Aug. 28, 1962 R. L. SMYTHE 3,051,278

GUY GUARD

Filed Feb. 3, 1958

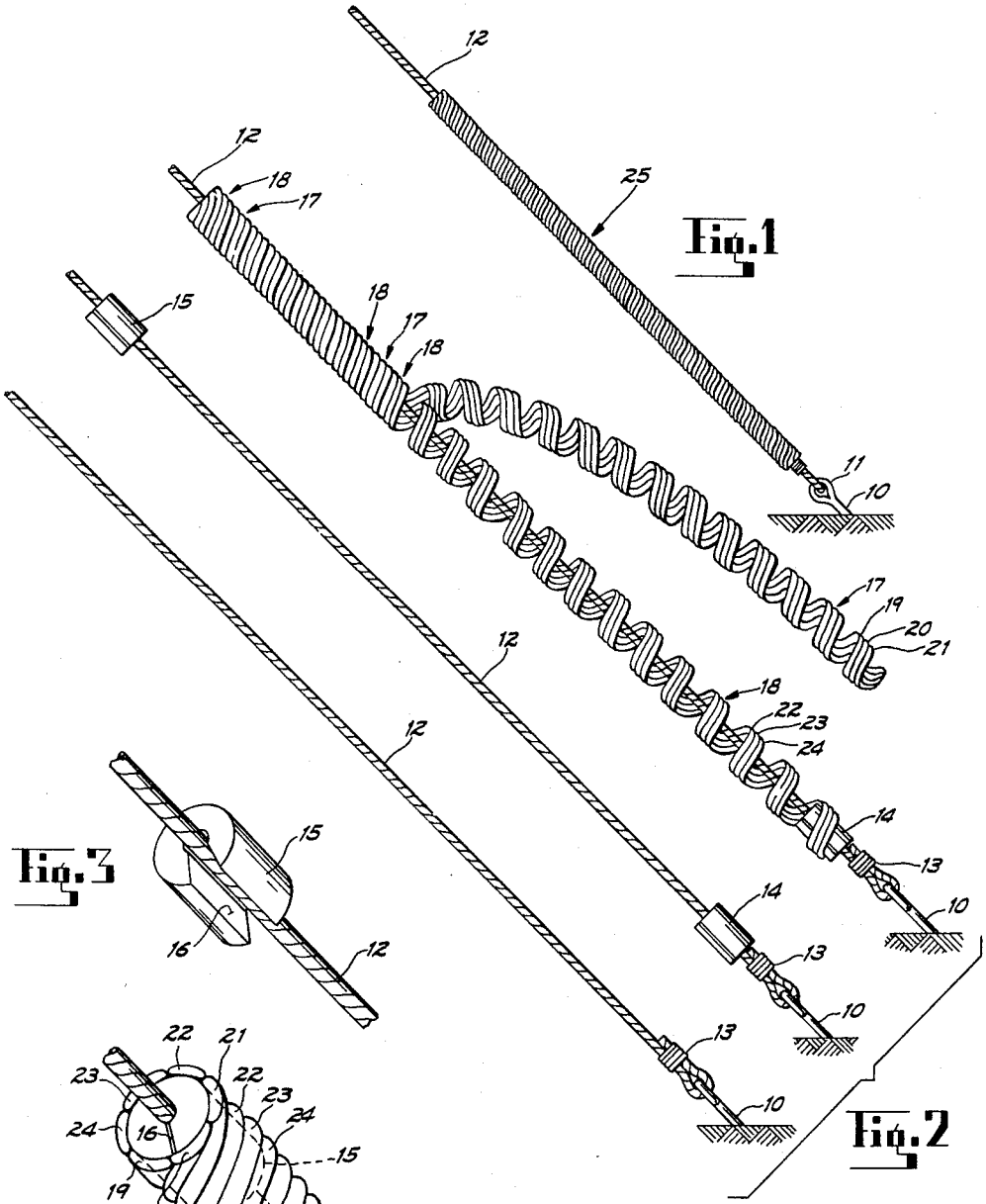


Fig. 1

Fig. 2

Fig. 3

Fig. 4

INVENTOR.
ROBERT L. SMYTHE

BY

ATTORNEY

United States Patent Office 3,051,278
Patented Aug. 28, 1962

3,051,278

GUY GUARD

Robert L. Smythe, Milwaukee, Wis., assignor to McGraw-Edison Company, Milwaukee, Wis., a corporation of Delaware

Filed Feb. 3, 1958, Ser. No. 712,828
1 Claim. (Cl. 189—31.5)

This invention relates in general to guy guards and more particularly relates to preformed helical elements disposed in surrounding relation to a working guy wire to protect the latter.

It is an object of this invention to provide a guy guard comprising preformed helical elements disposed on a guy wire and which will be readily noticeable to prevent unintentional active contact therewith while not being objectionably blatant so as to attract undue attention.

It is a further object of this invention to provide a guy guard of the type aforementioned which is semiflexible and, therefore, offers good impact stability.

It is a further object of this invention to provide a hollow guy wire guard as above characterized including mounting means clamped to the guy wire, which serve the dual purpose of supporting and spacing the helically formed wires away from the guy wire to form a semiflexible guard for the guy wire to cushion an impact against the assembly and prevent abrasion of the guy wire by the impacting objects.

It is a further object of this invention to provide a hollow guy guard as above characterized including resilient mounting means whereby an impact blow first is spread along the entire length of the semiflexible guy guard and, thus, the blow is absorbed by the resiliency of the guy guard itself as well as by the resilient mountings before translation thereof to the working guy wire.

