Aug. 31, 1926. 1,598,310

T. A. QUINLAN

METHOD OR PROCESS OF TYING BOWS

Filed Dec. 17, 1923 2 Sheets-Sheet 1

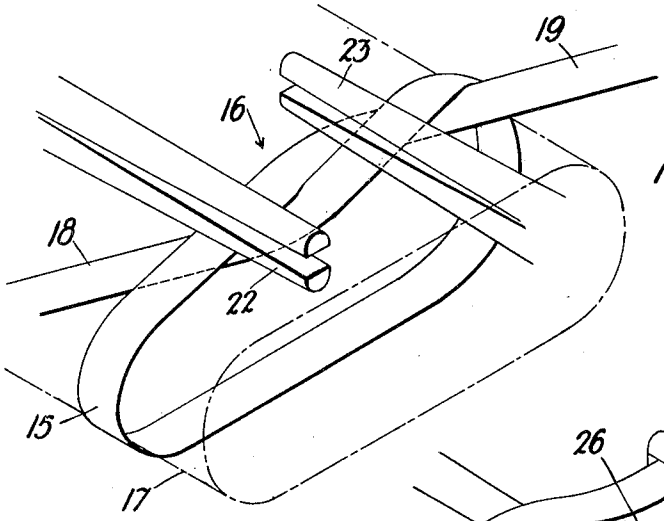


Fig. 1.

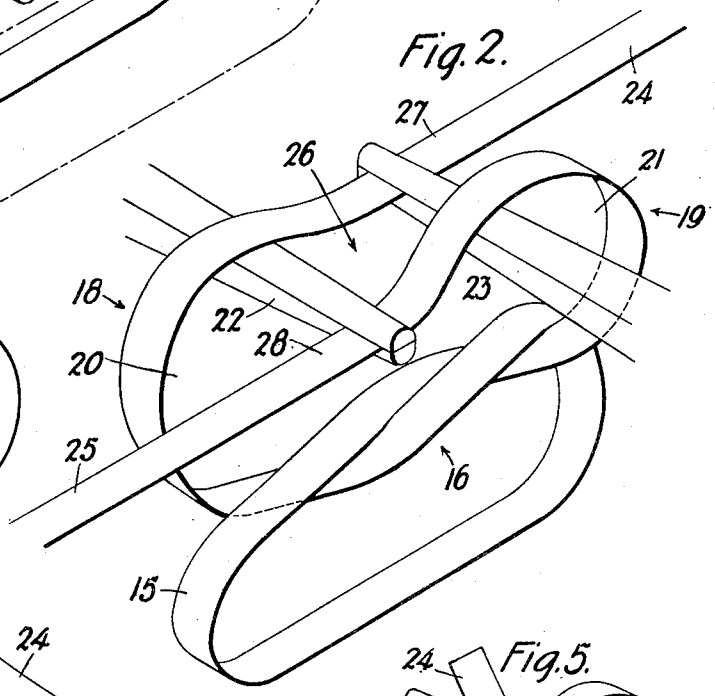


Fig. 2.

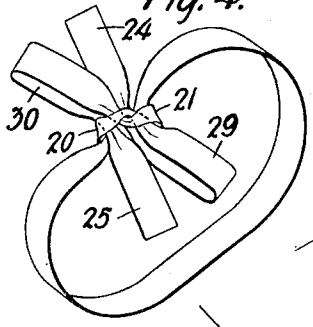


Fig. 4.

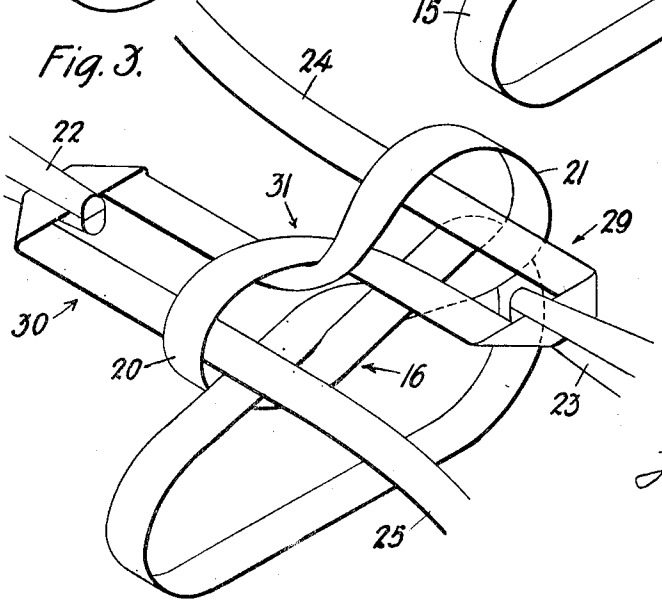


Fig. 3.

