G. D. SLAYMAKER.

ANCHOR OR TIE FOR LOOP ENDS.

APPLICATION FILED MAY 19, 1921.

1,408,230.

Patented Feb. 28, 1922.

2 SHEETS—SHEET 1.

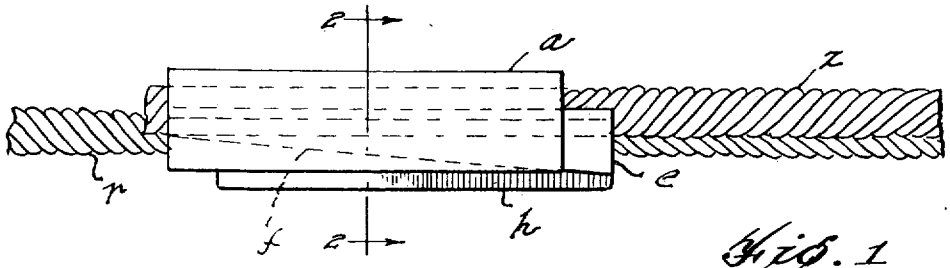


Fig. 1

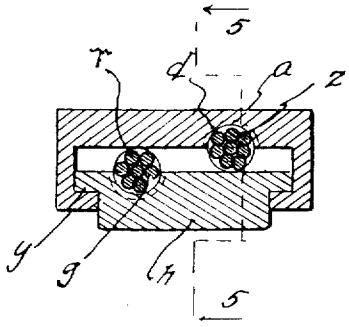


Fig. 2

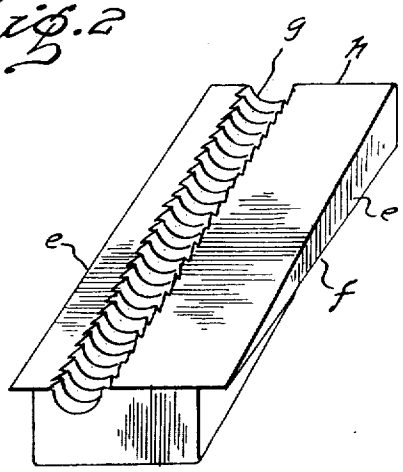


Fig. 4

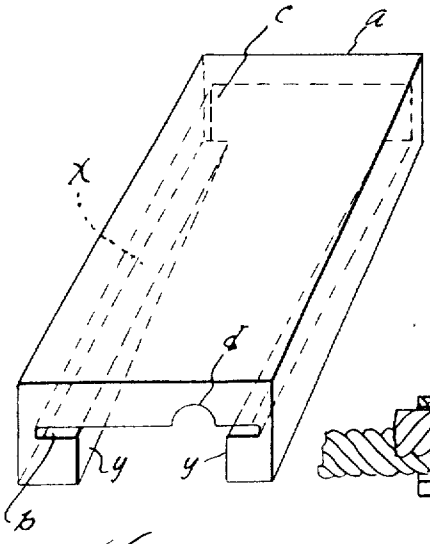


Fig. 3

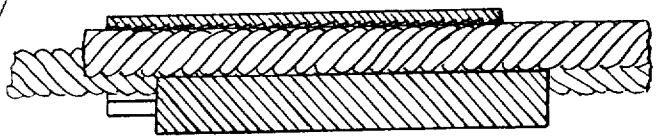


Fig. 5

INVENTOR.

George D. Slaymaker

BY

Stuart G. Barnes

ATTORNEY.

G. D. SLAYMAKER.

ANCHOR OR TIE FOR LOOP ENDS.

APPLICATION FILED MAY 19, 1921.

1,408,230. Patented Feb. 28, 1922.

