

March 26, 1929.

L. E. MOFFITT

1,706,805

CABLE GRIP

Filed July 12, 1928

Fig. 1,

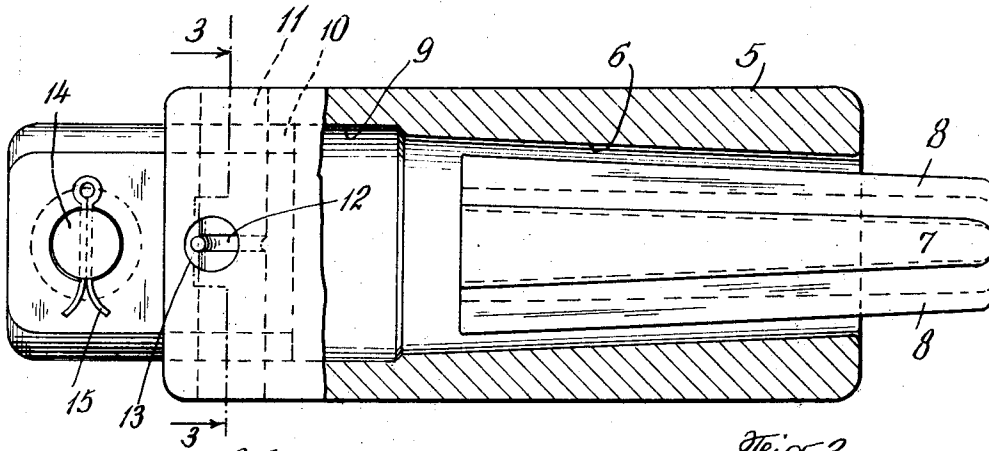


Fig. 2,

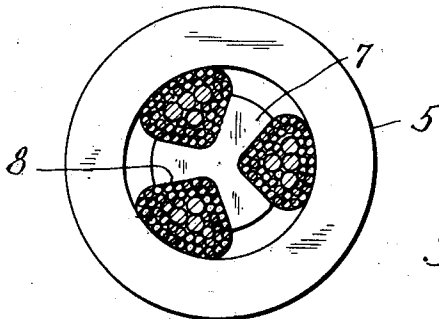


Fig. 3,

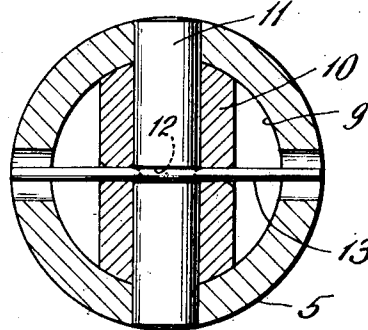


Fig. 4,

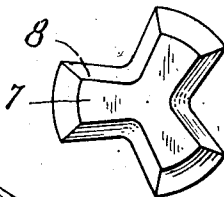
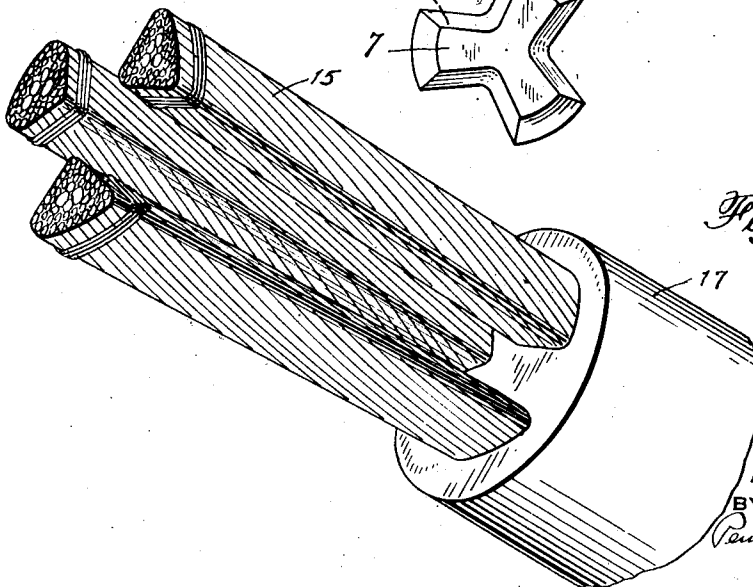


Fig. 5.



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CABLE GRIP.

Application filed July 12, 1928. Serial No. 292,252.

This invention relates to cable grips and particularly to a device for pulling multiple strand cables such as are employed as conductors of electric current, through conduits.

5 Electric cables consist of two or more strands of conductors enclosed in suitable insulation and surrounded by a metallic sheath. Such cables are heavy and relatively stiff. Considerable difficulty is experienced, there-
10 fore, in pulling the cables through underground conduits and particularly in providing a suitable connection between the cable and the draft mechanism.

