

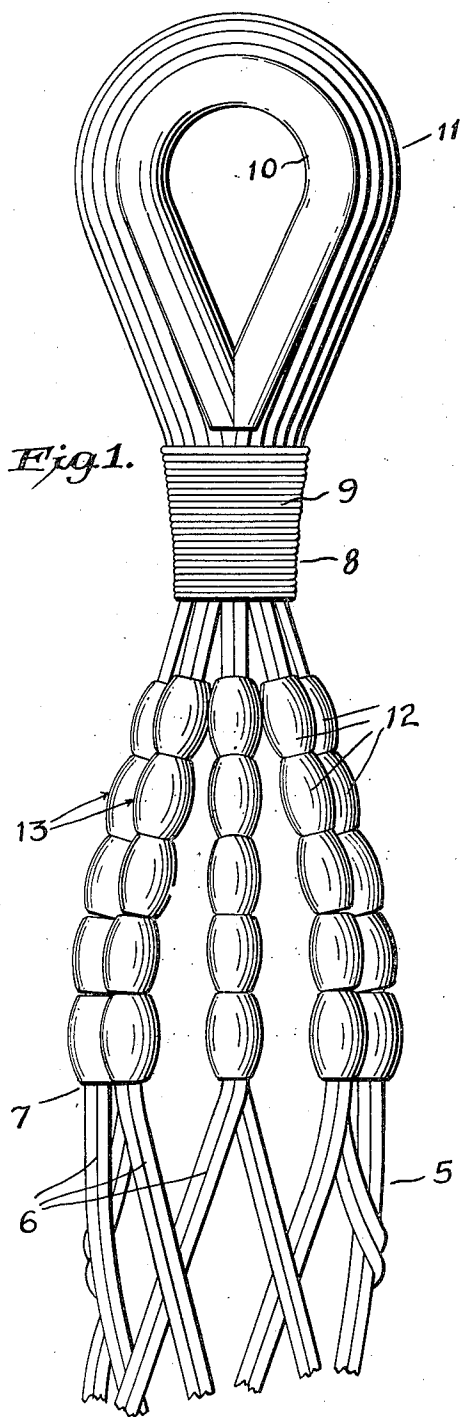
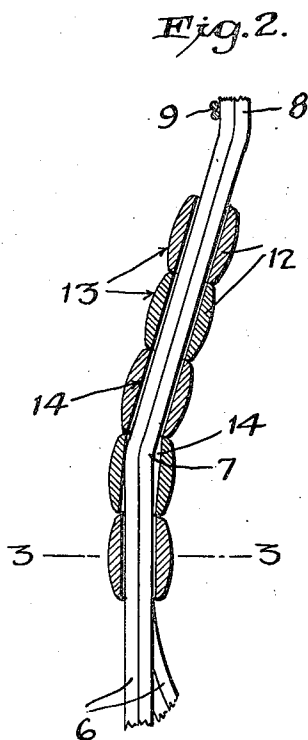
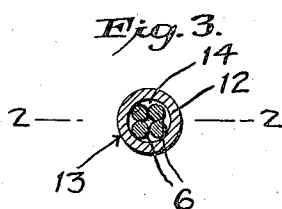
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CABLE GRIP

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CABLE GRIP

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The invention relates to improvements in woven cable grips and has to do primarily with providing a protection means for the draft end of such a cable grip.

5 Cable grips of the character described and illustrated in the present application are well known in the art and consist of a plurality of strands of wire or wire cord woven into an open mesh hollow body, cylindrically
10 shaped and with means at one end for attaching a draw rope.

It is a well known fact that the shoulder portions of such grips are subjected to great strains as they are being drawn through the
15 ducts and when such parts of the grip are left unprotected, they wear out quickly and the grip becomes useless. Different means have been devised in the art for protecting the grips. The pairs of strands adjacent the
20 shoulder portions of the grip have been inclosed by individual tubes. However, this has its disadvantages in that the tubes soon wear out and the wire is exposed and the tubes interfere with the flexibility of the
25 grip. Leather protectors laced about the shoulder portions of the grip have been used. While these leather protectors do not interfere in any great degree with the flexibility of the cable grip, they are very short lived
30 as, frequently, drawing the cable through one duct will destroy them.