2 SHEETS—SHEET 2.

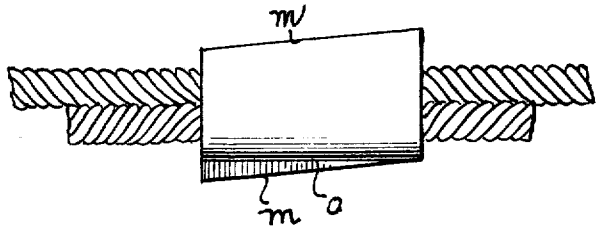


Fig. 6

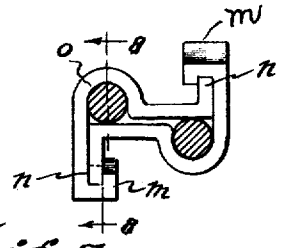


Fig. 7

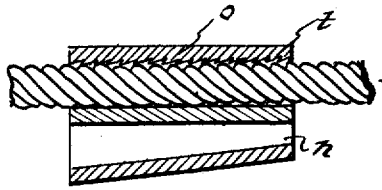


Fig. 8

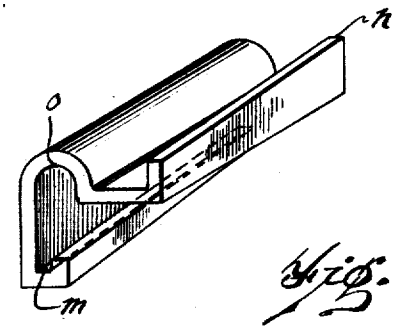


Fig. 9

INVENTOR.

George D. Slaymaker

BY Stuart L. Barnes

ATTORNEY.

UNITED STATES PATENT OFFICE.

GEORGE D. SLAYMAKER, OF DETROIT, MICHIGAN.

ANCHOR OR TIE FOR LOOP ENDS.

1,408,230. Specification of Letters Patent. Patented Feb. 28, 1922.

Application filed May 19, 1921. Serial No. 470,883.

To all whom it may concern:

Be it known that I, GEORGE D. SLAYMAKER, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Anchors or Ties for Loop Ends, of which the following is a specification.

This invention relates to anchors or ties for loop ends. It has for its object a simple device of this kind in which the loop ends can be laid and the two parts of the anchor driven together to bite into the cable, rope or other linear member that forms the loop.

Loops are very commonly used in connection with braided wire cables, especially in connection with electric street railway overhead equipment. These loops are now ordinarily made by unbraiding a part of the cut end of the cable and "serving" the wires around in opposite directions. Usually there are several of these wires and inasmuch as they are stiff and heavy, it is a rather difficult and time-consuming operation. It is the object of the present invention to provide an anchor which may be made simply of two pieces or blocks into which the looped ends may be laid. The two blocks may then be driven together and after the teeth in the blocks have bitten into the cable and the cable is put under tension, the more tension brought to bear on the cable the harder the teeth will bite into the cable and the tighter will the blocks wedge together.

In the drawings,—

Fig. 1 is a side elevation of the anchor applied to a cable.

Fig. 2 is a cross section on the line 2—2 of Fig. 2.

Fig. 3 is a perspective of one of the blocks.

Fig. 4 is a perspective of the other block.

Fig. 5 is a section on the line 5—5 of Fig. 2.

Figs. 6 and 7 are side and end elevations respectively of a modified form.

Fig. 8 is a longitudinal section of the same taken on the line 8—8 of Fig. 7.

Fig. 9 is a perspective view of one of the anchor sections.

Referring to the form of the invention shown in Figs. 1–5, *a* comprises a dove-tailed grooved block or section in which the undercut or dove-tailed groove is narrow at one end, namely, at the point *b*, and wide at the other end at the point *c*. This affords an inclined dove-tailed track *x*. This block is provided at one side of the center of the main groove with a groove *d* of semi-circular cross section provided with teeth and in this is adapted to be laid one of the loop ends. The other block is provided with a pair of overhanging upper edges or dove-tailed tongues *e* which have tapered under surfaces *f* complementary to the inclined track of the dove-tailed groove in the block *a*. The male block *h* is provided with a toothed groove *g* at one side of the center in which one of the ends of the loop may be laid. These two grooves do not register when the two blocks are assembled together, as is plainly shown in Fig. 2. Each of the toothed grooves is opposed by a plain surface of the other block.

Take the showing in Fig. 2, assuming the loop portion of the cable is behind the blocks or sections here shown, the main run of the cable is laid in the groove of the male block or section *h*, and the free end of the loop is laid into the toothed groove *d* of the female block or section *a*. The two blocks or sections are then driven together. When the cable or other linear member is put under tension the main run of the cable which is designated *r* will pull toward the viewer. Inasmuch as there are only teeth in the block *h* and while it engages the smooth surface of the block or section *a* the tension will tend to pull the male block or section *h* toward the viewer. Now viewing Fig. 1, it will be seen this will be an effort to pull the dove-tailed tongues up the inclined track and simply wedge the two blocks or sections together tighter. Similarly the tension on the loop end *s* will be in the opposite direction and inasmuch as it has only the teeth of the female block or section *a* biting into it, it will tend to pull the block *a* away from the viewer, but an inspection of Fig. 1 will show that this will simply drive the wedging blocks or sections more tightly together.