15 So-called basket grips which engage the cable sheath have been tried, but such devices tend to strip the sheath from and thus destroy the cable. Consequently it has been the practice to employ pulling eyes which are sweated to the ends of the conducting strands
20 with solder. The latter operation requires skill and time and is correspondingly expensive.

It is the object of the present invention to provide a simple and effective grip which is
25 adapted to engage and to securely hold the ends of the multiple strands of the cable and to permit the application of draft thereto.

Other objects and advantages of the invention will be understood by reference to the
30 following specification and accompanying drawing, in which

Fig. 1 is a longitudinal section through the device,

Fig. 2 is an end view thereof.

35 Fig. 3 is a section on the line 3—3 of Fig. 1,

Fig. 4 is an end view of the wedge, and

Fig. 5 is a view in perspective of a section of cable with the strands bared for engagement with the device.

40 The cable grip or draft device embodying the invention comprises a shell having a tapered opening therein and a tapered wedge having grooves to receive the strands of the cable. The strands are first bared by removing a portion of the sheath and insulation
45 from the end of the cable and are then inserted through the smaller end of the tapered opening through the shell. The wedge is centered between the strands and is driven to a tight fit. Thereafter an eye-block is inserted
50 in the larger end of the opening through the shell and is secured by a pin. The eye-block may be connected to a swivel link through which draft is applied. Owing
55 to the frictional contact between the strands and the shell and wedge the application of

draft wedges the strands firmly within the shell so that they cannot be separated therefrom until the tension is relieved and the wedge is forced backwardly to release the
60 strands.

The device as described is extremely simple. It affords, nevertheless, a firm grip upon the strands of the cable. It can be attached and detached quickly, thus saving the labor which
65 has been incidental heretofore to the use of pulling eyes of the type usually employed.

The device may be embodied in various forms, but the preferred construction is illustrated in the drawing, in which 5 indicates a
70 shell of steel or other suitable metal having a tapered opening 6 therein. A wedge 7 is similarly tapered and is provided with grooves 8 to receive the strands of the cable. It will be understood that while three grooves
75 are illustrated in the drawing any number of grooves may be employed depending upon the number of strands in the cable and that the device may be utilized for pulling cables having
80 any number of strands by substituting suitable wedges.

At its larger end, the opening 6 in the shell 5 is preferably cylindrical as indicated at 9, and is adapted to receive an eye-block 10 having an opening therein to receive a pin 11.
85 The pin is provided preferably with a groove 12, and a pin 13 is disposed in a suitable opening in the block 10 to engage the groove 12, and thus to prevent escape of the pin 11 while the device is in the conduit. A swivel link
90 (not shown) of usual type may be connected to the eye-block by means of a pin 14 which may be secured by a cotter 15.

In applying the cable grip, the strands 15 at the end of the cable 16 are exposed by
95 cutting away the sheath 17 and insulation 18. The eye-block 10 is separated from the shell 5 and the wedge 7 is withdrawn. The bared ends of the strands are inserted through the smaller end of the tapered opening 6 and the
100 wedge 7 is centered between the latter, being disposed in the grooves 8. The wedge is driven home and the eye-block 10 is replaced. The device may be connected then to the swivel link and to the draft mechanism.
105 Upon the application of draft to the device, the cable strands are firmly gripped and the cable may be drawn through the conduit without danger of breaking the connection or stripping the sheath from the cable.
110

The device affords a simple, easily applied and certain connection between the draft

mechanism and the cable. It may be connected and disconnected at will with a minimum of effort. It nevertheless avoids the principal difficulties experienced heretofore
5 in drawing cables through conduits.

Various changes may be made in the details of construction and arrangement of the parts without departing from the invention or sacrificing any of the advantages thereof.

10 I claim:

1. In a cable grip, the combination of a shell having a bore extending longitudinally therethrough, said bore having one end tapered for the reception of a wedge for
15 maintaining the cable in frictional engagement with the shell and an eye block removably held within the other end of the bore for connection to draft means.

2. In a cable grip, the combination of a
20 shell having a bore extending longitudinally therethrough, said bore having one end tapered for the reception of a wedge for maintaining the cable in frictional engagement

with that end of the shell, a transverse bore extending through the other end of the shell, 25 an eye block for connection to draft means removably held within said other end of the longitudinal bore, and means adapted to be inserted through the transverse bore for locking the holding means for the eye block 30 against removal.

3. In a cable grip, the combination of a shell having a bore extending longitudinally therethrough, said bore having one end tapered for the reception of a wedge for main- 35 taining the cable in frictional engagement with the end of the shell, a plurality of transverse bores extending through the other end of the shell, an eye block in said other end of the longitudinal bore for connection to draft 40 means and means extending through the transverse bores for removably holding the eye block within said longitudinal bore.

In testimony whereof I affix my signature.

LAMONT ERNEST MOFFITT.