Dec. 2, 1952 J. H. FRONTEL 2,619,704

KNOT AND METHOD OF MAKING THE SAME

Filed Nov. 2, 1951

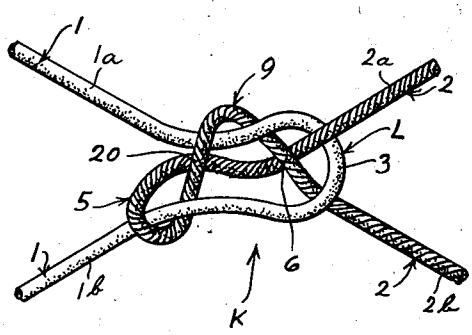


FIG. 1.

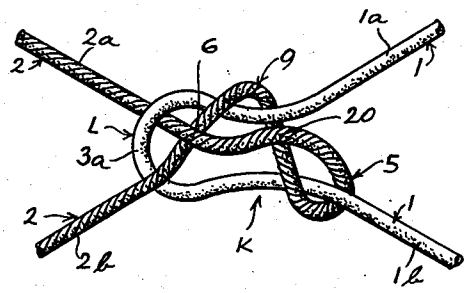


FIG. 2.

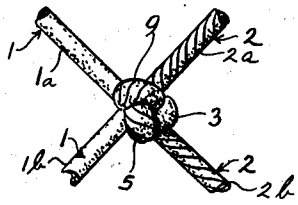


FIG. 5.

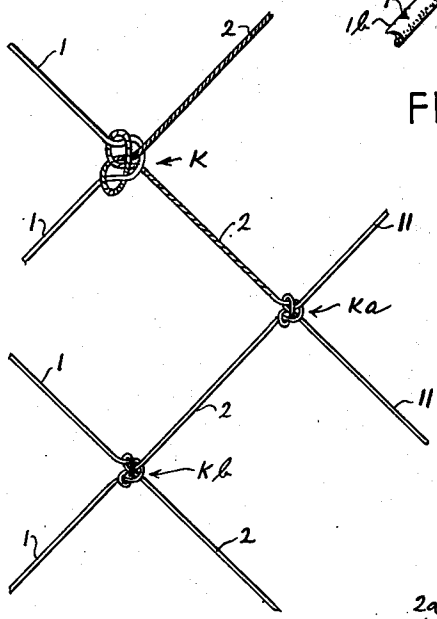


FIG. 3.

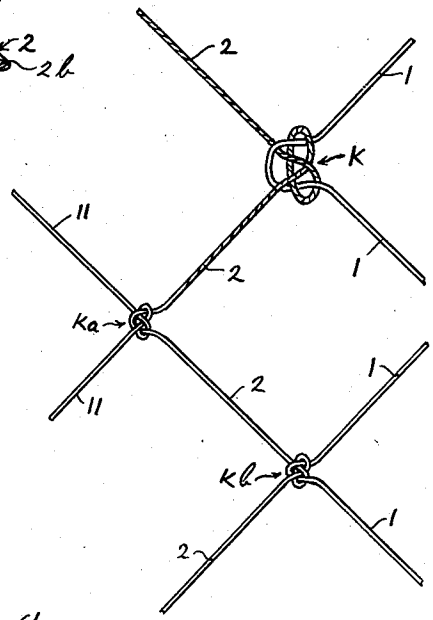


FIG. 4.

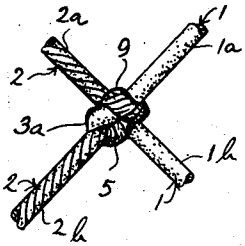


FIG. 6.

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KNOT AND METHOD OF MAKING THE SAME

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4 Claims. (Cl. 28—72)

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My invention relates to a new and improved fisherman's net and a new and improved knot and a method of making such knot. The invention relates generally to any netting construction.

It is desirable, in such a net, to produce and maintain meshes of the same size. The weight and movement of the fish frequently shift the cords of the net relative to each other, thus producing unequal meshes. This undesirable effect is prevented or minimized by this invention.

Other objects and features of the invention are explained in the drawings and description.

Fig. 1 is a front elevation which shows two net-cords and the improved net-forming knot in its open stage.

Fig. 2 is a rear elevation of Fig. 1.

Fig. 3 is a front elevation which shows three net-cords and three such knots, which are shown in successive stages of tightening.

Fig. 4 is a rear elevation of Fig. 3.

Fig. 5 is an enlarged detail front elevation, which shows the knot in its finally tightened or closed stage.

