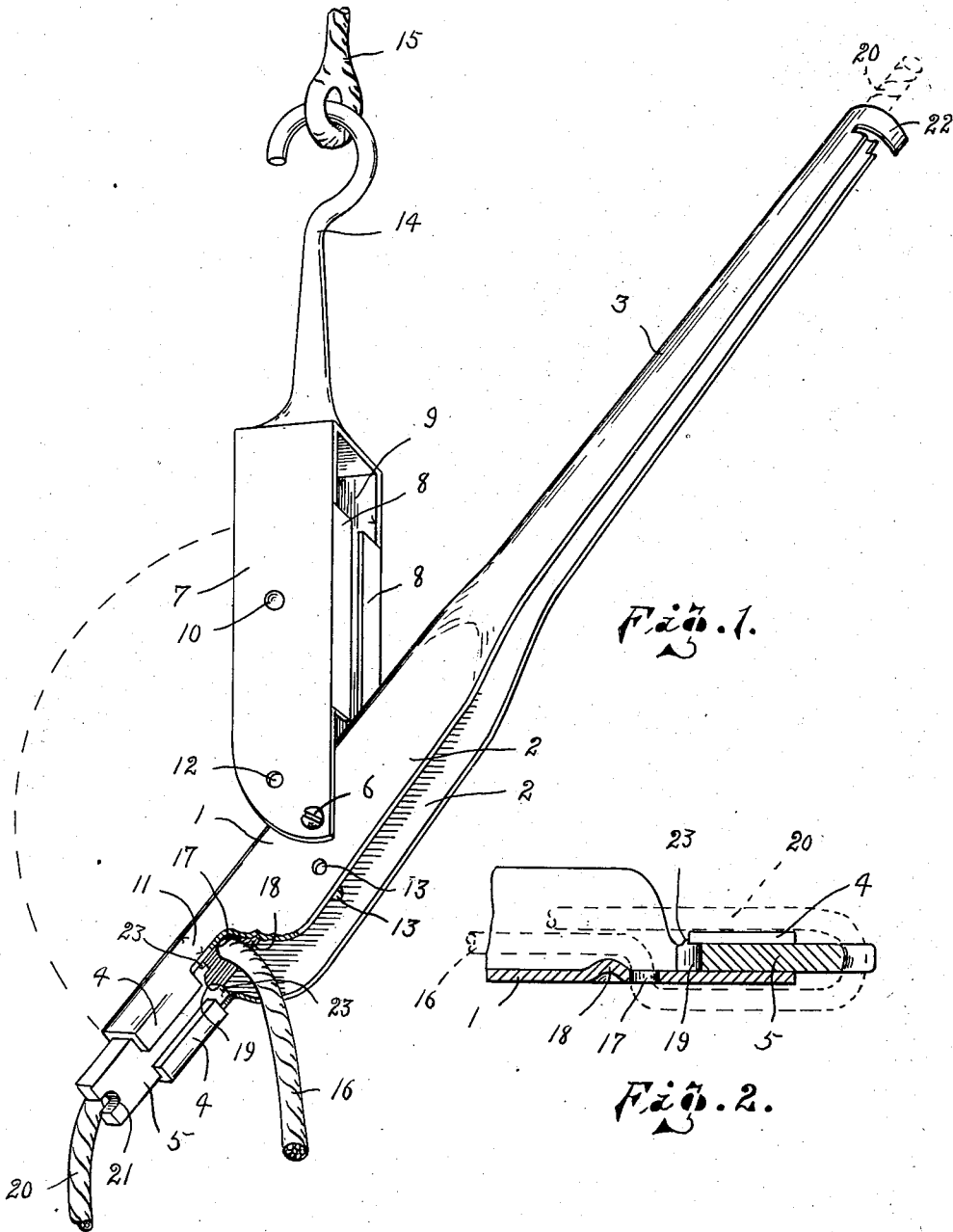


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CABLE CLAMP AND TIGHTENER

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CABLE CLAMP AND TIGHTENER

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6 Claims. (Cl. 24—68)

This invention relates to means for adjustably connecting flexible members and more particularly to adjustably connecting adjacent parts of cable, rope, clothesline, and the like.

The principal object of the invention is to provide a simple and practical cable clamp and tightener of the class described.

Another object is that of providing more convenient means for utilizing the tension on a cable for furnishing the clamping stress and insuring the efficiency of the device.

A further object of the invention is to provide such a device which is extremely simple, durable and reliable in use, economical to manufacture and easy to install.

Other objects and advantages of the invention will appear in the following description thereof.

Referring now to the accompanying drawing, forming part of this application and wherein like reference characters indicate like parts:

Figure 1 is a perspective view of one embodiment of the device in its open and inactive position.

Figure 2 is a somewhat enlarged central sectional view through the slidable holding block.

In the drawing, the numeral 1 represents the main body portion of the device which is of channel shape in cross section and comprises the two substantially parallel side members 2—2 and connecting base. These side members 2—2 gradually converge toward their rearmost end and are somewhat elongated forming the channel-like handle member 3, this latter portion being more cylindrical in shape than the main body portion.

The forward end of the body portion is made rectangular in cross section and reduced somewhat by the opposed side member being bent at right angles toward each other, providing the two somewhat elongated holding members or jaws 4—4, and in which portion the clamping block 5 is reciprocally held. This block is reciprocable by the action of the cable, and in either direction, as necessitated by the adjustment of the device, which will be described later.