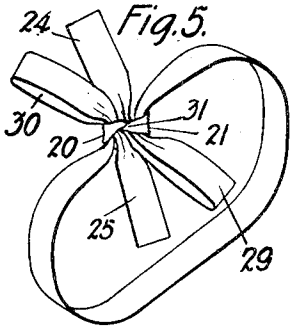


Fig. 5.

Inventor
Thomas A. Quinlan
by A. L. Wolte
Atty

Aug. 31, 1926. 1,598,310

T. A. QUINLAN

METHOD OR PROCESS OF TYING BOWS

Filed Dec. 17. 1923 2 Sheets-Sheet 2

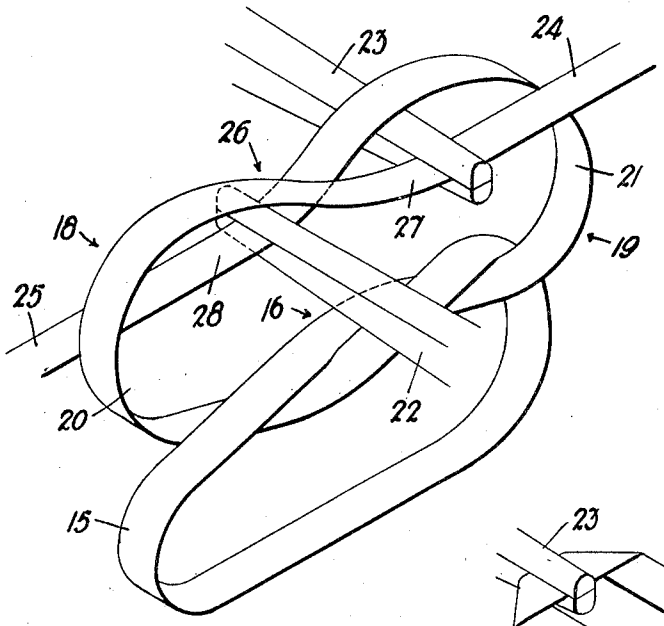


Fig. 6.

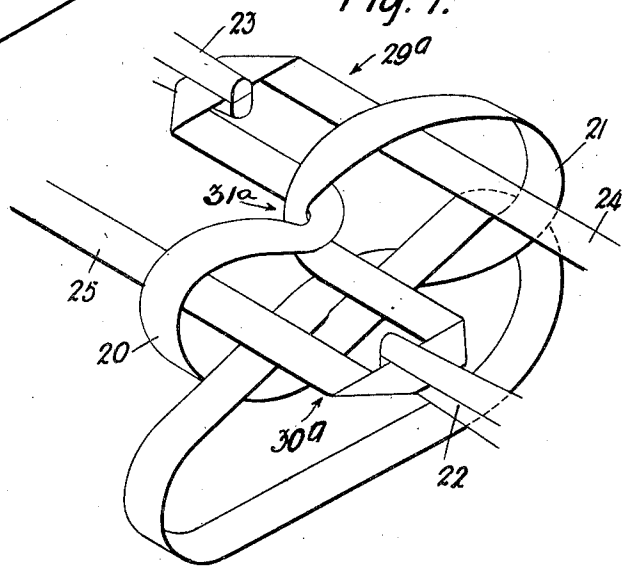


Fig. 7.

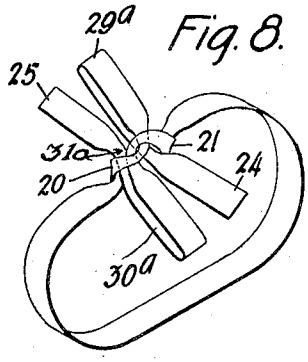


Fig. 8.

