

March 24, 1936.

E. ST. JOHN

2,034,928

CABLE SHIELD

Filed March 23, 1934

FIG. 1

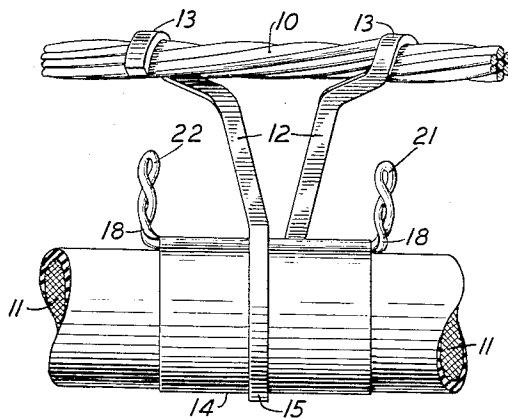


FIG. 2

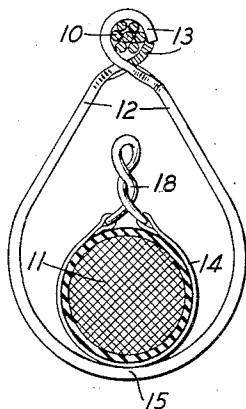


FIG. 3

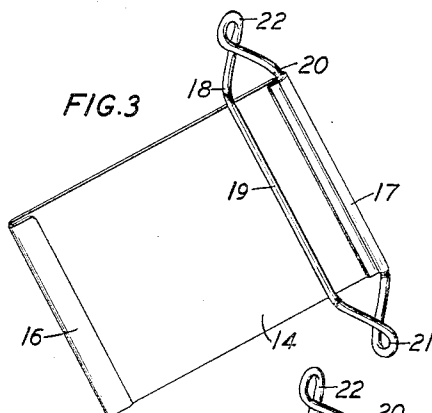


FIG. 4

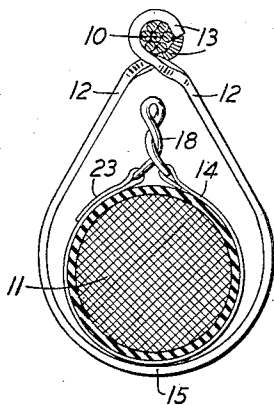
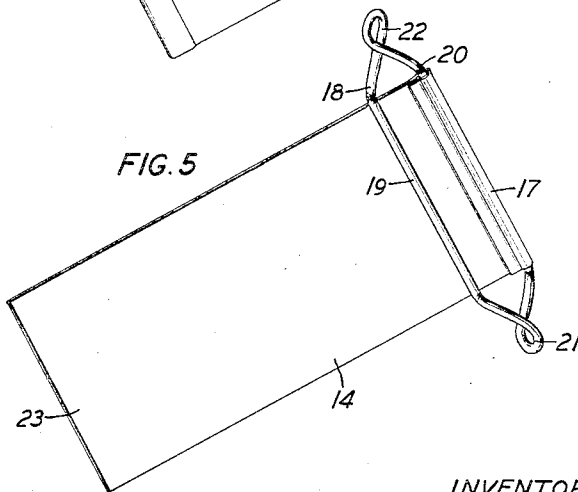


FIG. 5



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CABLE SHIELD

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3 Claims. (Cl. 248—61)

This invention relates to shields and more particularly to devices of this nature which are for use in supporting aerial cables.

One of the objects of this invention is to provide a shield for aerial cables which will protect the sheath from abrasions due to the cable supporting rings cutting into the sheath.

Another object of the invention is the provision of a shield for aerial cables which may be adjusted to the various sizes of cables.

A further object of the invention is the provision of a shield which can be readily installed with a minimum amount of time and labor and without the use of special tools.

A still further object of the invention is the provision of a cable shield which is inexpensive to manufacture, and yet is sturdy in construction.

Heretofore, it has been common practice in the supporting of aerial cables to provide some means for preventing the cable supporting ring from cutting into the cable sheath. The most widely used method of preventing cutting has been the provision of a saddle on the interior of the cable ring, this saddle being somewhat wider than the ring itself and presenting to the surface of the sheath a wider surface than could be obtained by the ring. It has been found that this method is highly unsatisfactory and that it did not solve the problem, inasmuch as the cable was still free to rotate in the ring and the surface of the saddle was not large enough to prevent the wear which is present when the cable is allowed to rotate in its supporting ring.

If the saddle on the cable ring were made large enough to prevent wearing of the cable due to the movement of the cable therein, the saddle would attain such a size that not only would the cost be prohibitive, but they would be difficult to handle and would make the pulling of the aerial cable extremely hard.