In the form shown in Figs. 6 to 9 inclusive the same principle of operation is employed but the dove-tailed grooves and tongues instead of being located, the grooves all on one member and the tongues all on one member, are located one groove and one tongue on each anchor section, and instead of solid blocks into which a toothed groove

is cut the groove is formed by a depression pressed into the metal. This permits the sections to be stamped, which is, of course, a somewhat cheaper operation than constructing the anchor sections as shown in Figs. 1 to 5 inclusive, where machine work is required on the grooves and tongues.

To be more specific, each section in the modification shown in Figs. 6 to 9 is a stamping having a section in a rough angle iron formation with one edge turned over to form a hook-like member *m* and the other edge turned over to form a flange or tongue *n*. The hook-like member *m* forms a groove which is inclined from one end to the other. This is nicely shown in Fig. 9. The flange or tongue *n* is also inclined from one end to the other at an equal angle. The depression *o* is pressed in the angle iron section and provided with teeth *t*. This is adapted to receive the cable which engages in the toothed groove formed by the depression. The die sections are right and left hand, hence separate dies are required for each section as one section has the tongue wide at one end and the groove narrow while the other section at the same end has the tongue narrow and the groove wide. These grooves and tongues are essentially dove-tailed grooves and tongues and do not differ from the principle of the anchor section shown in Figs. 1 to 5 inclusive except that the present design lends itself to stamping and the grooves are distributed one on each section and the tongues one on each section. The cable engages in one toothed groove and against plain surface of the opposite section and the strains operate in the same way as in the first-mentioned form.

What I claim is:

1. An anchor or tie for the purpose specified, having in combination, a pair of anchor sections adapted to engage together in wedging relation, the two said sections provided with two sets of opposed smooth and toothed surfaces whereby the linear members engage between these two sets of surfaces and tension in opposite directions will tend to draw the sections together when laid in the proper set of opposed surfaces.

2. An anchor or tie for the purpose specified, having in combination, a male and female section having a groove and tongue wedging engagement, the said sections having two sets of opposed surfaces, one of the surfaces of which is smooth and the other toothed whereby when the sections are driven together and the pair of oppositely-tensioned linear members are engaged between the sections the said linear members will tend to draw the sections together when laid in the proper set of slots.

3. An anchor or tie for the purpose specified, having a pair of sections provided with dove-tailed grooves and tongues having inclined surfaces that wedge together and having toothed grooves at opposite sides of the center of the sections, the toothed groove of one section opposing a smooth surface of the other block.

4. An anchor or tie for the purpose specified, having a pair of anchor sections in the form of angle iron members provided at one side with a hook-like turned-over member forming an inclined dove-tailed groove and at the other side with a turned-out flange having a longitudinally inclined edge, said flange forming a dove-tailed tongue, and tongues and grooves adapted to interlock in wedging relation and engage with a cable.

5. An anchor or tie for the purpose specified, comprising a pair of anchor sections each comprising a member of angle section having at one edge a turned-over hook-like formation forming a dove-tailed groove having an inclined bottom and at the other edge turned up to form a flange or tongue with an inclined edge, the tongues and grooves of the two members interlocking in wedging relation and each of the sections provided with a depression or groove for holding the cable, the said depressions or grooves when the sections are interlocked together opposing a plain surface of the other section.

6. An anchor or tie for the purpose specified, comprising a pair of angle section members comprising each a turned-over edge forming a hook-like formation and constituting a dove-tailed groove with an inclined bottom, the other edge of the angle section being turned up into a flange or tongue with an inclined edge, the tongues and grooves of the two angle sections being arranged to slide together in wedging relation, each of the sections being provided near the angle in the angle member with a depression to form a toothed groove, said grooves of the two sections when the same are secured together opposing a plain surface on the opposite section and arranged each groove to hold a cable for the purpose specified.

In testimony whereof I affix my signature.

GEORGE D. SLAYMAKER.