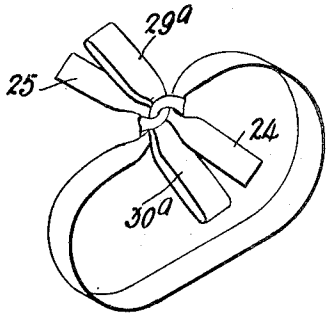


Fig. 9.

Inventor:
Thomas A. Quinlan
by A. C. Wolfe, Att'y

Patented Aug. 31, 1926. 1,598,310

UNITED STATES PATENT OFFICE.

THOMAS A. QUINLAN, OF ATLANTA, GEORGIA, ASSIGNOR TO F. L. SMITHE MACHINE COMPANY, INCORPORATED, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

METHOD OR PROCESS OF TYING BOWS.

Application filed December 17, 1923. Serial No. 681,276.

This invention relates to a method or process of tying bows. The primary object of the present invention is to simplify and thus facilitate the manner of making bow knots.

In the past bow knots have been formed ordinarily by first making one bow loop from one end of a piece of material, such as a tape or cord, winding the other free end around said loop to form a preliminary or temporary loop, and then drawing an intermediate portion of the remaining section of the last named free end through the temporary loop to form the other bow.

According to the present invention the bow is tied by folding the free ends of the material back towards themselves so as to form two symmetrical preliminary loops, then passing intermediate portions of the remaining sections of the free ends each through the loop formed by the other free end to thus form the bow loops.

A good understanding of the invention may now be had from the following description thereof, having reference to the accompanying drawings, in which—

Figure 1 is a perspective view showing a tape or ribbon tied around a package with a single knot formed and showing a set of tools in place to assist in tying a granny type of bow knot;

Figure 2 is a view similar to Figure 1, but shows the free ends of the ribbon folded back towards themselves to form preliminary loops, and shows the free ends grasped by the tools;

Figure 3 is a view similar to Figure 2 and shows intermediate sections of the free ends, each being drawn through the preliminary loop formed by the other free end to form the bow loops;

Figure 4 shows the bow formed but somewhat open in character;

Figure 5 shows the bow as it actually appears after having been drawn tight;

Figure 6 is a view similar to Figure 2 but shows the tools placed in opposite positions and the folded free ends of the ribbon so placed as to form a reef or square type of bow knot;

Figure 7 shows the tools drawn in opposite directions to form the bow loops;

Figure 8 shows the reef or square type of bow knot formed but not drawn tight;

Figure 9 shows the resulting bow knot after it has been drawn tight.

In Figure 1 of the drawing a ribbon or string 15 is shown tied in a knot 16 after having been wrapped around a package 17. To form the bow knot, the free ends 18 and 19 of the ribbon are folded back towards themselves to form preliminary loops 20 and 21, respectively, as indicated in Figure 2. A set of tools, such as pliers 22 and 23, may be used to assist in forming the bow knot. Said pliers are placed over the knot 16, substantially at right angles thereto, and overlapping the knot. It is important to note that in each pair of pliers the jaw end passes through the preliminary loop before it engages the free end of the ribbon. When the granny type of bow knot is to be formed, the jaw end of each pair of pliers is placed to extend to the side of the knot opposite to that out of which the adjacent free end of the ribbon extends. For instance, in Figure 1 the free end 18 of the ribbon extends out of the rear side of the knot 16 and the jaw end of the pliers 22 extends towards the forward or opposite side of the knot. In a similar manner the free end 19 and the jaw end of the pliers 23 are oppositely disposed with respect to each other.

In actual practice the preliminary loops 20 and 21 may be formed by winding the tape partially about the pliers 22 and 23, respectively, and the intermediate portions 27 and 28 of the free ends 24 and 25 may then be inserted between the jaws of the pliers 23 and 22, respectively. The intermediate sections of the free ends are thereupon passed through the preliminary loops 21 and 20 by drawing the pliers in opposite directions and substantially at right angles to the knot 16, thus forming bow loops 29 and 30. The crossing of the ends 24 and 25 at 26 of Figure 2 causes a knot 31 to be formed between the bow loops 29 and 30 (Figure 3). After drawing up tight on the bow loops, the bow knot is formed as shown in Figure 5. This same bow knot is shown in Figure 4 where it is somewhat open in character so that the course of the ribbon may readily be traced.

