Nov. 17, 1936. A. A. HOCHER ET AL 2,061,306

GUY WIRE PROTECTOR

Filed Aug. 10, 1933

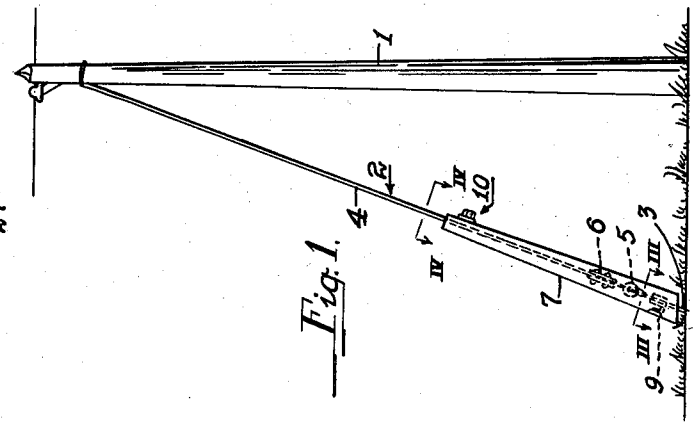


Fig. 1.

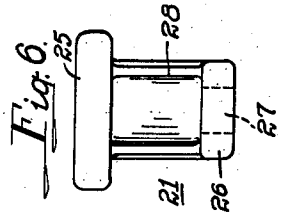


Fig. 6.

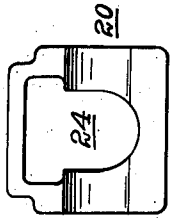


Fig. 5.

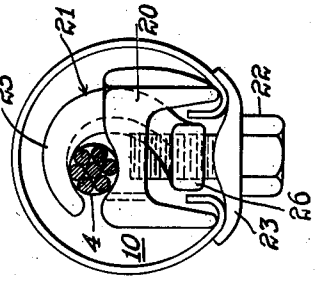


Fig. 4.

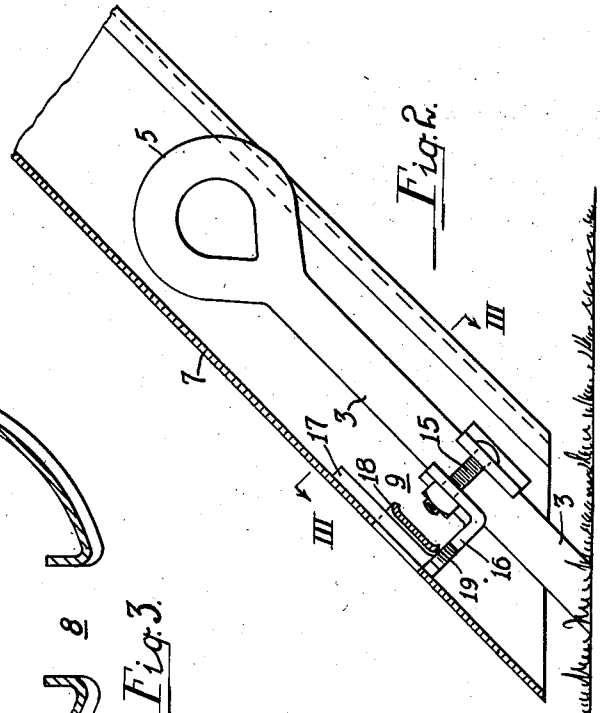


Fig. 2.

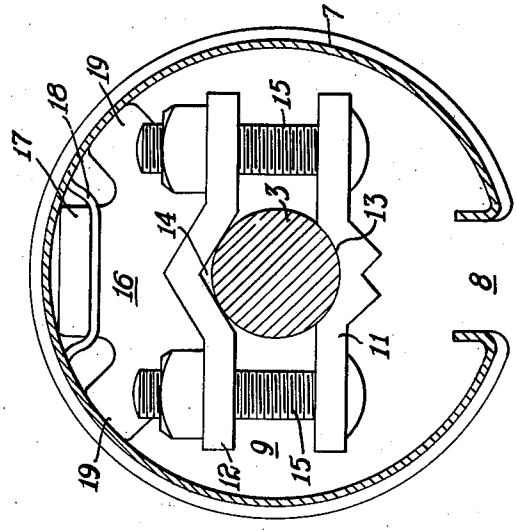


Fig. 3.

