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P. T. PAULS

2,162,115

NETTING CONSTRUCTION

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FIG. 1.

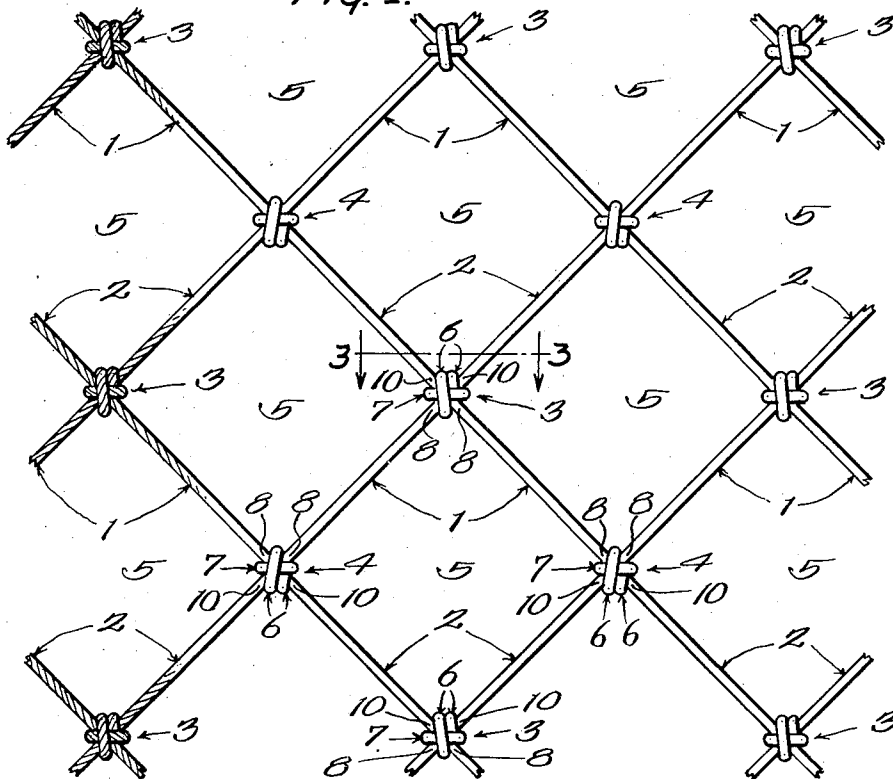


FIG. 2.

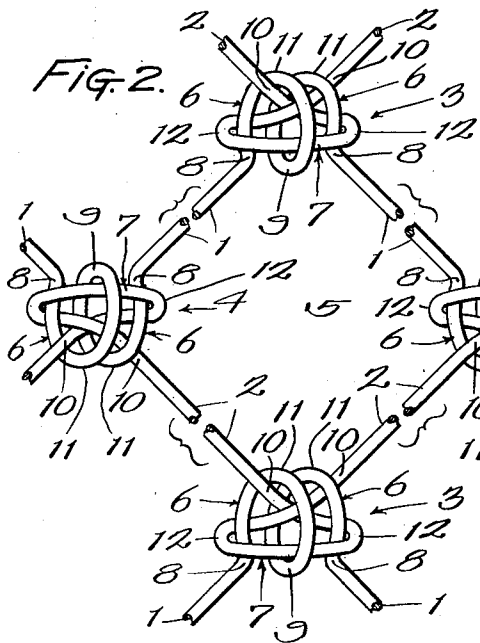


FIG. 3.

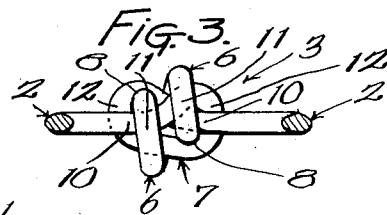
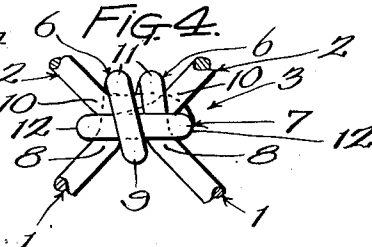


FIG. 4.



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NETTING CONSTRUCTION

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9 Claims. (Cl. 96—23)

This invention relates to netting construction, and more particularly pertains to that type of netting, or net, constituting a snare, such as may be employed in the fishing industry.

5 The type of netting referred to is usually made up of laterally arranged lengths of flexible tie elements, such as twine or cord or the like, interconnected therealong by knot formations arranged to provide the openings or meshes in the
10 netting.