To form the reef or square type of bow knot illustrated in Figures 6 to 9, inclusive, the pliers are placed over the knot 16, as in

Figure 6, each pair of pliers with its jaw end extending towards the side of the knot out of which the adjacent free end of the ribbon passes. The preliminary loops 20 and 21 are then formed by the free ends 18 and 19 of the ribbon, as previously described. It will be noted, however, that the free end 25 of the ribbon is now behind the free end 24 and that the pliers 22 and 23 are reversed in direction, as compared to Figure 2. The pliers are now moved to pass intermediate parts 27 and 28 through the preliminary loops 21 and 20, respectively, as indicated in Figure 7, to form the bow loops 29^a and 30^a, and also form the knot 31^a between them. The reef or square type of bow knot is finally produced, as shown in Figure 9, said bow knot being shown somewhat open or loose in Figure 8 for clearness.

It will be understood that the bow knots may be formed without the aid of tools, in which case the first two fingers of each hand are substituted for the pliers.

In the method of tying the bow in the present invention, if the free ends 18 and 19 of the ribbon are of equal length beyond the knot 16, the bow loops after the bow is tied are of equal length and the ends of the ribbon forming part of the bow are also of equal length. This is considered quite an advantage over the well known method of tying a bow, in which one free end beyond the knot must be left sufficiently longer than the other free end to compensate for wrapping one free end around the first bow formed. In order to produce a bow having loops and ends of equal length by the latter method, it is often necessary to re-tie the bow one or more times because it is difficult to make the proper allowance for wrapping the one free end around the first bow. The method of the present invention automatically produces bows and loops of equal lengths.

It will be understood that in either of the methods of the present invention, the bows may be formed without any relation to a package or parcel, such as 17 of Figure 1, and without the previous formation of a preliminary knot 16. Many other changes and modifications may be made in the herein described specific methods of practicing the invention, without departing from the spirit and scope of the invention as defined by the appended claims.

What I claim is:

1. The method herein described, which consists in combining the opposite ends of a length of ribbon or cord to form a knot, folding said ends to form a pair of preliminary loops, and then drawing each free end through the loop formed by the other free end.

2. The method herein described, which consists in combining the opposite ends of a length of ribbon or cord to form a knot, folding said ends to form a pair of preliminary loops, and then simultaneously drawing, the remaining portions of the free ends through the loops, each through the loop formed by the other free end.

3. The method herein described, which consists in combining the opposite ends of a length of ribbon or cord to form a knot, folding said ends to form a pair of preliminary loops, and then drawing an intermediate section of the remaining portion of each free end through the loop formed by the other free end to form bow loops.

4. The method herein described, which consists in combining the opposite ends of a length of ribbon or cord to form a knot, folding said ends to form a pair of preliminary loops, drawing an intermediate section of the remaining portion of each free end through the preliminary loop formed by the other free end to form bow loops, and then pulling on the bow loops to pull the preliminary loops into a knot.

5. The method herein described, which consists in combining the opposite ends of a length of ribbon or cord to form a knot, folding said ends to form a pair of preliminary loops, extending in opposite directions with the remaining portions of the free ends along side of each other, crossing said remaining portions and then drawing an intermediate section of each remaining portion through the loop formed by the other free end.

6. The method making a bow which consists in combining the opposite ends of a length of ribbon or cord to form a knot, forming said ends into two preliminary loops arranged in opposed relation and then passing each free end through the loop formed by the other free end.

7. The method of making a bow which consists in combining the opposite ends of a length of ribbon or cord to form a knot, forming said ends into two preliminary loops arranged in opposed relation, passing an intermediate section of the remaining portion of each end through the loop formed by the other free end to form bow loops, and then drawing on said bow loops to draw up the preliminary loops to form a knot between the bow loops.

8. The method of making a bow which consists in combining the opposite ends of a length of ribbon or cord to form a knot, forming said ends into two preliminary loops arranged in opposed relation, crossing the remaining portions of the free ends with respect to each other, and then passing each free end through the loop formed by the other free end to form a knot.

In testimony whereof I have affixed my signature to this specification.

THOMAS A. QUINLAN.