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GUY WIRE PROTECTOR

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5 Claims. (Cl. 189—31.5)

This invention relates to guy wire protectors, such as are mounted on guy wires to make their location more visible to motorists and to safeguard pedestrians and render them less liable to injury should they accidentally walk or run against the same.

Heretofore, it has been the practice to make guy wire protectors of uniform cross-sectional area from one end to the other, and as a consequence, the protectors in most cases, are too small at the bottom and too large at the top. It also frequently happens that the lower ends of such protectors are not large enough to clear the eyes in the guy anchor rods, so that when the protectors are secured to the guys, they are bent and deformed by the pressure exerted on the eyes of the anchor rods thereon. The sizes of eyes of guy rods vary considerably, and for this reason a protector, if large enough for guy rods of certain sizes, is entirely too small for other sizes.

An object of this invention is the provision of a protector that shall be tapered from one end to the other so that it may have adequate bulk or size where such is required. Thus, by making the protector larger than usual at the lower end and smaller at the upper end with a gradual taper therebetween, the protector when in operative position, will clear the eyes of anchor rods of any commercial size and be of adequate size for covering that part of the guy wire or cable between the anchor rod and the upper end of the protector.

Another object of the invention is the provision of a protector that may be easily mounted and when placed in operative position, will not shift out of place.

Other objects of the invention will, in part, be apparent and will, in part, be obvious from the following description taken in conjunction with the accompanying drawing, in which:

Figure 1 is a view of a pole provided with a guy on which a protector embodying one form of the invention is mounted;

Fig. 2 is a fragmentary longitudinal view, in section, of the lower end of the protector and a mounting for attaching the same to an anchor rod;

Fig. 3 is a view in section taken on lines III—III of Figs. 1 and 2, showing, in detail, a mounting for attaching the lower end of a protector to a guy rod;

Fig. 4 is a view of the upper end of the protector as seen looking in the direction of arrows IV—IV of Figure 1, showing one form of mounting for attaching the upper end of the protector to a guy; and

Figs. 5 and 6 are top plan and front elevation views, respectively, of two separate parts embodied in the mounting shown in Fig. 4.

Throughout the drawing and the specification, like reference characters indicate like parts.

In Fig. 1 of the drawing, a pole 1 is illustrated having a guy 2 for bracing the same. The guy includes an anchor rod 3 which is anchored in the ground and a cable 4. One end of the cable is looped through an eye 5 of the anchor rod which loop is held against slipping by means of a clamp 6. The other end of the cable is wrapped around the upper end of the pole and tied in any well known manner.

The guy is provided with a protector or shield 7 embodying one form of the invention adapted to flank or embrace the guy. The protector comprises an elongated hollow body made from sheet metal and provided with a slot or opening 8 on one side that extends the full length thereof to facilitate placing the protector over a guy, in the manner indicated in Fig. 1.

The protector is tapered from the bottom or lower end towards the top thereof so that the protector approximates a truncated cone having a base of relatively larger diameter and an apex of a smaller diameter. The diameter at the upper end of the protector may be half or less than the diameter of the lower end.

In practice it is preferred that the diameter of the lower end of the protector be much larger than the diameter of prior art protectors so that the lower end of the protector, when mounted in place on a guy, will clear the eye and cable clamp of the largest sized commercial guy rods. By making the lower end of the protector large it may be mounted in spaced relation to an anchor rod and the eye thereof and the cable clamp which prevents the cable from slipping through the eye.

It is preferred to make the taper of the protector such that the diameter of successive sections from the lower to the upper end thereof shall become gradually smaller and so that the diameter of the upper end of the protector will be materially smaller than protectors now in use.

The adjacent edges of the protector which forms the opening or slot 8 may be flanged inwardly as indicated in Figs. 2, 3, and 4, so as to avoid any exposed sharp edges and to utilize the stiffening effect which these flanges would impart.

The protector is provided with mountings 9

and 10 at the opposite ends thereof for attaching the same to the guy. These mountings hold the protector in spaced relation from the guy at all points, and cause the longitudinal axis of the protector to substantially coincide with the longitudinal axis of the guy.

The mounting 9 at the lower end of the protector comprises clamp parts 11 and 12 having seats 13 and 14 to accommodate the guy anchor rod. The guy rod is clamped between these parts by means of bolts 15 disposed one on each side of the rod.

The upper clamp part includes a web 16 that extends at substantially right angles to anchor rod 3 and a tongue 17 that projects at substantially right angles to the web towards the upper end of the protector. The lower end of the protector is provided with inwardly projecting loop 18 through which tongue 17 extends when the guard or protector is mounted in place.

