March 14, 1933. F. N. BIERCE 1,901,550

GUY SHIELD

Filed Feb. 12, 1930

Fig. 2.

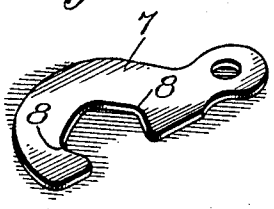


Fig. 1.

Fig. 5.

Fig. 3.

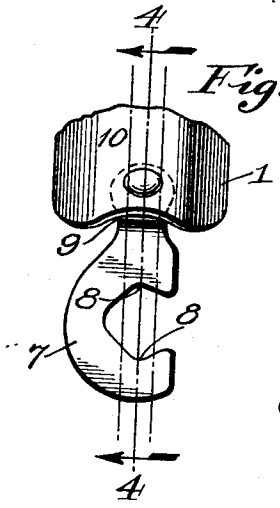


Fig. 4.

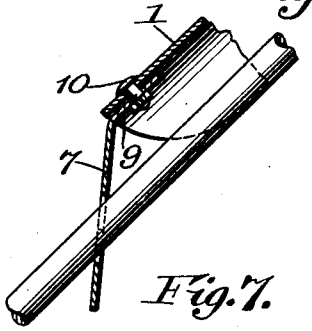


Fig. 6.

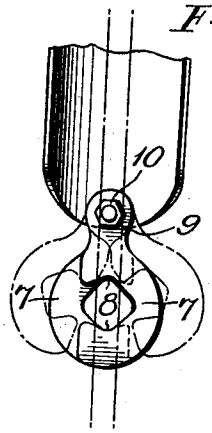


Fig. 7.



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UNITED STATES PATENT OFFICE

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GUY SHIELD

Application filed February 12, 1930. Serial No. 427,793.

The invention relates to a guard or shield for guy wires or rods and particularly to the fastening means for securing the shield in place about the guy. The shield comprises a channel shape length of sheet metal semicircular in cross section and adapted to cover a portion of the guy and preferably spaced therefrom. A general practice is to connect the guy wire or cable to an eye formed in the upper end of an anchor rod, the anchor rod emerging forward or protruding a short distance above the line of the ground and to guard or sheath the guy at a point commencing below the rod and wire joint so that the lower end of the shield bears comparatively close to the ground. With the lower end of the shield bearing close to the ground and being set in an inclined line makes it very inconvenient to secure the shield at its lower end by fastening devices requiring hand tools for tightening.

It is therefore an object of the invention to provide a shield or guard for guys with fastening devices of simple and durable structure for ready application of the shield to the guy and particularly at the lower end thereto and which can be applied without the use of hand tools.

Another object of the invention is to provide a guy shield with a fastener link clip ready to be clasped about the guy securing against lateral displacement and grippingly engaged with the guy to hold the shield against longitudinal displacement.

With the foregoing and other objects in view, the invention consists of certain novel features of the construction in arrangement of parts that will hereinafter be more fully described and illustrated in the accompanying drawing, in which:

Figure 1 is a vertical longitudinal section taken through the center of the shield with the improved fastener clip at the lower end thereof and in position clamping the shield to the guy.

Figure 2 is a detailed perspective view of the improved fastener clip preferably for the lower end of the shield.

Figure 3 is a front view looking against the clip and lower end of the shield in a position as applied upon the guy.

Figure 4 is a section on line 4—4, Figure 3.

Figure 5 is a detailed plan view of the clip and lower end of shield as viewed from the underside of the shield.

Figure 6 is a modification illustrating the use of a plurality of clips, the clips relatively conversely positioned.

Figure 7 is a section on line 7—7, Figure 1.

Referring to the drawing which illustrates practical improvements of the invention, 1 indicates the shield formed of galvanized sheet metal curved or shaped into channel form substantially semicircular in cross section with curved or rounded edges at its opposite longitudinal ends. The shield is of suitable length and cross dimension to amply cover the guy from the upper side, giving sufficient protection as may be necessary to meet the safety requirements.