One of the objects of the invention is to provide such netting formed by knots so constructed and arranged whereby the netting will have a natural tendency to assume such a symmetrical shape as to present fully opened symmetrical
15 meshes.

Another object is to provide a net with knots that will not slip along a length of cord thereof by force of an object being wedged within the
20 mesh formed thereby.

Another object is to provide such a knot for the netting wherein there will be no sawing action between the various portions of the lengths of cord of which it is constructed when the netting is in use, to prevent the possibility of the
25 lengths breaking at the knots.

Although the invention is mainly concerned with netting employed as a snare, it is also adaptable to other types of netting as well, such as that employed as screens or the like.

Other objects and advantages will become apparent by reference to the specification and the accompanying drawing, in which:

Fig. 1 is a face view of a portion of the netting
35 embodying one form of the invention.

Fig. 2 is an enlarged diagrammatic detail of Fig. 1 illustrating the knots of the invention in loosened condition with portions of the lengths of cord or twine therebetween being broken away.

40 Fig. 3 is an enlarged sectional detail taken on the section line 3—3 of Fig. 1, illustrating a side or edge view of one of the knots in slightly opened condition.

Fig. 4 is a face view of the knot structure as
45 seen in Fig. 3.

The netting of the invention, as illustrated, comprises laterally arranged lengths of similar flexible tie elements 1 and 2, such as cord or twine, alternately interconnected or tied with adjacent lengths therealong at either side thereof
50 by the equally spaced knot formations 3 and 4, respectively, to form the openings or meshes 5 in the netting.

In accordance with the invention, the knots
55 are constructed so that the meshes formed there-

by will readily assume a substantially rectangular or square form when the netting is in use. To this end, and in carrying out other objects of the invention, the knots comprise, respectively, spirally twisted formations in the lengths of cord 1 forming pairs of loops 6 within which are interlocked or tied, respectively, the spirally twisted formations 7 of the lengths of cord 2. Each formation 7 comprises a single loop which encircles the terminal portions 8 of its respective pair of loops 6 to hold said terminal portions in clamping engagement with opposite sides of the loop portion 9 intermediate or joining the pair of loops. The portions 10 leading from each encircling loop 7 continue in opposite directions through their respective pair of loops 6, respectively, so as to be engaged between the bottom portions 11 of the pair of loops and the portions 12 of the loop 7 encircling the terminals of said pair.

By virtue of the knot structure so far described, when the knots are in tightened condition, as seen in Fig. 1, with the loop portions 6 and 7 tightened about each other in interlocked assembly, the portions 8 and 10 of the lengths of cord leading from the knot will be firmly held by the loop portions 9, 11 and 12 therebetween, respectively, so that adjacent leading portions will be directed from the knot at substantially right angles to each other in a common plane. With the portions leading from the knots being spaced thereabout at right angles to each other, the sections of the lengths of cord between the knots will be constrained to present substantially square meshes.

By reason of the manner in which the loops 6 and 7 of the knots are interlocked, any pull exerted upon any two portions of the lengths of cord leading from a knot will cause such a binding action of the loops thereof about all cord portions leading therefrom as to effectively prevent the knot from slipping along any one of the lengths.

The spiral formations, or loops, of each length of cord forming adjacent knots therealong are wound opposite to each other or comprise right and left hand turns, in order that a general twist will not be imparted to the lengths during the forming operation of the knots and cause distortion in the shape of the netting when completed.

Having thus described my invention, I claim:
1. Netting constructed of laterally arranged lengths of flexible tie elements interconnected at intervals therealong by knot formations each

including a spiral formation of one length comprising a pair of loops and a spiral formation of an adjacent length comprising one loop surrounded by said pair of loops and arranged in
5 interlocked connection therewith to cause portions of the loops to engage opposite sides of each portion of the lengths leading from the knot to hold same separated from each other about the knot.

10 2. Netting constructed of laterally arranged lengths of flexible tie elements interconnected at intervals therealong by knot formations each including a spiral formation of one length comprising a pair of loops and a spiral formation
15 of an adjacent length comprising one loop surrounded by said pair of loops and arranged in interlocked connection therewith to cause portions of said loop and pair of loops to engage opposite sides of each portion of the lengths
20 leading from the knot respectively to hold same separated from each other about the knot in a substantially symmetrical order.