In mounting the guard or protector on the guy, it is positioned over the same in such manner that tongue 17 is about to enter loop 18. Thus, by moving the protector downwardly along the guy, the tongue passes through the loop until the loop strikes web 16 (see Fig. 2). Web 16 has two lugs 19 on which the protector rests (see Fig. 3) and serves to provide a stable support for the lower end of the guy protector.

The mounting at the upper end of the protector comprises an inverted channel 20 adapted to bear on the underside of the guy cable, a J-hook 21 adapted to bear on the topside of the cable, a clamp screw 22 and a backing plate 23. The opposite edges of the protector lie between the backing plate and the edges of the channel 20 so that when the screw is drawn up tight, cable 4 is clamped between the J-hook and channel and the opposite edges of the protector are clamped between the backing plate and the channel. Thus, the upper end of the protector is spaced from the guy, and the edges thereof being gripped by the mounting, the protector cannot whip or turn relative to the cable.

The construction of the J-hook channel may be understood from Figs. 4, 5, and 6. The channel has an opening 24 in the web thereof through which the hook may be passed. The rear portion of this opening is somewhat rectangular and the forward portion is somewhat oval. The rectangular portion of this opening is made of such size and shape that the lower portion of the J-hook may be passed through the same.

The J-hook has a relatively wide curved portion 25 adapted to engage or overhang the cable, a relatively wide and narrow portion 26 at its lower end having a threaded opening 27 therein to accommodate screw 22, and an intermediate connecting portion 28 of such width that it will fit in the forward part of opening 24. The connecting portion 28 of the hook is somewhat concave on its inner face to provide clearance for screw 22.

In assembling mounting 10, the J-hook is inserted through opening 24 to a position such as shown in Fig. 4, the backing plate 23 is placed on the screw, and the screw threaded into the hook. The cable may now be inserted between the hook and the channel and the mounting slipped along the cable until the edges of the protector are disposed between the edges of the channel and the backing plate. By drawing the screw up tight, the cable and protector will be clamped or gripped by the mounting in the fashion indicated by Fig. 4.

By constructing the guard or protector in the manner aforesaid, it will be apparent, especially by inspection of Figs. 1 and 3, that the lower end of the protector is of such size as to substantially completely embrace the guy rod with its eye and cable clamp, and that the upper end of the protector is materially smaller than the lower end but substantially completely embraces the guy cable. The protector being tapered from its lower end to its upper end, the protector has sufficient bulk where bulk is needed, and such bulk is needed near the lower end of the protector. The portion of the protector which embraces the guy cable of course need not be so large as the lower portion and it is therefore convenient to taper the protector.

The mountings of the protector facilitate the positioning of the protector on the guy, and furthermore, space the protector from the guy at all points.

Having thus described the invention, what we claim as new and desire to secure by Letters Patent is:

1. A protector for guy wires comprising a frusto-conical sheath that is open along one side from end to end, said sheath having a mounting at its lower end for attachment to a guy, and a mounting at its upper end disposed to grip both the guy and the opposite edges of the sheath and hold the sheath out of engagement with the guy.

2. A protector for guy wires comprising a sheath made from metal shaped in the form of elongated partially closed tapered hollow body having the longitudinal edges spaced to form an opening therebetween and mounted on the guy with its large end lowermost, a mounting at the lower end of the sheath for securing the sheath to the guy and holding it in spaced relation thereto, and a mounting at the upper end adapted to grip the opposite edges of the sheath and the guy.

3. A protector for guy wires comprising a tapered shield adapted to be mounted over a guy with its large end lowermost, said shield having an inwardly projecting loop at its lower end adapted to receive a mounting attached to the guy, and a mounting at the upper end of the shield having means to grip the guy and the edges of the shield, said mountings holding the shield in spaced relation to the guy.

4. A protector for guys comprising an elongated sheath having an opening on its lower side extending the full length thereof, the edges of said opening being turned inwardly with respect to the outer contour of said sheath, and a clamp having jaws for gripping the guy and jaws for embracing said inwardly turned edges and gripping the sheath on opposite sides of said opening.

5. A guy guard including an elongated sheet metal sleeve having a wall slot extending the full length thereof, inwardly curved portions formed at the margins of said wall slot, and sleeve fastening means disposed in the slot and including jaws for gripping the guy and the jaws for embracing said curved portions and clamping said sheath on opposite sides of said wall slot.

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