May 12, 1931. C. L. MATTHEWS ET AL 1,805,251

GUY GUARD

Filed Dec. 15, 1930

Fig. 5.

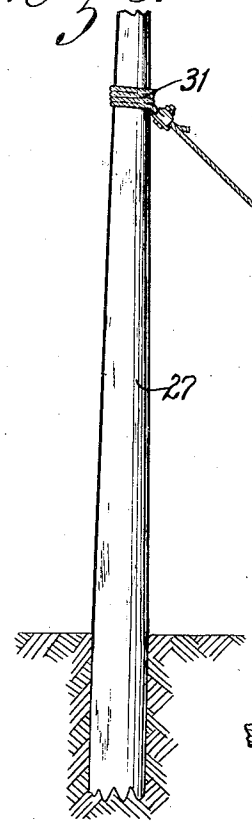


Fig. 3.

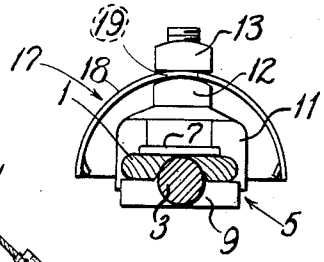


Fig. 4.

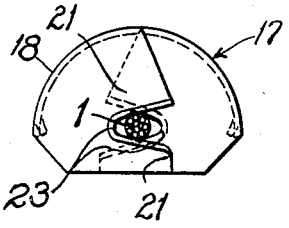


Fig. 6.

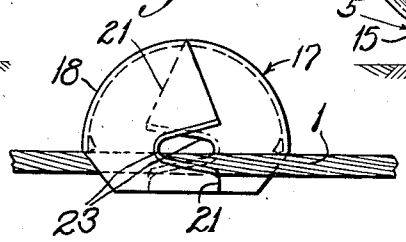
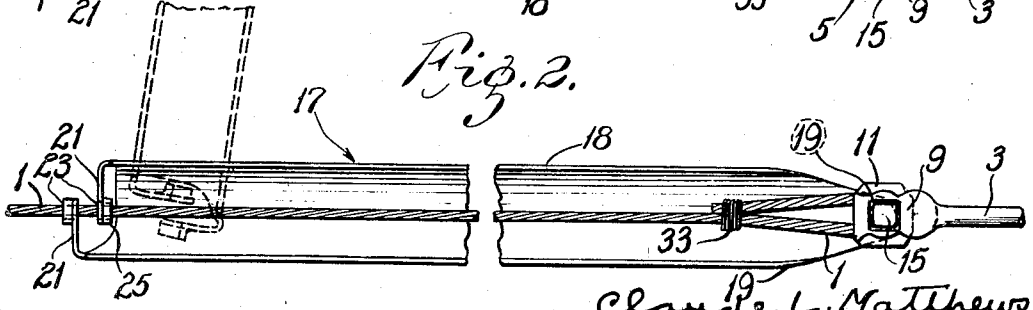


Fig. 1.

Fig. 2.



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Patented May 12, 1931 1,805,251

UNITED STATES PATENT OFFICE

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GUY GUARD

Application filed December 15, 1930. Serial No. 502,342.

This invention relates to guards, and with regard to more specific features, to guards for guy strand and the like.

Among the several objects of the invention may be noted the provision of a guard which prevents injury to that which might otherwise come into contact with the guy strand and be injured if the guard were not used; the provision of a device of the class described which is non-rotatable about the strand and which is tightly held thereto; the provision of a device of the class described which may be held in position by one nut and bolt, and which is easily installed or removed; the provision of a device of the class described which is of one piece and which is so designed that a plurality can be nested to provide for minimum cost of shipment and which is economical to manufacture. Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly comprises the elements and combinations of elements, features of construction, and arrangements of parts which will be exemplified in the structures hereinafter described, and the scope of the application of which will be indicated in the following claims.

