material necessary in order to make a device of the kind stated.

The Fig. 11 showing illustrates the eye **16** as having been bent inwardly by the pliers which are arranged in the openings or recesses **32** and it is believed that it will be clear how the present invention is utilized in order to firmly support either V. H. F. or U. H. F. lead-in wires by the use of the same insulator or stand-off as has been utilized heretofore, whereby it is not necessary to provide a completely new device for the U. H. F. lead-in wires.

The slots **48** may be used to hold the flat V. H. F. wire,

and of course such formations may be made in any part of the device to hold such wire.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A device of the class described comprising a flat-sided insulating body for holding wires, said body being elongated and having a slot extending longitudinally thereof inwardly from one end for a major portion of the length thereof, said slot terminating in an enlargement, a generally circular head at one flat side of said body adjacent the said one end thereof, said slot intersecting said head and said head providing means for attaching the insulator to a support.

2. A device of the class described comprising a flat-sided insulating body for holding wires, said body being elongated and having a slot extending longitudinally thereof inwardly from one end for a major portion of the length thereof, said slot terminating in an enlargement, a generally circular head at one flat side of said body adjacent the said one end thereof, said slot intersecting said head and said head providing means for attaching the

insulator to a support, and a metal insulator eye applied to said head constricting the same and tending to close the slot, said insulator eye having a pointed end for projecting into the support.

3. A device of the class described comprising a flat-sided insulating body for holding wires, said body being elongated and having a slot extending longitudinally thereof inwardly from one end for a major portion of the length thereof, said slot terminating in an enlargement, a generally circular head at one flat side of said body adjacent the said one end thereof, said slot intersecting said head and said head providing means for attaching the insulator to a support, and a metal insulator eye applied to said head constricting the same and tending to close the slot, said insulator eye having a pointed end for projecting into the support, the body of said insulator being provided with lateral recesses at opposite edges thereof in the region of said head whereby pliers may be utilized to constrict the eye of the insulator eye to cause the same to grip and hold the insulator.

No references cited.