The invention comprises essentially a wide strip of flexible metal of sufficient length to surround the cable to which it is to be secured, each end of the strip being bent back upon itself a short distance to provide a U-shaped channel. Located in the channel on one end of the strip is an elongated wire loop having at each end a bent up portion, this bent up portion having a slight twist. In applying applicant's shield to a cable, the strip is wrapped around the cable and the free end is brought into engagement with the wire loop. The extending ends of the wire loop are now further twisted to draw the strip tightly

around the cable sheath; the cable supporting ring is then installed in the usual manner.

In a modified form of the invention the free end of the strip has no bent over portions, but is merely pulled through the loop until it fits snugly around the cable and it is then bent back upon itself to secure it in position. The extending ends of the loop are now twisted as heretofore described to secure the strip around the cable sheath. This construction allows various sizes of cable to be accommodated by a single shield.

The features which are believed to be characteristic of this invention are set forth in the appended claims and the invention, both as to its organization and its method of operation will be further explained in the following detailed description, having reference to the accompanying drawing in which:

Fig. 1 is a side elevation illustrating the improved device as applied to a cable;

Fig. 2 is an end view of Fig. 1;

Fig. 3 is a view in perspective of applicant's device before it has been applied to the cable;

Fig. 4 is an end view of a modified form of applicant's device; and

Fig. 5 is a view in perspective of the modified form of cable shield before it is applied.

Referring now to the drawing, as shown in Fig. 1, 10 is a messenger strand and extends parallel to the cable 11 which it supports by means of the ring 12 the arms 13—13 of which embrace the supporting strand or messenger 10.

As shown, applicant's improved shield 14 is positioned between the loop 15 of the ring 12 and the sheath of the cable 11. The cable ring 12 may be any one of the well known types which, due to its own tension, locks itself on the messenger strand in such a way as to prevent longitudinal movement thereon.

As shown in Fig. 3, the shield 14 comprises a rectangular strip and is preferably made from a durable and ductile material. The ends of this strip 14 are bent back upon themselves for a short distance to form the rolled edges or channel portions 16 and 17. Located in the channel portion 17 is one side of the wire loop 18. This loop 18 is rectangular in shape and comprises two parallel side members 19 and 20, the end portions of which are partially twisted to form the upstanding loops 21 and 22. These partially twisted loop portions 21 and 22 extend upwardly at an angle from the main body of the loop member 18.

This shield in its application to a cable sheath

is bent into circular form to enable it to engage the cable sheath in gripping relation as shown in Figs. 1 and 2. After the shield 14 has been bent around the cable 11, the free end 16 is hooked over the portion 19 of the loop 18. The shield is now in contact with the cable, but is loosely mounted thereon. It is now necessary to tighten the shield to secure it in position on the cable sheath. This is accomplished by twisting the loop portions 21 and 22, with any suitable tool, in a clockwise direction. This twisting shortens the distance between the two parallel side members 19 and 20 of the loop 18 and consequently draws the portions 16 and 17 of the shield 14 toward each other thereby securing the shield 14 tightly against the sheath of the cable. Inasmuch as the space between the parallel members 19 and 20 may vary in width, one length of shield will do for various sizes of cable, within certain limits.

In order that one size of shield may accommodate a greater number of sizes of cable, the applicant has provided a modified shield in which the turned-over-end portion on the free end of the strip has been eliminated and in applying the shield to the cable, the procedure is the same as outlined above, except that the free end 23 is placed under the portion 19 of the ring 18 and thence back on itself, as shown in Fig. 4, the surplus strip may then be cut off and the shield tightened on the cable as heretofore described.

The broad surface presented by applicant's shield assures protection to the cable sheath even though there is a displacement of the ring due to creeping. The securing of the shield tightly to the cable in the manner heretofore described, permits the cable and shield to rotate in its supporting ring, thereby applying the wear be-

tween the ring and the shield instead of between the ring and the cable sheath.

What is claimed is:

1. A protective shield for aerial cables and the like comprising a rectangular strip of metal, one end of which is provided with a bent over portion to form a lip thereon, an elongated wire loop, formed from a single piece of wire and having parallel sides, one side of said loop positioned in said lip and the other side engaging the free end of said strip, said loop member having eye portions at its ends extending above the main body of the loop for drawing the sides of said loop toward each other by applying a twisting motion thereto.

2. A protective shield for aerial cables and the like comprising a rectangular strip of metal, the ends of which are provided with bent over portions to form lips thereon, an elongated wire loop formed from a single piece of wire, the sides of which are parallel and cooperate with said lips, said loop provided at its ends with upwardly extending eye portions for drawing the sides of said loop toward each other when a twisting motion is applied to said extending portion.

3. A protective shield for aerial cables and the like comprising a rectangular strip of metal, the ends of which are provided with bent over portions to form lips thereon, an elongated wire loop formed from a single piece of wire and having parallel sides which engage the bent over portions of said strip, said loop provided at its ends with upwardly extending eye portions for drawing the sides of said loop toward each other when a twisting motion is applied to said extending portion.

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