In the accompanying drawings, in which are illustrated several of various possible embodiments of the invention,

Fig. 1 is a side elevation of one form of the guard installed on a guy strand;

Fig. 2 is a bottom plan view of Fig. 1, the dotted lines showing a position of the guard during the process of installation;

Fig. 3 is a right-hand elevation of Fig. 1;

Fig. 4 is a left-hand elevation of Fig. 1;

Fig. 5 is a side elevation showing the guard installed on a guy strand for guying a pole; and

Fig. 6 is a left-hand elevation with the guard at right angles to the guy strand as at the start of the operation of installing the same.

Similar reference characters indicate corresponding parts throughout the several views of the drawings.

The term "guy strand" in the present specification and claims is inclusive of strands adapted to function for all purposes and includes wire, rope and cable.

Guy strand used to guy poles or the like to ground anchors and the like forms a source of danger to persons, animals or objects moving about near it and accordingly should be shielded. The purpose is to make the presence of the guy wire or strand known to persons to prevent tripping and to prevent the catching or tearing of such things as may come into contact with the fastenings associated with the attachments between the strand and anchor rod or the like. It is difficult to shield these guys because, due to their small diameter, difficulty arises in clamping the shields to them. The shields so clamped are usually either so loose that they slide or twist out of position, rattle, and in general are unsatisfactory, or so involved that their manufacturing expense and freight rates for delivery are prohibitive. The present invention overcomes these difficulties and provides a guy guard which is formed in one piece, is easily manufactured, shipped and installed, and substantially immovably fastened to the guy strand or wire or the like.

Referring now more particularly to Figs. 1 and 2 there is illustrated at numeral 1, a guy strand terminated at, and fastened to a guy rod 3 by a guy clamp 5. The clamping end of the guy rod 3 has formed with it a base portion 9 of the clamp 5, and also a capstan 7 adapted to be surrounded by the guy strand. The clamp 5 is formed so as to force the cable into a tortuous shape when the clamping action is effected. The form of guy clamp which I prefer is shown in Figs. 1 and 2 herein and it is clear that the guy clamp comprises the base portion 9, cap portion 11 adapted to be clamped on to the base portion 9 by means of a bolt 15, and a fastening nut 12. It is understood that the bolt 15 extends appreciably above the nut 12 in the final clamped position. The extra nut 13 is furnished with this guy clamp when this guy guard is to be used with it. This makes it possible to securely and easily fasten the guy guard to the clamp after the guy strand is clamped in its final taut position.

At numeral 17 is shown the guard installed

on the guy strand 1 and the guy rod 3. The guard 17 is preferably, though not necessarily, formed from sheet metal such as galvanized iron or the like, and comprises a trough-shaped body portion 18, an eye 19 at one end, and guy gripping members 21 at the opposite end of said body portion. The nestable, trough-shaped body portion 18 may be of any shape such as semi-circular (shown), triangular, rectangular, or the like and may be of any convenient area. In the present invention it is in the form of a trough. The eye 19 is adapted to be slipped over and fastened to the bolt 15 by the nut 13 when the clamp 5 is in a clamped position. The nestable feature is of importance. With the present invention it is possible to save in excess of two-thirds of the volume otherwise consumed in a given weight in shipment. Thus the present device takes third class freight rate, instead of second class.

The guy gripping members 21 are sufficiently spaced to freely accommodate the guy strand 1 when the body portion 18 is in an angular position to the cable 1, see dotted lines, Fig. 2 and solid lines, Fig. 6. Notches 23, (Figs. 1, 4 and 6), provided in the gripping members 21, are adapted to frictionally receive and engage the guy strand 1 when the body portion 18 is turned and longitudinally aligned with the guy strand 1, as shown by solid lines in Figs. 1, 2 and 4. Moreover as the guard is aligned with the guy strand, the center line of the notches is positioned so that the guy strand will finally be secured below the edges of the guard (see Fig. 4). Flanged edges 25 on the notches 23, provide a substantial and slidable contact between the cable 1 and the gripping members 21, Fig. 2, so that they will not scar the guy strand, wire, rope or cable.