Approximately centrally of the body portion 1 of the device is pivotally mounted as at 6, by a suitable through bolt extending through both side members 2 of the body portion, the other main portion 7 of the device, it being channel shaped in cross section and of a size to fit down over the forward end of the clamp, and having one closed end. This member 7 is provided with inwardly turned flanges 8—8 of its side members which form a stop for the portion 1 when it is jackknifed against the other portion of the clamp, and

at which time both portions 1 and 7 are in closed horizontal position with the otherwise free forward end of the body portion 1 within the box-like terminus 9 of the member 7. For convenient holding of the two portions together in this horizontally united relation, we have provided one or more indentations, such as at 10, upon the side walls of the member 7, and which provide additional engagement of the sides of the member 7 with the other cooperative portion of the clamp, for example in their passing the narrowed portion of the side walls of the member 1 as at 11, so that the two members may be readily snapped together and there normally remain. Additional through holes 12 and 13 in the sides of both of the pivotally united members are provided, the former within the side walls of the member 7 and the latter in the side walls of the member 1, which, when the two members are closed, will register and provide convenient means for a locking pin, staple, or the like, if so desired.

The upper closed end of the member 7 is provided with any desired form of hook or link such as indicated at 14 for attachment of one end 15 of the cable in which the device is installed, while at 16 is represented the other end of the cable, and this end is rove through the hole provided therefore in the back of the forward end of the member 1, as at 17, just inwardly of the inner end of the clamping block 5. Rearwardly of this hole the back of the body portion 1 is slightly humped or elevated as at 18 to form positive but easy elevation of the cable which is clamped thereagainst as by the inner end of the block 5, and which end is shaped as at 19 to approximately fit against the cable, and, as the pulling portion of the cable, which is indicated at 20, is brought around the opposite end of the block 5, before being passed through the hole 17, it will, at the time the two portions of the clamp are brought together, cause the block to positively impinge the cable and hold it tightly against the hump 18. For preventing injury to the cable, in any way, the arcuate cut-out portion 19, as well as that illustrated at 21 in the other end of the block 5, may be rounded out and shaped as desired.

It is to be understood that when the two members of the clamp are jackknifed together the portion 20 of the cable will be in line with that portion indicated at 16 and may be readily tucked under the terminal flap 22 at the handle end of the member 1, and it is quite obvious that a slight opening of the clamp with proper pulling through of the cable therein and then return to its jackknifed or closed position, will permit of

comparatively slight adjustment of the cable, or, when opened widely, as in Figure 1, considerable length of cable may be affected.

It will be noted that the clamping block 5 is prevented from dislodgment outwardly by a slight upsetting of the two innermost corners 23 thereof.

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

1. A cable clamp and tightener comprising a support, means for anchoring one end of said support, a locking slidable block within said support, means for passing one end of a cable through said support adjacent one end of said block, means at the other end of said block about which said cable may pass to an anchor, whereby the tension of said cable causes said block to clamp and bind the end of said cable passing through said support.

2. A cable clamp and tightener comprising a two-part pivotally united support, means for anchoring one end of one part of said support, a locking slidable block within the other part of said support, means for passing one end of a cable through said other part of said support adjacent one end of said block, a slot in the other end of said block about which said cable may pass to an anchor, whereby the tension of said cable causes said block to clamp and bind the end of said cable passing through said support and the positioning of said parts in alinement progressively increases the tension of said cable.

3. A cable clamp and tightener comprising an anchored support, a handle portion pivotally mounted intermediate of its ends upon said support, a locking block slidably supported within said handle portion, means for attaching one end of a cable to said handle by slidable movement of said locking block thereagainst, means at the other end of said block about which said cable may pass to an anchor, whereby movement of said handle portion to a position in alinement with said support will increasingly exert a clamping action by said block on the end of the cable attached to said handle portion.

4. A cable clamp and tightener comprising an anchored portion having means for attachment to an anchor, a handle portion, pivoted intermediate of its ends to said anchored portion, a cable locking block slidable within said handle portion, a slot in one end of said block, an opening through said handle, adapted to receive one end of a cable, means at the other end of said block adapted to receive the body portion of said cable thereabouts, whereby tension on said cable will cause the block to slide against and lock the end of said cable in said opening.

5. A cable clamp and tightener comprising an anchored portion generally channel-shaped in form, a handle portion similarly shaped and fitting within said anchored portion and pivoted intermediate of its ends to one end of said anchored portion, a cable locking block slidably mounted in one end of said handle portion, an opening through said handle portion adjacent one end of said block and adapted for attaching one end of a cable therein, means at the other end of said block adapted to receive the body portion of said cable thereabouts, whereby tension on said cable will cause the block to slide and lock the end of said cable in said opening.

6. A cable clamp and tightener comprising a main body portion having a channel therein, a clamping block reciprocally held in said channel and adapted to engage a cable at one end and bind it at the other end, a second portion pivoted at one end to said main handle portion intermediate of its ends and having means at its other end for attaching one end of a cable thereto, and means for pivotally moving said portions into longitudinal alinement, said pivotal connection being such that when said portions are moved into longitudinal alinement any slack in said cable will be taken up and the tension created thereby will cause said clamping block to reciprocate and bind the end of said cable in said handle portion.

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