

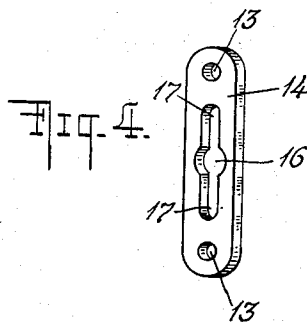
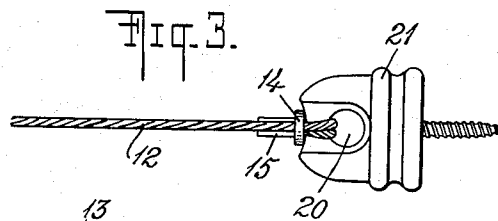
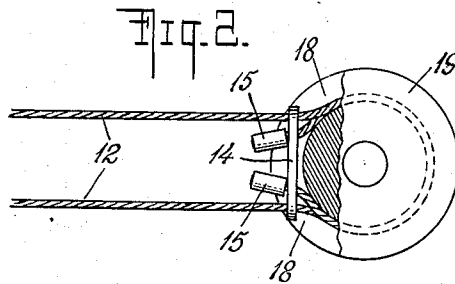
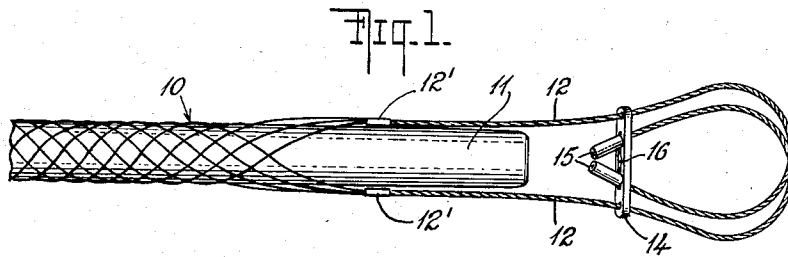
April 27, 1954

D. L. KELLEMS

2,676,376

CABLE GRIP

Filed May 25, 1951



INVENTOR.
DAVID L. KELLEMS
BY *Klein + Hart*
ATTORNEYS

UNITED STATES PATENT OFFICE

2,676,376

CABLE GRIP

David L. Kellems, Mystic, Conn., assignor to Kellems Company, Stonington, Conn., a partnership consisting of Vivien Kellems and David L. Kellems

Application May 25, 1951, Serial No. 228,222

2 Claims. (Cl. 24-123)

1

This invention relates to cable gripping devices for articles and more particularly to the draft ends of such devices for enabling the same with an article gripped therein to be attached to a supporting means such as an insulator, hook and the like.

The primary object of the invention is to provide the draft end of a cable gripping device with an improved means for attaching the grip to a support.

A further object of the invention is to provide a cable gripping device with a universally adaptable open bale which may be threaded through, attached to, or hung upon, various types of supports.

Other objects of the invention, as well as the advantages thereof, will become apparent after a perusal of the following description, when read in connection with the accompanying drawings, in which Fig. 1 is a top view of the draft or upper end of a grip constructed in accordance with the invention and showing it mounted on a cable; Fig. 2 is a top view, partly in section, showing the manner in which the draft end of the grip is attached to a round insulator; Fig. 3 is a side view showing the manner in which the draft end of the grip is attached to a closed insulator which is more commonly known as a house knob; and Fig. 4 is a perspective view, on an enlarged scale, of the sliding member in the draft end of the grip.

In the drawings, the reference numeral 10 indicates generally the body of the grip which may be a wedge, clamp or other suitable device for firmly gripping the cable 11. The particular grip body 10 shown in Fig. 1 of the drawing is composed of a plurality of wire strands interlaced or interwoven to form an open mesh structure adapted to be placed in surrounding gripping relation with an article and having any suitable form. Some examples of the forms in which the woven or mesh grip body 10 may be made are illustrated in the E. E. Kellems Patent No. 2,017,625, issued October 15, 1935. Whatever the type of grip body 10 used in the grip, there is secured to its draft end at least two groups or branches composed of a number of wire strands which preferably are woven into rope form. In the grip body 10 illustrated, the wire strands which go to make up such body, extend beyond the latter and are divided into two branches 12, 12 each containing a like number of strands. The strands in each group or branch are connected together adjacent the grip body by means of a ferrule 12' and from thence on are twisted

2

upon each other into rope form. The length of the branches 12 is substantially greater than the length of the mesh body 10 and such length is determined by the use to which the grip is to be put. At the outer end of each branch 12 is a lug 15 preferably made of a short length of heavy walled tubular material and secured to the wire ends of such branch by swaging.