3. Netting constructed of laterally arranged lengths of flexible tie elements interconnected
25 at intervals therealong by knot formations thereof each including a spiral formation in one length comprising a pair of loops and a spiral formation in an adjacent length comprising one loop disposed within said pair of loops and encircling
30 portions thereof forming the terminals of the spiral and with portions of the length continuing from said encircling loop in opposite directions through the pair of loops respectively and arranged whereby the portions of the lengths
35 leading from the loops are held thereby in separated relation about the knot in a substantially symmetrical order.

4. Netting constructed of laterally arranged lengths of flexible tie elements interconnected
40 at intervals therealong by knot formations thereof each including a spiral formation in one length comprising a pair of loops and a spiral formation in an adjacent length comprising a loop disposed within said pair of loops and encircling the portions thereof forming the terminals
45 of the spiral and with portions of the length continuing from said encircling loop in opposite directions through the pair of loops respectively in engagement between the bottoms thereof and the encircling loop and arranged
50 whereby all portions of the lengths leading from the knot are held by the loops in separated relation about the knot in a substantially symmetrical order.

55 5. Netting construction of laterally arranged lengths of flexible tie elements interconnected at intervals therealong by knot formations thereof each including a spiral formation in one length comprising a pair of loops providing an intermediate loop portion therebetween engaged between
60 the portions of the loops forming the terminals of the spiral, and a loop formation in an adjacent length interlocked with the pair of loops and arranged to hold said terminal portions of the loops engaged with said intermediate loop portion and to hold the portions of the lengths leading from the knot in separated
65 relation thereabout in a substantially symmetrical order.

70 6. Netting constructed of laterally arranged lengths of cord or twine interconnected at intervals therealong by knot formations thereof each including a spiral formation in one length comprising a pair of loops providing an intermediate loop portion therebetween engaged be-
75

tween the portions of the loops forming the terminals of the spiral, and a spiral formation in an adjacent length comprising a loop tied within said pair of loops and encircling the said terminal portions thereof to hold same engaged
5 with said intermediate loop portion and with portions of the length continuing from the encircling loop in opposite directions through the pair of loops respectively in engagement between the bottoms thereof and the encircling loop and
10 arranged whereby the portions of the lengths leading from the knot are held thereby in separated relation thereabout in a substantially symmetrical order.

7. Netting constructed of a series of laterally
15 arranged lengths of cord or twine alternately connected with adjacent lengths at either side thereof at intervals therealong by knot formations thereof comprising spirally twisted formations of the lengths forming loop portions inter-
20 locked and arranged to engage opposite sides of the portions of the lengths leading from the knots to hold said leading portions in separated relation about the knots, and wherein the spiral formations of each length forming adjacent knots
25 are twisted opposite to each other to prevent a general twist in the lengths during the formation of the knots in order to further prevent deformation of the netting.

8. Netting constructed of a series of laterally
30 arranged lengths of cord or twine alternately connected with adjacent lengths at either side thereof at intervals therealong by knot formations thereof comprising spirally twisted formations of one length comprising pairs of loops and
35 spirally twisted formations of an adjacent length comprising loops interlocked with said pairs of loops respectively and arranged to cause portions thereof and of the pairs of loops to engage opposite sides of the portions of the lengths lead-
40 ing from the knots to hold same in separated relation about the knots in a substantially symmetrical order, and wherein the adjacent spiral formations of each length are twisted opposite to each other to prevent a general twist in the
45 lengths during the formation of the knots in order to further prevent deformation of the netting.

9. Netting constructed of a series of laterally
50 arranged lengths of cord or twine alternately connected with adjacent lengths at either side thereof at equally spaced intervals therealong by knot formations thereof including respectively spirally twisted formations of one length comprising spaced pairs of loops twisted opposite to
55 each other with each pair forming an intermediate loop portion therebetween engaged between the terminal portions thereof, and including spirally twisted formations of an adjacent length comprising spaced loops twisted opposite to each
60 other and tied respectively within the pairs of loops and encircling the terminal portions thereof to hold same engaged with their respective intermediate loop portions and with the portions of the length continuing from the encircling
65 loops in opposite directions through the loops of the pairs respectively in engagement with the bottoms thereof and the encircling loops and arranged whereby the portions of the lengths leading from the knots are held thereby in a
70 symmetrical cross formation thereabout to constrain the sections of the lengths connecting the knots to form symmetrically square meshes in the netting.