Fig. 6 is a rear elevation of Fig. 5.

In Fig. 1, the legs of the net-cord 1 are designated as 1*a* and 1*b*, and the legs of the companion net-cord 2 are designated as 2*a* and 2*b*.

An open bight or loop L is formed in cord 1. Said bight L is the junction between legs 1*a* and 1*b*. Said loop L has a central front point 3 and a central rear point 3*a*.

As viewed in Fig. 1, the leg 2*a* crosses and overlies loop L at a point spaced from the central point 3. The cord 2 is then looped in a bight 5 around leg 1*b*, and is then looped in a bight 9 around leg 1*a* so that the respective branches of cord 2 cross each other at point 20. The cord 2 is then looped in a bight 9 behind leg 1*a* and loop-portion L of cord 1, all as fully shown in Figs. 1 and 2, which are substantially to scale. The point 6 is a point at which the respective branches of cord 2 cross.

The open knot K which is shown in Fig. 1 in its initial open stage, is tightened or closed by exerting tension on the legs 1*a* and 1*b*.

Figs. 3 and 4 show the net-cords 1 and 2, an additional cord 11 and three knots K, K*a* and K*b*, which are in different respective closed stages. The knot K*b* is in substantially final closed state.

Figs. 5 and 6 show that the bights tightly abut each other, with considerable friction, in the final closed stage of the knot, so that the friction prevents the cords from shifting relative to each other.

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The net is constructed in the usual manner, save for the improved knot.

For convenience, the cord 1 is designated as the first cord; leg 1*a* is designated as the first leg of the first cord; leg 1*b* is designated as the second leg of the first cord; cord 2 is designated as the second cord; leg 2*a* is designated as the first leg of the second cord; and leg 2*b* is designated as the second leg of the second cord.

In the finished closed knot, the bight 5 tightly and frictionally grips leg 1*b*; bight 9 tightly and frictionally grips leg 1*a*; bights 5 and 9 are in figure-of-eight relation; inner parts of legs 2*a* and 2*b* are located in the closed knot, in addition to the bights 5 and 9 in overlapping relation between the inner face of loop L and the bights 5 and 9; and said inner parts of the legs 2*a* and 2*b* are tightly and frictionally gripped between the inner face of loop L and said bights 5 and 9.

It is noted that the legs 2*a* and 2*b* are located at opposite faces of the loop L, at the points where said legs cross the loop L. Thus, as viewed in Fig. 1, the leg 2*a* is above loop L at the respective crossing points, and leg 2*b* is below loop L, at the respective crossing point.

The knot may be formed by initially extending either leg 2*a* or leg 2*b* into loop L, as said procedures are clear equivalents.

The new knot disclosed herein is an improvement on the well-known Carrick knot or Carrick bend, in which the cords merely have interlacing loops. The improved knot may be designated as a "Carrick bite" knot.

I have described a preferred embodiment of my invention, but numerous changes and omissions and additions can be made without departing from its scope.

I claim:

1. A knot which comprises a first cord and a second cord, said first cord having first and second legs which terminate in an open end-loop which is a part of said knot, said second cord having a first leg which is bent over and under the second leg and then over and under the first leg of said first cord in successive respective bights, which are in said knot, the last-formed bight being continuous with a second leg of said second cord, said legs of said second cord also having respective inner parts thereof in addition to said bights which are located in said knot between said bights and said end-loop, said respective bights tightly and frictionally gripping said legs of the first cord in said knot, said bights and said end-loop tightly and frictionally engaging said inner respective parts of said legs of said second cord in said knot.

2. A knot according to claim 1 in which said bights are in direct succession and in figure-of-eight relation.

3. A knot which comprises a first cord which has legs which terminate in an open end-loop, a second cord which has respective legs which cross said end-loop at opposite faces of said end loop, said legs of said second cord being continuous with successive bights which respectively are bent over and under the second leg and then over and under the first leg of said first cord.

4. A method of forming a knot between a first cord and a second cord, which consists in shaping said first cord to provide respective legs thereof which terminate in an open end-loop,

laying a first leg of said second cord across one face of said end-loop and then bending said first leg of said second cord in successive opposite directions around said legs of said first cord to form successive bights through which said legs of said first cord extend, and extending said second cord from said last-formed bight in a second leg of said second cord to cross said first leg of said second cord inwardly of the inner side of said end-loop and then to cross said end-loop at a face of said end-loop which is opposed to the first-mentioned face of said end-loop.

JOSEPH H. FRONTEL.

No references cited.