No. 621,891. Patented Mar. 28, 1899.

I. S. ADAMS.

NETTING.

(Application filed Jan. 18, 1899.)

(No Model.)

Fig. 1,

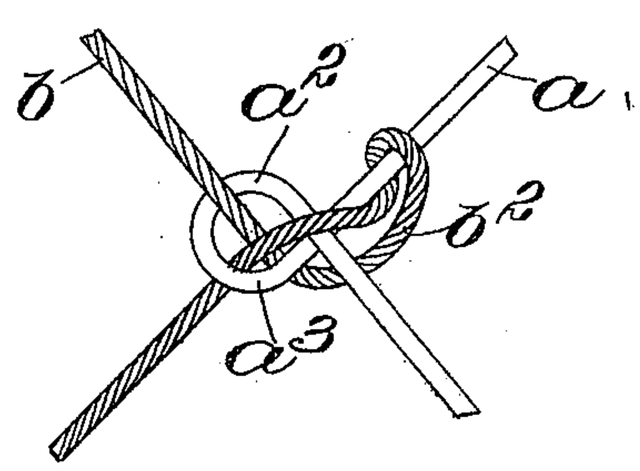
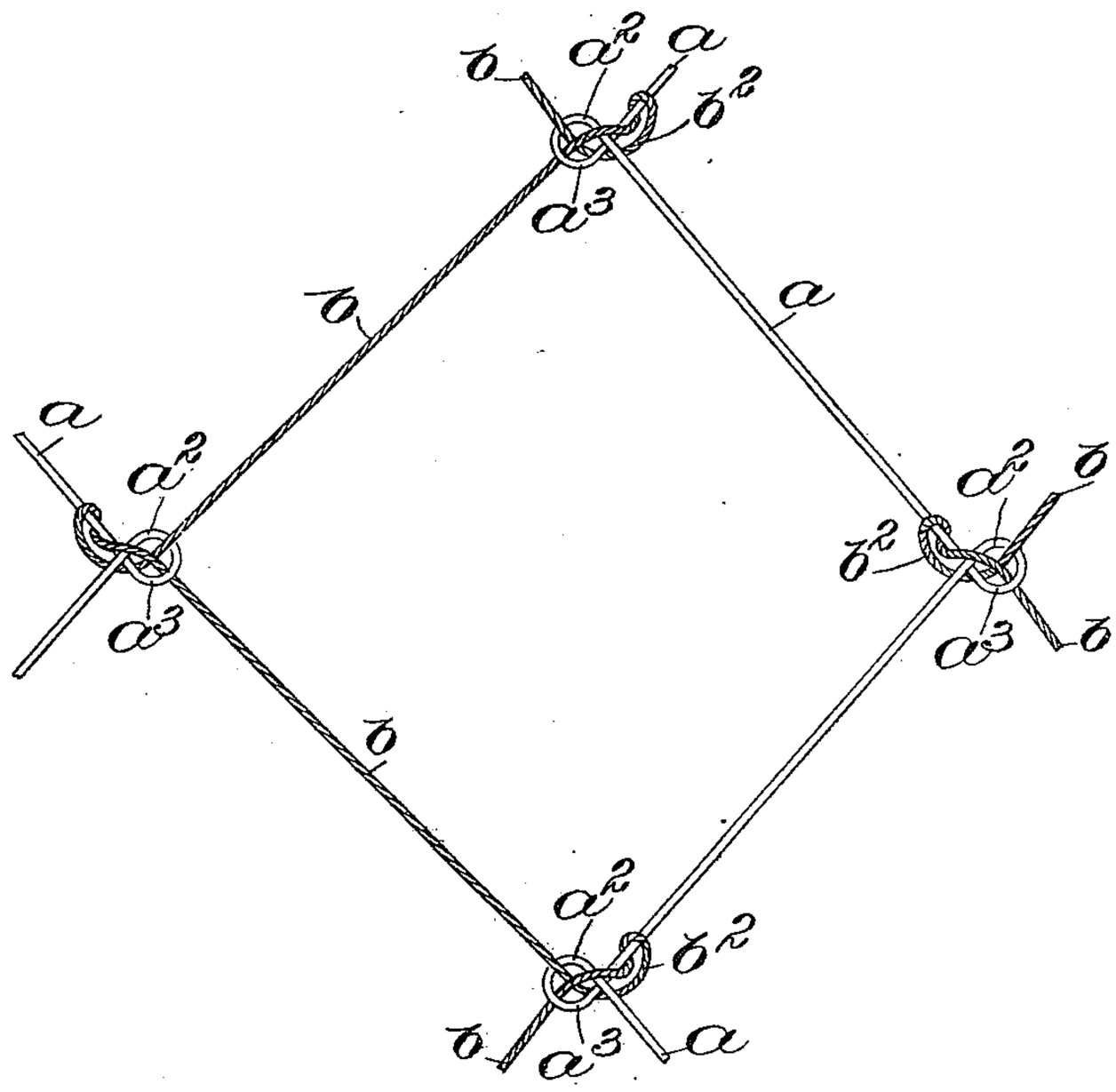


