No. 621,890. Patented Mar. 28, 1899.

I. S. ADAMS.

NETTING.

(Application filed Mar. 2, 1898.)

(No Model.)

Fig. 1.

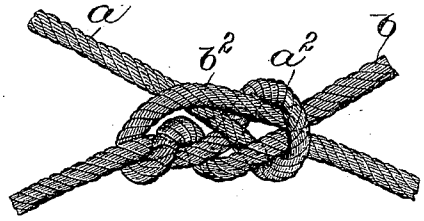


Fig. 3.



Fig. 4.

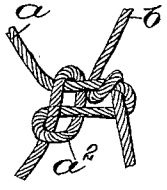
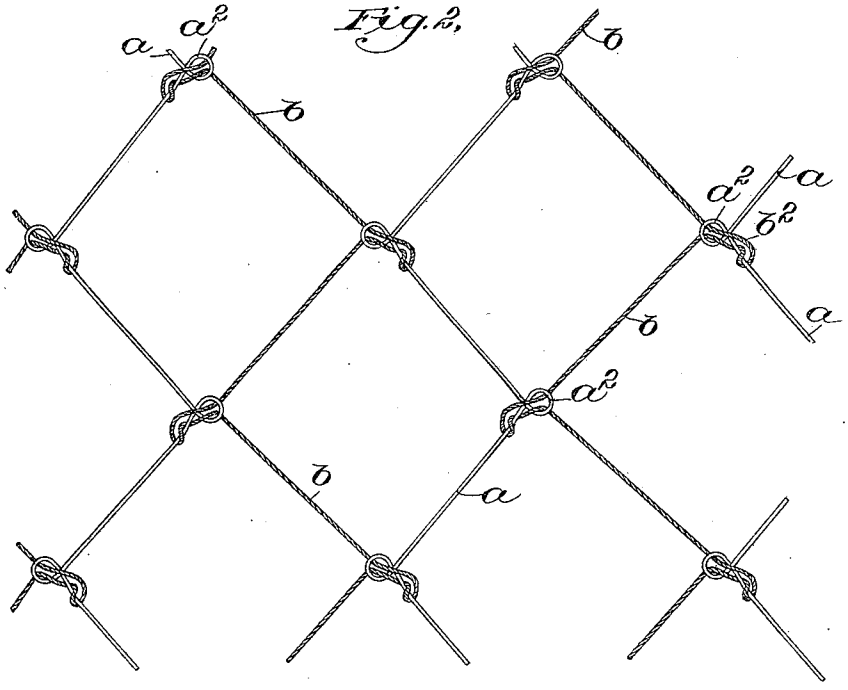


Fig. 2.



Witnesses
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NETTING.

SPECIFICATION forming part of Letters Patent No. 621,890, dated March 28, 1899.

Application filed March 2, 1898. Serial No. 672,304. (No model.)

To all whom it may concern:

Be it known that I, IVERS S. ADAMS, of Cambridge, county of Middlesex, and State of Massachusetts, have invented an Improvement in Netting, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

The present invention relates to netting such as is commonly used for fish-nets, and is embodied in an improved knot whereby the adjacent strands of the netting are fastened together, the object of the invention being to secure the strands so that the knot cannot pull through or upset in such a manner as to allow one strand to slip with relation to the other when pressure is brought to bear thereon, and thereby enlarge the meshes of the net.

In the ordinary weaver's knot, which has been heretofore commonly employed in making netting, if an object larger than one of the openings in the netting is forced into such opening so as to tend to straighten the strand which forms two sides thereof it frequently happens that when said strand is straightened the loop which holds the same is pulled through the knot, so that the said strand is free to move through the said loop, and thereby enlarge the opening, so that the object forced into the opening can perhaps pass completely through the netting. This defect is practically obviated in accordance with the present invention by giving the strand which passes through the loop a turn or bight around one of the other strands beyond the said loop, so that an enlargement is formed which will usually prevent said strand from being pulled through the loop, while even if it is pulled through the other strand will be to a large extent prevented from slipping.

Figure 1 is an exaggerated view of one of the knots for netting embodying the invention. Fig. 2 is a view on a smaller scale of a portion of the netting itself; and Figs. 3 and 4 views showing, respectively, an ordinary weaver's knot "upset" or pulled through and a knot forming the subject of the present invention in the same condition.

The netting in which the knot is employed is shown as comprising the strands a and b, which alternate, each set of strands extending in a zigzag direction and being connected alternately with the adjacent strands at opposite sides, as best shown in Fig. 2. To connect the said strands together and form the netting, one set of the strands, as a, is formed at each point of connection into an open loop a^2, the two members of which cross each other and extend at an angle to each other toward the next thread b, where they are formed in similar loops a^2. The thread b at each knot has a loop b^2, which passes through the loop a^2, as shown in Fig. 1, both members of the loop b^2 passing over the members of the loop a^2, where they cross each other. The closed portion of the loop b^2, however, extends twice around the lower member of the loop a^2—*i. e.*, under, over, and then under the same—so that it forms a bight, as best shown in Figs. 1 and 4. When, therefore, the threads are drawn tight, the bight in the loop b^2, which surrounds the lower strand a, constitutes an enlargement, tending to prevent the thread b from pulling the said lower strand a through the loop and permitting the thread b to slip.

It is to be understood that the terms "upper" and "lower" are used merely for convenience, the strands called "lower" being those which are shown as behind or below the others in Fig. 1.

The upsetting or pulling through of the ordinary weaver's knot is shown in Fig. 3, where the lower thread of the loop a^2, which holds the thread b, is pulled through the loop itself, leaving the thread b straight and free to slip and destroy the shape of the netting. In the knot embodying the present invention, on the other hand, it is obvious that not only will the bight in the loop b^2 tend to prevent the thread a from being pulled through, as shown in Fig. 4, but even if the said thread is pulled through the thread b instead of being free to slip through an open loop is itself wound once around one of the strands of said loop, it being obvious, therefore, that if the two ends of said threads are strained, as would be the case if something were being forced through the meshes of the net, it would tend to tighten around the thread a rather than to slip with relation thereto.

I claim—

The herein-described netting or like structure having the strands thereof connected by a knot, in which knot one strand is formed in

a simple loop, as a^2, the members of which cross one above the other, and the other strand extends through said loop at the same side of both members thereof, and under, over, and under the lower member of said loop and thence out through the loop at the same side of both members thereof, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

IVERS S. ADAMS.

Witnesses:
H. J. LIVERMORE,
NANCY P. FORD.