Sept. 26, 1944. N. A. TORNBLOM 2,358,946

CLAMPING SUPPORT FOR CABLES

Filed June 16, 1943

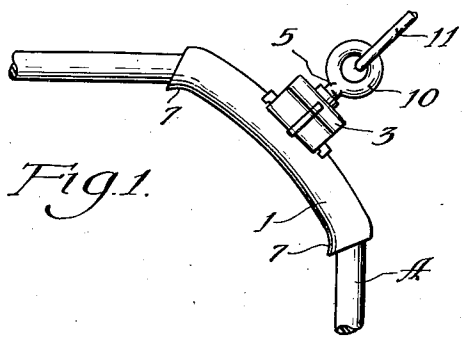


Fig. 1.

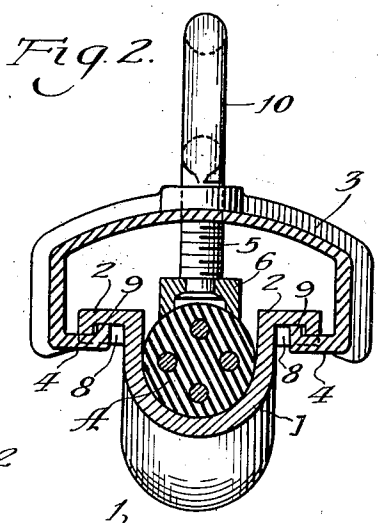


Fig. 2.

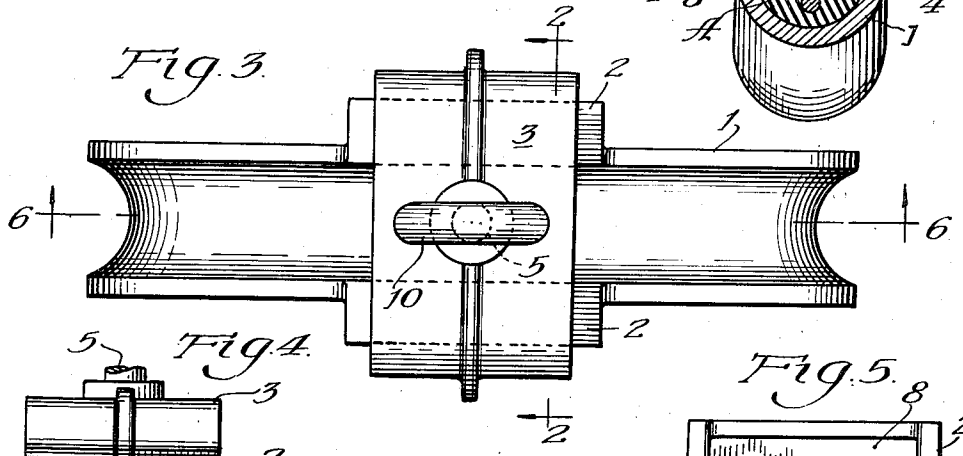


Fig. 3.

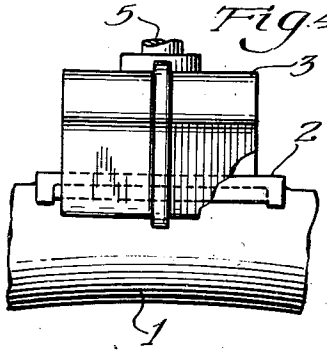


Fig. 4.

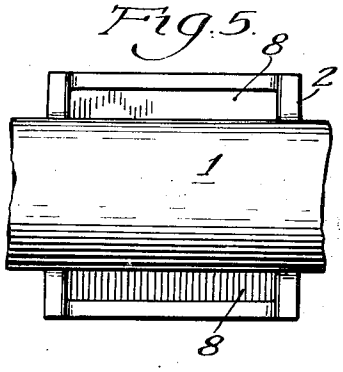


Fig. 5.

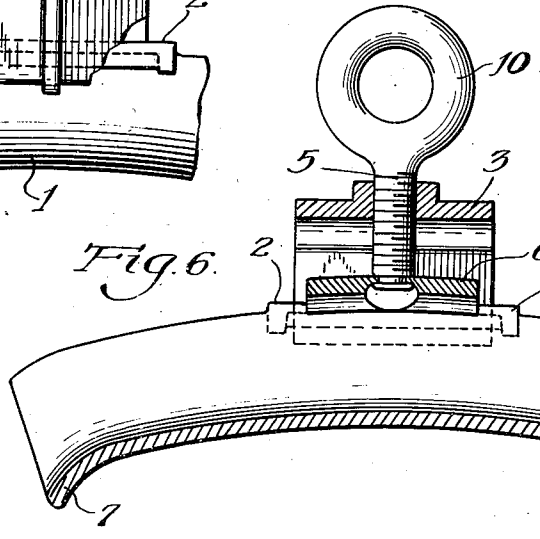


Fig. 6.