Fig. 2,



Witnesses
Jas. J. Maloney.
Nancy P. Fold.

Inventor,
Ivers S. Adams
by J. P. and J. J. Livermore
Attys.

UNITED STATES PATENT OFFICE.

IVERS S. ADAMS, OF CAMBRIDGE, MASSACHUSETTS.

NETTING.

SPECIFICATION forming part of Letters Patent No. 621,891, dated March 28, 1899.

Application filed January 18, 1899. Serial No. 702,535. (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 a netting or similar structure having the strands thereof connected together at intervals, and is mainly embodied in a novel arrangement of the strands to form the connecting-knot, the object of the invention being to prevent the slipping of one strand with relation to another, which is liable to occur when the meshes of the net are stretched. In such netting as now commonly made the strands are usually connected by means of the ordinary "weaver's knot," and pressure on the strands is liable to cause the loop of the knot to pull through, so that the knot slips and widens the mesh.

The material embodying the invention is mainly used for fish-nets, and when strands are connected by means of the weaver's knot a large and powerful fish will frequently press against the strands in such a way as to cause the loop to pull through and the knot to slip, so that the mesh widens sufficiently to let the fish escape. In netting constructed according to this invention the formation of the knot is such as to effectually prevent the slipping of the strands and consequent widening of the meshes.

Figure 1 is an enlarged view of two strands at the point where they are fastened together, showing the relation of the said strands to each other when the knot is formed; and Fig. 3 is a view on a smaller scale, showing one mesh of netting or like structure to illustrate more fully the manner in which the strands are arranged and knotted together.

The material embodying the invention comprises two sets of strands a and b, which alternate along the fabric, as indicated in Fig. 2, each strand a extending along the material in a zigzag direction and being connected first with a strand b at one side and then with another strand b at the opposite side, the strand b being arranged in the same way with relation to the strand a. The knot is formed in accordance with the present invention by forming simple loops in each strand of one set at each point of connection, the said loops being herein shown as formed in the strands a, the two ends crossing each other and forming what may be described as the "upper" member a^2 and "lower" member a^3 of the loop. The strand b in accordance with the invention is shown, Fig. 1, as passing in through the loop above the upper member a^2 and then below the lower member a^3, and after it is thus passed through it is wound around the said lower member beyond the loop, then passing over the said upper member and out through the loop in the opposite direction—that is to say, below the member a^3, as shown. The said strand b is thus formed in a kind of twisted loop b^2, the ends of which cross each other and pass through the loop a^2 a^3 in opposite directions.

It is to be understood, of course, that the terms "above" and "below" are used merely for convenience and refer to the knot when it is in the position shown in the drawings, it being obvious that the knot will be the same regardless of the position in which the fabric is placed, the two strands always having the same relation to each other. Comparing, for example, the different knots shown in Fig. 2 it will be seen that the upper member of the loop in the strand a in the knot shown in the upper part of the drawings is continuous with the lower member of the similar loop in the knot shown at the right-hand side of the drawings, but that the member b enters the loop in the same way over the said upper member, passing below the lower member and around the same beyond the loop and then again over the upper member and out through the loop under the lower member.

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, the members of which cross

one above the other, and the other strand extends through said loop above the upper member thereof and below the lower member thereof, being wound around said lower member beyond the loop and then passing out through said loop above the upper member and below the lower member 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.