The principal object of the present invention is to provide a protection means that will overcome the foregoing objections and one
35 that will give a maximum amount of protection to the shoulder portion of the grip and at the same time not impair in any manner the flexibility of the grip.

A further object is to provide a protection
40 means for the individual pairs of strands at the shoulder portion of the grip, such protection means having long-wearing abilities and greatly lengthening the life of the grip.

A further object is to provide a protection
45 means for the pairs of strands which may be easily turned in relation to the strands so as to expose different wearing surfaces.

A further object is to provide a protection
50 which is exceedingly simple in construction and easy to install while the grip is being

assembled and therefore adds very little to the cost of the grip.

Other advantages will become apparent as this specification proceeds. Referring to the drawings forming a part thereof and in
55 which one embodiment of the invention is illustrated:

Fig. 1 is an elevational view of the draft end of a cable grip with the protection means in place on the cable grip strands;
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Fig. 2 is a view of one of the pairs of strands showing the protecting means in section thereon; and

Fig. 3 is a cross sectional view taken on line 3—3 of Fig. 2.
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Referring again to the drawings, the reference numeral 5 designates the interchangeable woven open mesh grip. Grips of this general type being well known, suffice it to say the grip is formed of a plurality of
70 strands of wire or wire cord 6 which are woven into an open mesh hollow body, cylindrically shaped. The gripping action of these grips is due to the change of form of the meshes. When a pull is exerted the
75 meshes are elongated axially and are narrowed circumferentially, thus decreasing the diameter of the grip and causing it to firmly grasp the cable. The grip may be of any desired length and in Fig. 1 a substantial
80 part of the body portion of the grip is broken away.

At the draft end of the cable grip the strands 6 are brought together so as to form a shoulder portion 7 and neck portion 8. As
85 indicated at 9 in Fig. 1 the neck portion may be served with marline or other suitable material. The strands are then brought around a thimble 10 so as to form a rigid eye 11 to which the draw rope is attached.
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In drawing a cable through the duct, due to irregularities in the duct, a great strain is put on the shoulder portion of the grip as this portion comes in contact with the irregularities. As heretofore stated the object of the present invention is to provide a simple
95 means for protection of this shoulder portion.

For this purpose a plurality of bead-like members 12 are mounted on each pair of
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strands. These members extend from the neck portion or slightly below the neck portion to the larger portion of the woven wire mesh.

- 5 The members 12 are preferably bead-like in appearance having rounded exposed wearing surfaces 13 and clearance holes 14 for the strands. They are rotatable about the strands and when worn in one place they may be slightly turned on the strands and a new wearing surface exposed. With this construction and the protection members 12 being made of a hard metal fibre or other suitable material it is obvious they will last for a great length of time and thus add substantially to the life of the cable grip.

The members 12 will not become displaced on the grip as they are prevented from movement in one direction by the constricted neck portion and are prevented from any material movement in the opposite direction by the separation of the two strands of each pair as they merge into the large portion of the cable grip.

- 25 Sufficient play is allowed between the members 12 so that they will not bind on each other and interfere with the flexibility of the grip particularly when the grip is being used to draw a cable through a bend in a duct.

30 While the members 12 are shown in the drawings as being substantially egg-shaped with flattened ends this form might be considerably varied and still function in a satisfactory manner.

- 35 Such changes might be made in details of construction as would come within the scope of the appended claims.

I claim:

1. A cable grip protection means for a cable grip formed of a tubular woven mesh of wire strands bunched together at one end, said protection means comprising a plurality of rotatable members mounted on the pairs of strands at the shoulder portion of the cable grip.

2. A cable grip protection means for a cable grip formed of a tubular woven mesh of wire strands bunched together at one end, said protection means comprising a plurality of members mounted on the pairs of strands of the cable grip, said members extending from the neck portion of said cable grip to the larger portion of the woven mesh and being capable of rotating in relation to said strands.

3. A cable grip comprising a tubular woven mesh of wire strands bunched together at one end, a plurality of rotatable members mounted on each of the pairs of strands and extending from the neck portion of said cable grip formed by the bunched ends to the larger portion of said woven mesh.

4. A cable grip comprising a tubular woven mesh of wire strands bunched together at one end, a plurality of bead-like members mount-

ed on each of the pairs of strands, said bead-like members being capable of rotation in relation to said strands and extending from the neck portion of said cable grip formed by the bunched ends to the larger portion of said woven mesh.

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