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CLAMPING SUPPORT FOR CABLES

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3 Claims. (Cl. 248—63)

In shops and other places it is frequently necessary to lead a power cable from an overhead point downwardly and laterally to a machine which be supplied with electric current. It is therefore common practice to attach anchoring means to the cable to hold in the shape of an inverted L; the horizontal leg being at the top where it is out of the way, and the vertical leg taking up very little space in the regions wherein the workmen move. It is customary to secure one of the anchors at the point where the two legs of the cable meet; and, sometimes the cable is damaged through being bent too sharply or because the gripping means cuts into the same.

The present invention has for its object to produce a simple and novel device that can be easily and quickly attached to a cable and which, when attached, holds the cable firmly without danger of injury resulting from cutting or from being bent too sharply.

The various features of novelty whereby my invention is characterized will hereinafter be pointed out with particularity in the claims; but, for a full understanding of my invention and of its objects and advantages, reference may be had to the following detailed description taken in connection with the accompanying drawing, wherein:

Figure 1 is a side view of one of my improved devices applied to a cable at the point where a horizontal section and a vertical depending leg portion meet; Fig. 2 is a central transverse sectional view, on a larger scale than Fig. 1, the plane of the section being indicated by line 2—2 of Fig. 3; Fig. 3 is a top view of the device, on the same scale as Fig. 2, the cable being omitted; Fig. 4 is a view similar to Fig. 1, but on the same scale as Fig. 2, and only a part of the device being shown; Fig. 5 is a bottom view of so much of the device as appears in Fig. 4; and Fig. 6 is a section taken on line 6—6 of Fig. 3.

The body portion of my improved device consists of two members, preferably castings. One of these members is in the form of a trough or channel, bowed lengthwise on a curve of considerable radius. The width of the valley in the member 1 should be about equal to the diameter of the cable to be clamped and supported, or at least as great as the diameter of the largest cable, if cables of different sizes are to be served; and the bottom of the valley is preferably rounded as shown. At the middle of this member are a pair of wings or flanges 2 extending outwardly from the free edges of the sides of the trough.

Cooperating with the member 1 is a member 3 in the form of a yoke, the span of which is greater than the overall width of the member 1 across the flanges of the latter. The yoke is provided with inturned flanges 4 at the free ends of its arms; these flanges being adapted to be brought underneath the flanges 2 when the yoke is slipped over end of the member 1 and is moved along until it is midway between the ends of the trough. A screw 5 extends through the cross piece of the yoke, midway between and parallel to the side or arm portions of the yoke. On the inner or under end of the screw is a shoe 6 adapted to rest on a cable A in the trough member and cause the device firmly to grip the cable. The shoe is swivelled to the screw, is bowed in the lengthwise direction and is also curved transversely to fit the cable.

It will thus be seen that when the device is to be attached to a cable, the member 1 is placed against the side of the cable, the latter fitting in the trough, and the yoke is then slipped in place, lengthwise of the cable and the trough. When the yoke is properly interengaged with the flanges 2 the screw 5 is tightened and the cable is firmly gripped throughout a length corresponding to that of the shoe.

The radius of curvature of the trough is greatly decreased at the extreme ends, as indicated at 7. This permits the principal bending of the cable to be distributed between two regions spaced apart from each other and free from the grip of the clamping means. In order to prevent the yoke from slipping while the clamp is being applied, and afterward, the under sides of the flanges 2 are recessed as indicated at 8, and the flanges 4 are provided with lips 9 that enter these recesses as soon as the thrust of the screw, during the act of tightening the clamp on the cable, forces the yoke up.

The head of the screw may be in the form of an eye 10 to which an anchoring wire or other tension element 11 may be secured.

My improved device is very sturdy, it can be manufactured cheaply, it is easily applied and taken off, the cooperating clamping elements are automatically interlocked against slipping lengthwise of each other after the screw has been tightened, and practically all danger of damage through firmly gripping and supporting a cable at a right angle bend in the latter is eliminated.

While I have illustrated and described with particularity only a single preferred form of my invention, I do not desire to be limited to the exact structural details illustrated and described; but intend to cover all forms and arrangements which

come within the definitions of my invention constituting the appended claims.

I claim:

1. A device of the character described, comprising a long trough shaped member bowed in the direction of its length and having the bottom of the trough on the concave side, a yoke member, cooperating elements on said members whereby they may be engaged with each other by relative lengthwise sliding movements, and a cable-engaging screw extending through the closed end of the yoke toward the trough in the other member.

2. A device of the character described, comprising a long trough shaped member bowed in the direction of its length and having the bottom of the trough on the concave side, the said member having outwardly extending flanges at the free edges of its sides, a yoke having at its ends inturned portions adapted to be brought under the said flanges by moving the yoke lengthwise of said member, and means on the yoke to clamp a cable lying in the trough of said member to said member.

3. A device of the character described, comprising a long trough shaped member bowed in the direction of its length and having the bottom of the trough on the concave side, short flanges projecting from opposite sides and along the free edges of the aforesaid member midway between the ends of the latter, the flanges being recessed on the under sides inwardly from all the free edges thereof to form pockets closed at the ends, a yoke having inturned ends adapted to be brought underneath the flanges by moving the yoke lengthwise of said member and thereafter to be entered in said pockets upon lifting the yoke, and an adjustible pressure element on the yoke for engaging a cable lying in the trough of said member and clamping it to the latter.

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