During installation, the guy stand 1 is first pulled into a taut position around the capstan 7 (Figs. 1 and 2) and then is clamped by the guy clamp 5. The free end of the cable may be secured as illustrated at numeral 33. The guard 17 is now placed in an angular position (preferably at right angles) to the cable 1 so that the space between the gripping members 21 receives the guy strand 1, (dotted lines, Fig. 2 and solid lines, Fig. 6). The body portion 18 is swung to align with the guy rod 3. As this motion is continued, the notches 23 frictionally receive the guy strand 1, thereby frictionally holding that end of the guard 17 to the strand 1. When the body portion 18 has come into alignment with the strand 1, it is slidably moved along the strand 1. The sliding motion permits the eye 19, which, as has been pointed out, is adapted to be received on the bolt 15 to complete the engagement, whereupon the nut 13 is threaded on the bolt 15 and the guard 17 is thus securely held against longitudinal and angular displacements.

Fig. 5 illustrates the guard 17 installed on a guy wire 1 for guying a pole 27. One end of the cable 1, is secured by a guy rod 3, which is fastened to a ground anchor 29. The other end is secured as at 31. It may be seen that the bolt 15, and the nut 13 fasten one end of the guard to the clamp 5, and that the other end is firmly held by the gripping members 21.

From the above description it will thus be seen that a guard has been provided for the guy wire 1, which is firmly held on the guy wire and provided against any rotation or rattling on the wire. It is also pointed out that only one bolting operation is required to secure the guard in place. A guard has been provided which can be easily installed or removed and which can be nested in quantity to save shipping expense, and storage space.

In view of the above, it will be seen that the several objects of the invention are achieved and other advantageous results attained.

As many changes could be made in carrying out the above constructions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

We claim:

1. A guy guard comprising a longitudinal body portion, spaced gripping means formed on said body portion, said means being adapted to freely receive a guy strand therebetween when said body portion is angularly disposed to said guy strand, said means being adapted to securely engage said guy strand when said body portion is angularly turned to substantially align with said strand.

2. A guy guard comprising a longitudinal body portion, spaced gripping means formed on said body portion, said means being adapted to freely receive a guy strand therebetween when said body portion is angularly disposed to said guy strand, said means being adapted to securely engage said guy strand when said body portion is angularly turned to substantially align with said strand, and an extension on said body portion, said extension having an aperture therein through which a bolt securing the end of said guy strand is adapted to be fastened.

3. A guy strand guard comprising a longitudinal body portion, spaced gripping means formed on one end of said body portion, said means having notches formed therein, said means also being adapted to freely receive a guy strand therebetween when said body portion is angularly disposed in respect to said guy strand, said notches being adapted to receive said guy strand when said body portion is substantial-

ly aligned with said guy strand, whereby said notches hold said guy guard to said guy strand.

4. A guy strand guard comprising a longitudinal body portion, spaced gripping means formed on one end of said body portion, said means having notches formed therein, said means also being adapted to freely receive a guy strand therebetween when said body portion is angularly disposed in respect to said guy strand, said notches being adapted to receive said guy strand when said body portion is substantially aligned with said guy strand, whereby said notches hold said guy guard to said guy strand, and means formed on said body portion adapted to be fastened to a clamp on said guy strand, whereby rotational and longitudinal movement of the guy guard relative to said strand is prevented.

5. A guy strand guard comprising a longitudinal body portion, spaced gripping means formed on one end of said body portion, said means having notches formed therein, said means also being adapted to freely receive a guy strand therebtween when said body portion is angularly disposed in respect to said guy strand, said notches being adapted to receive said guy strand when said body portion is substantially aligned with said guy strand, whereby said notches springingly hold said guy guard to said guy strand, said notches also being adapted to lower said guy guard over said guy strand as said body portion is aligned with said guy strand.

6. A guard for use with a guy strand having a bolted clamp, comprising a body portion, said body portion being adapted to at least partially surround said guy strand, gripping members at one end of said body portion, said gripping members having notches adapted to slidably attach said body portion to said guy strand and means at the other end adapted to be bolted to said clamp by at least one bolt of said clamp.

In testimony whereof, we have signed our names to this specification.

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