The shield toward its upper end is securely fastened to the guy wire or cable 2 by a U-bolt 3 and a spacer block 4 substantially the same as disclosed in the prior patent issued to me, No. 1,183,161, November 16, 1916, which have gone into extensive commercial use. The head or cross portion of the U-bolt engages crosswise with the convex or outer side of the shield and its prongs or shanks engage through perforations in the shield straddling the spacer block 4 disposed and bearing against the concave or underside of the shield and grooved to recess the shanks of the U-bolt, securing the same against lateral displacement.

The spacer block is provided with a V-groove in its lower end for the reception of the wire cable to seat and grip the cable when clamped thereto by a cross bar or plate 5 engaged over the shanks of the U-bolt and clamped by the nuts 6 of the U-bolt. This type of fastener provides a very substantial means for securing the upper end of the shield to the guy and one or several number of such clamps may be used as may be essential for a given length of shield and

which are positioned a distance up from the ground so as to be readily accessible by hand tools for placing the fastener parts or tightening the nuts.

Insofar as the present invention is concerned, it is to be recognized that various other types of fasteners may be employed for securing the upper end of the shield to the guy. The lower end of the shield is provided with an open link clip 7 preferably extending longitudinally from the shield formed or stamped out of sheet or plate metal of a design or outline forming a body portion in the form of a C for clasping about the anchor rod. The rod engages through the opening in the clip and the opening of configuration to provide opposing V-notches 8—8 for biting or gripping the surfaces of the rod at relatively opposite sides when the clip is bent or set acutely to the rod, holding the shield against longitudinal displacement as well as lateral displacement or disengagement from the rod. The clip has a pendant 9 integrally extending therefrom providing a ring for attaching and suspending the clip from the lower end of the shield and secured to the shield by a bolt or rivet 10 and a neck or stem portion at which the clip will more readily yield or bend to incline the clip relatively to the rod in applying the shield.

The clip is preferably formed from spring metal allowing the clip to yield or bend at the neck or stem and possesses sufficient elasticity to engage with the guy under tension to constantly maintain its gripping clasp about the guy or anchor rod. A clip opening is of such design and measurement adapting the rod to be threaded into the opening when the clip is positioned at right angles thereto and binding or gripping the rod therewith when moved or inclined acutely thereto. The slight inclination of the clip from the perpendicular at which the threading is easily accomplished will position the clip to prevent lateral displacement and when inclined to a degree to bring the edges of the V-notches into engagement with the rod establishes a gripping hold therewith preventing longitudinal displacement or movement of the shield upon the rod and also maintains an appropriate spacing of the shield from the rod.

In applying the shield, a lower clipped end of the shield is first engaged with the rod and then bent to incline the shield and bring the same parallel with the guy whereby the shield is secured by the upper fasteners. In the modification shown in Figure 6, a pair of open link clips are provided conversely arranged and adapted to swing or swivel upon the bolt or rivet 10 to separate the same sufficiently to allow for insertion of the rod into the openings of the clip, and then brought to a closed position after which the shield is moved down to a parallel position with the guy rod, substantially the same as described for the single clip. In the modified form, the clips can be made of lighter weight material with the function and utility extending the same as in the use of a single clip.

The open link clip, aside from furnishing a ready and effective fastener for the lower end of the shield, permits the shield to be brought closely to the ground or even in contact therewith if desired, which, however, would not be feasible on account of corrosion of sheet metal. The clip represents a single stamping of simple and cheap manufacturing and within the present concept, may also be regarded as an integral part of the shield, although the shield usually is made of the gauge of metal which would not offer the stability to that of a clip made from a heavy gauge spring metal.

Having described my invention, I claim:

A shield for guy rods and cables, comprising, an elongated channel-shaped member adapted to overlie a portion of the guy, a guy engaging clip fixed to and extending from one longitudinal end of the channel member constituting a plate having a notch at one edge inwardly providing a throat to receive the guy therethrough and clinch thereto when the clip is disposed at an acute angle to the guy.

In witness whereof, I hereunto subscribe my name.

FRED N. BIERCE.