The branches 12 of the grip are threaded through the outer holes 13 of a sliding bar 14. The holes 13 are slightly larger in diameter than the diameter of the rope shaped branches 12 but have a diameter less than that of the lugs 15. Thus the bar 14 is readily slidable along the lengths of the branches 12, but is locked or secured on such branches by the lugs 15. The holes 13 are preferably peened or countersunk so as to present rounded edges to the branches 12, thus facilitating the sliding movement of the bar 14 on the latter. Intermediate the holes 13, the bar 14 is provided with an elongated slot composed of an enlarged central portion 16 and end portions 17, 17. The central portion of the slot or center hole 16 has a diameter larger than the diameter of the lugs 15 so that the latter may be readily threaded therethrough. The end portions of the slot or notches 17, 17 have a width less than the diameter of the lugs 15, but greater than the diameter of the branches 12 so that the branches can be readily inserted into such notches in a sidewise direction, but cannot be pulled lengthwise therethrough in one direction when the lugs 15, 15 abut against the inner surface of the sliding bar 14 as shown in Figs. 1-3 of the drawings.

It will be understood from the foregoing, that in the use of the device, the bale thereof is fastened to a support by wrapping or threading the portions of the branches 12 beyond the sliding bar 14 around or through the support and returning such branches to the sliding bar 14, when the lugs 15 are inserted through the central hole 16 of such bar and the adjacent ends of the branches then pushed or latched sideways into the notches 17, 17 as is shown in Fig. 1 of the drawings. Thus when the grip is to be attached to an insulator 19 such as shown in Fig. 2 of the drawings, the portions of the strands 12 beyond the sliding bar 14 are turned around in the groove 18 of such insulator in opposite directions and then the lugs 15 inserted through the hole 16 and the branches 12 inserted in the notches as previously explained. Usually the sliding bar 14 is held away from the support until the branches have been wrapped around or through

the holding device or support and the branches secured to the plate 14 in the manner aforesaid, and then cinched up tight against the support by pulling on the branches 12. With the sliding bar thus cinched up against the insulator 19, it will enter into and be firmly held in the grooves 18, thus locking the looped end of the grip bale to the insulator. The end portions of the branches 12 will be securely locked in the notches 17 of the bar 14 because of the resilient or spring action of the wires in such strands. Insulators such as shown in Fig. 2 of the drawings are usually held on a rack or bar and are thus closed so that an ordinary eye cannot be placed over the insulator. With the instant construction however, the open ends of the strands with the small size of the lugs 15 attached thereto make it possible to readily secure the grip to an insulator so mounted.

The facility with which the instant device may be attached to closed openings is illustrated in Fig. 3 of the drawings. In the house knob type of insulator 21 there shown, the plugs 15 are inserted through the opening 20 thereof in opposite directions and then secured to the sliding bar 14 in the manner previously explained. The sliding bar 14 is then cinched up against the insulator to lock it in the groove formed in the forward end of the insulator, as illustrated. With the sliding bar 14 thus firmly latched in the grooves of the insulator 19 or 21, it maintains the portions of the branches extending therefrom to the grip body 10 in separated relationship. Preferably the holes 13, 13 in the sliding bar 14 are spaced apart a distance at least as great as the diameter of the grip body so that the bar holds such branch portions in separated parallel relation or in diverging relation to the grip body. By this arrangement of the branches, the strains exerted on the grip body are equally distributed upon the strands throughout the area of the grip body affording a more positive and firmer grip of the body 10 upon the cable or other article gripped thereby, and minimizing any possible cutting action of the strands at the draft end or shoulders of the grip body 10 on the article being gripped. In this latter connection, such cutting action is substantially eliminated if the sliding bar 14 is so constructed that the portions of branches 12 leading from such bar to the grip body are maintained in diverging relation relative to the latter.

While I have illustrated and hereinabove described a preferred embodiment of my invention,

it will be apparent to those skilled in the art that changes and modifications may be made therein without departing from the spirit of the invention or the scope of the appended claims.

I claim:

1. In a gripping device of the character described, a body portion adapted to be placed in gripping relation on an article to be held, a plurality of elongated flexible members connected to said body portion and extending therefrom in spaced relation, the outer free ends of said flexible members being provided with locking means, and a member slidably connected to said flexible members between said body portion and said locking means, said member including a plurality of spaced openings through which said flexible members extend and a slot intermediate said openings, said slot having an enlarged portion through which said locking means may be inserted and having a reduced portion adapted to receive a flexible member but to prevent the passage therethrough of the locking means in the free end of such flexible member.

2. In a gripping device of the character described, a body portion adapted to be placed in gripping relation on an article to be held, a plurality of elongated flexible members connected to said body portion and extending therefrom in spaced relation, a lug provided on the free end of each of said flexible members, and a member slidably connected to said flexible members between said body portion and said lugs, said member including a plurality of spaced openings through which said flexible members extend and a slot intermediate said openings, said slot having an enlarged central portion through which said lugs may be inserted and having reduced end portions of a width to readily receive said flexible members, but to prevent the passage therethrough of the lugs on the free ends of said members.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
642,214	Enright	Jan. 30, 1900
1,413,818	Wilkinson	Apr. 25, 1922
1,521,619	Haas	Jan. 6, 1925
2,330,538	Allen	Sept. 28, 1943
2,463,116	Lewis	Mar. 1, 1949
2,510,186	Marsico	June 6, 1950
2,551,803	Leonard	May 8, 1951
2,560,418	Di Palma	July 10, 1951