It is a further object of this invention to provide a guy wire guard of the type aforementioned where there are no projecting surfaces to catch on articles of clothing, to catch animal collars, or to allow purchase for climbing by small children and the like.

It is a further object of this invention to provide a device of the above character which is simple to install since it merely requires two simple frictionally mounted adapter plugs and an intertwisting of helical preformed elements.

The novel features that are characteristic of the invention are set forth with particularity in the appended claim. The invention itself, both as to its organization and its method of operation, together with additional objects and advantages thereof, will best be understood by the following description of a specific embodiment when read in connection with the accompanying drawings in which:

FIG. 1 is a view of the novel guy guard disposed in assembled relation to an anchored guy wire and the like;

FIG. 2 is a view showing the steps of assembly of applicant's novel guy guard;

FIG. 3 is a fragmentary perspective view of the assembly of the pliable adapter plug portion of the assembly to the guy wire; and

FIG. 4 is a fragmentary perspective view of the end portion of FIG. 1.

A working guy wire **12** is attached to a pole or the like at its upper end (not shown) and is anchored in the ground by a suitable anchor **10** having an eyelet **11**. The guy wire is attached to the anchor eyelet **11** by any of a great number of suitable means at **13**. A pair of resilient adapted plugs **14** and **15** are each formed with a central bore and a longitudinal slot for communication of the central bore with the periphery of the plugs. The bore preferably is slightly smaller than the guy wire

12 of application. The plugs **14** and **15** are insertable over the working guy wire **12** as shown in FIG. 3 by slipping the plugs thereover by spreading the slotted portion **16**. For the application shown, it is preferred that at least two plugs such as shown at **14** and **15** be disposed in spaced relation to each other and in surrounding relation to the working guy wire. If desired, the lower plug **14** may be placed upon the anchor shank **10** to cover the attaching means **13**. This is dependent on the type of fastening means **13** used in the assembly. It is to be expressly noted that the plugs **14** and **15** may be made of resilient material such as rubber or the like. Also, the plugs may be made of metal or wood. However, in this instance, grooves must be formed on the periphery of the plugs to accommodate the wire strands.

Helically preformed elements here shown as two half lays **17** and **18** each are formed having a common pitch and a common diameter and are disposed in surrounding relation to the guy wire **12**, the ends of the individual half lays **17** and **18** each terminating on the plugs **14** and **15**, respectively. It will be noted that the slot **16** is compressed as shown in FIG. 4 when the guy guard is in its assembled relationship. As shown, the half lay **17** is 180° out of phase with the half lay **18**. The half lay **17** may be of such a size that it may comprise three wire strands **19**, **20** and **21** and half lay **18** may comprise three strands **22**, **23** and **24**, each half lay of three strands being held together in a unit for intertwisting with the other half lay which will be 180° out of phase therewith. It is obvious that more or less strands may comprise a half lay as suitable and desired. It is to be observed that the pitch of the lay of strands as illustrated is actually much shorter than the actual practice and, thus, is to be considered semidiagrammatic rather than scale drawing. It is also possible to use a great plurality of individual strands intertwisting them individually into the assembled relation shown in FIG. 1. The strands **19** to **24**, inclusive, may be made of metal wire or suitable plastic materials.

As shown in FIG. 2 and FIG. 4, the internal diameter of the assembled half lays **17** and **18** forming the guy wire guard **25** provides a body having a diameter substantially larger than the guy wire itself. Thus, a blow upon the center of the guy guard **25** will be taken up by the semiflexible strands to guy guard rather than being transmitted directly to the working strand **12**. Further, the resilient plugs **14** and **15** shown in FIG. 2 will also tend to absorb impact shocks. When rigid type guy wire protectors are badly damaged by impact, sharp edges are frequently encountered and these edges may infringe upon and abrade or score the guy wire **12**. When the guy wire guard **25** is made of semiflexible, helically formed wire, pliable plastic or rubmer, the semiflexible material will be a barrier between any impacting objects and the guy wire **12** and prevent the latter from being badly abraded or scored (which lowers its tensile strength).

Although a specific embodiment of the invention has been shown and described, it is with full awareness that many modifications thereof are possible. The invention, therefore, is not to be restricted except insofar as is necessitated by the prior art and by the spirit of the appended claim.

What is claimed as the invention is:

A hollow guard for protecting a guy wire comprising, in combination, a pair of spacers adapted to be secured to said guy wire in spaced apart relation lengthwise thereof, and a pair of helically preformed elements having the same pitch and diameter and being of an internal diameter larger than the diameter of said guy wire and slightly smaller than the external diameter of said spacers, said

elements being adapted to encircle said guy wire without disturbing it, said elements constituting half lays and being adapted to be intertwisted to form a whole lay surrounding said guy wire in radially spaced relation thereto and surrounding said spacers in clamping engagement therewith and providing a sheath free of projections for protecting said guy wire.

References Cited in the file of this patent

UNITED STATES PATENTS

695,427	Davis	Mar. 11, 1902
1,627,423	Bierce	May 3, 1927
1,781,124	Nein	Nov. 11, 1930
1,924,701	Webb	Aug. 29, 1933
2,018,477	Wentz	Oct. 22, 1935
2,060,162	Boe	Nov. 10, 1936
2,126,290	Seeley	Aug. 9, 1938
2,275,019	Peterson	Mar. 3, 1942
2,736,398	Peterson	Feb. 28, 1956
2,918,783	Little	Dec. 29, 1959

OTHER REFERENCES

American Telephone and Telegraph Co., Specifications No. 3927 of December 1920, page 96.