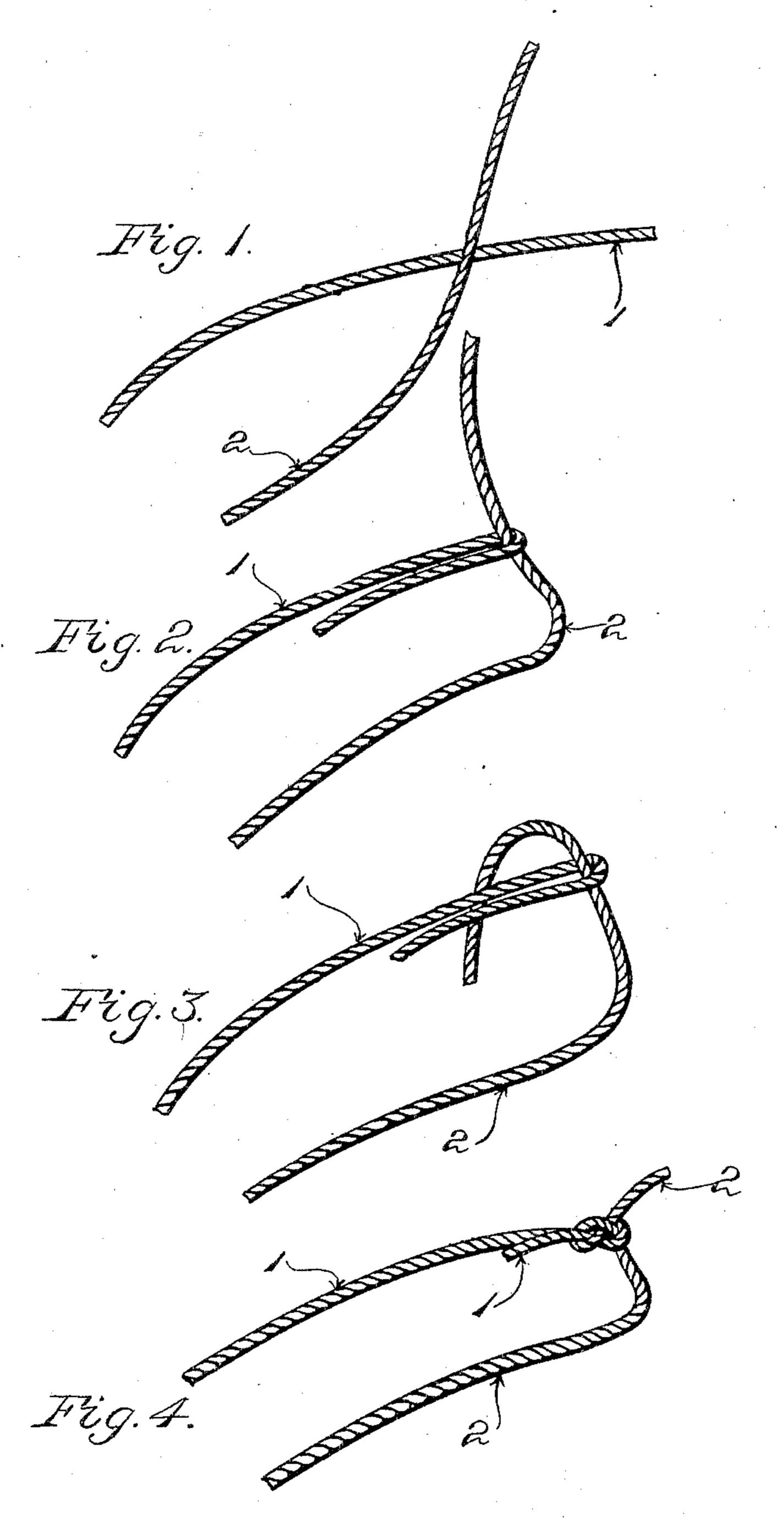
S. A. WEST.

METHOD OF TYING KNOTS.

APPLICATION FILED JUNE 12, 1903.



Witnesses: Oscar F. Hill Aline Tarr Inventor: Stillman A. West-By Macleod Calvert Randall Attorneys.

## United States Patent Office.

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## METHOD OF TYING KNOTS.

SPECIFICATION forming part of Letters Patent No. 789,467, dated May 9, 1905.

Application filed June 12, 1903. Serial No. 161,144.

To all whom it may concern:

Be it known that I, STILLMAN A. WEST, a citizen of the United States, residing at Lynn, in the county of Essex, State of Massachusetts, have invented a certain new and useful Improved Method of Tying Knots, of which the following is a specification, reference being had therein to the accompanying drawings.

The general object of my invention is to devise a new method of tying a knot for the purpose of uniting together the ends of two yarns, threads, or the like—as, for example, in connection with the various operations in winding and weaving—and which shall be more especially fitted to be carried into effect mechanically by means of automatic knottying devices or mechanism.

The invention consists in the new mode of procedure, which I will now explain, with reference to the accompanying drawings, in which latter the successive steps or operations are illustrated.

In the drawings, Figure 1 shows the manner in which the threads or yarns are placed together in beginning operations. Fig. 2 shows the manner in which one of the threads or yarns is bent around the other. Fig. 3 shows the extremity of the second thread or yarn carried partly around the two portions of the first thread or yarn preparatory to interlocking. Fig. 4 shows the interlocking effected and the knot in readiness to be tightened, and thereby completed.

The essential steps of my improved method of tying a knot consist in first causing to cross each other at an angle, substantially as represented in Fig. 1, the ends of the two threads, yarns, or the like which are to be united

with each other. For convenience of designation I have marked one of the threads or 40 yarns in the drawings with the numeral 1 and the other with the numeral 2. I then bend the free extremity of one of the said threads or yarns—as, for instance, that marked 1—around the other thread or yarn, 45 bringing such free extremity back into close proximity to the main portion of the said thread or yarn 1 and forming thereby the bight which is represented in Fig. 2. I then carry the free extremity of the other thread 50 2 to one side and behind the parallel portions of the doubled thread or yarn 1, as shown in Fig. 3, and bring such free extremity of the thread or yarn 2 again to the front, passing it over the said parallel portions of the thread 55 1 and inserting it between such parallel portions and itself, as represented in Fig. 4. This effects the interlocking, and on tightening the knot the latter is completed.

What I claim is—
The improved method

The improved method of tying a knot, which consists, essentially, in assembling two threads, or the like, which are to be united, then bending one of the threads around the other to form a loop or bight about the latter, and 65 then carrying the free extremity of the thus inclosed thread around the two portions of the first thread and interlocking it with itself, substantially as described.

In testimony whereof I affix my signature in 7° presence of two witnesses.

STILLMAN A. WEST.

Witnesses:
Chas. F. Randall,
William A. Macleod.