

## MAKING A SIMPLE FLEMISH TWIST BOWSTRING #1

by Kirby

Here is a tutorial on making a flemish bowstring.

I don't own a jig so I use my workbench. I put two nails in the bench as pegs, 6 to 8 inches longer at each end of the bow than the bow knocks I am going to make the string for.

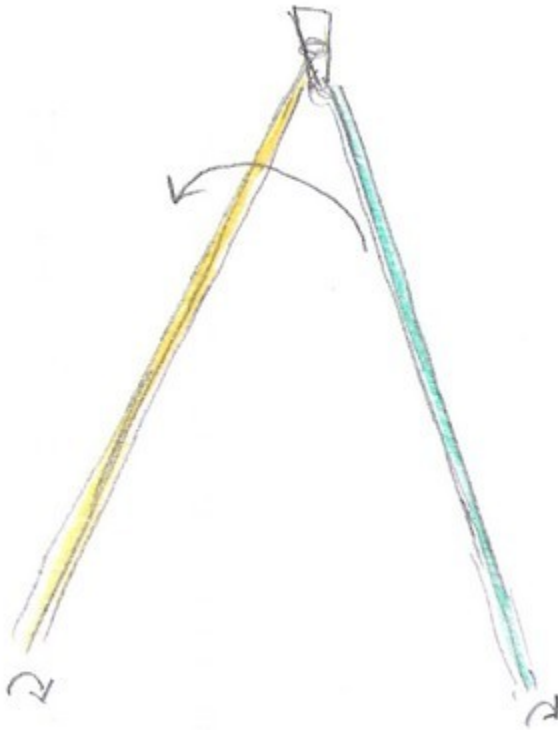


I then choose 2 different colors of B50 Dacron string material to use in the string. for this example we are using green and yellow. I use 12 strands for any bow up to 70lbs, 16 strands for 70-80lbs and I haven't made any strings for higher poundages.

I tie the first material (starting with green for this example.) off to one nail. I then make a loop around the other nail and back to the first. That makes 2 green strands of the string. Since we are making a 12 strand string, I need 3 wraps (or 6 strands) of each color. After making the 3rd wrap of green I tie it off with a couple of half hitches and then push the strands down the nails to be out of the way for the yellow string. I tie off the yellow and make 3 loops with it and tie it off again. Cut the spools of string loose and put them away.

Now cut all the strands loose from one nail. Keeping the green separate from the yellow, twist each group of strands clockwise until they are well twisted. they will be about 4-6 inches shorter than they were when you started at this point. You can twist one group at a time and then when twisted hold it in place by setting a weight on the end of it while you twist the second group.

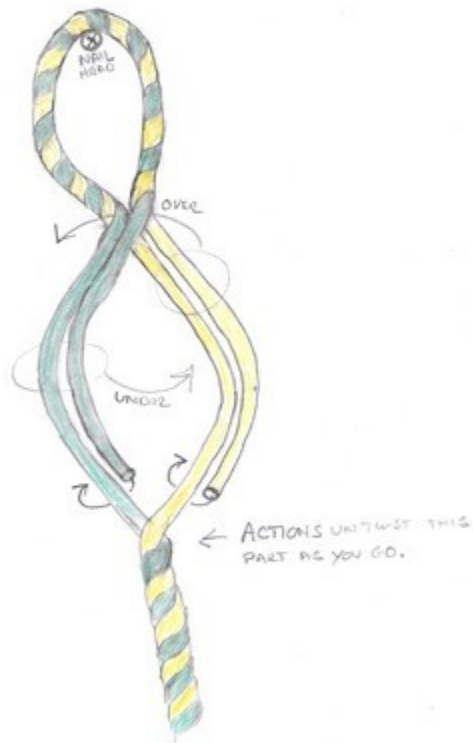
## Flemish Bowstring Tutorials



Once they are both twisted up, take one group in each hand and pulling against the nail they are still attached to, twist the two groups together counter clockwise. This is the time consuming part. As you twist you can spread the two group ends apart then let them come back together which will help the twists even out as they tighten up. Work the string until you are satisfied with the twist up to about 3 inches from the end.

Now make a loop with the twisted part of the string just the size you need for your bow nock by doubling the string back on itself. Put this loop over your nail so you can pull against it.

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Now untwist the portion of the string back from the loop until you can align up the untwisted ends. Just as you did before, twist all the green strands together and yellow strands together, clockwise in their individual groups. (there are now 12 strands of each color as you have them doubled.) Twist the two groups counter clockwise together. As you do this the main body of the string will be untwisting itself. Do this until you get past the ends of your doubled up strings. then let go and twist up the main sting. If all worked out correctly the whole string will now twist and tighten on itself.

Cut the other end of the string loose from the nail. leave your bow loop around the nail and use it to pull against. You may have to twist the individual groups a little and then twist up the pair to tighten up the strings overall twist. Remember it is the twist that keeps the bowstring together.

Make your next bow loop about equal to, or slightly shorter than the length of the two nocks on your bow. We can always shorten the string by twisting it later.



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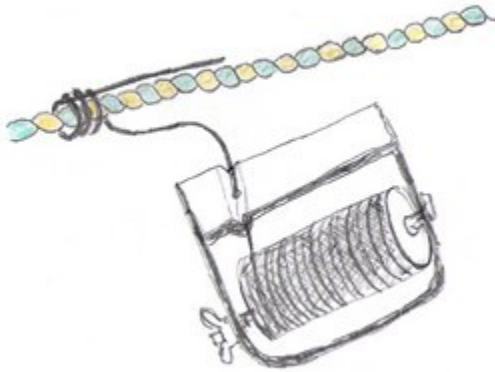
Make your loop the size you want and then wrap it around the nail again. Untwist the string enough to be able to match the colors up and twist them together. Once again twist up the 12 green and 12 yellow strands clockwise and then twist the two groups together counter clockwise. This process will be untwisting the main string as you go. Twist past the ends of your doubled up groups then let go and allow the string to twist itself up naturally.

Now put the sting on your bow. remove one end and twist it up tighter as needed to reach your desired brace height.

Rule of thumb is that it should be about as high or as with most of my bows, about 1/2" higher than my fist with my thumb up.

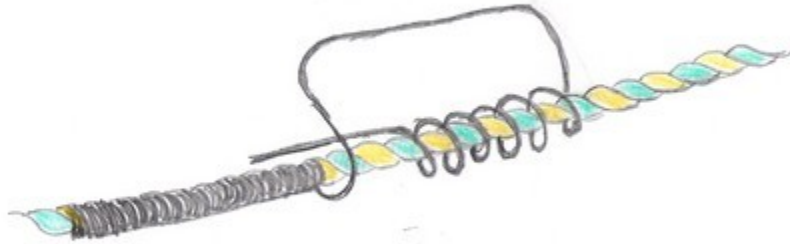
When you have it to your brace height then it is time to serve the string. I use a string server tool and braided serving string.

lay the end of the string along your new bowstring at about the lower end of your handle. start wrapping the serving back down over the end of the string keeping the serving tight. In this example we are working left to right.



This can take some time to. serve the string up past your knocking point by several inches. when you are about 1/2 inch from where you intend to stop, do two half hitches and then pull out about 1ft of string. cut it loose from the serving tool and then wrap it as shown.

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Holding a loop up with your left hand, wrap the serving accross the string then around the string under the right side of the loop, wrapping from the right side back twoards the left where your half hitches are until you have just an inch or two left of your serving string. Lay that last little bit up on your eariler serving then using the left side of the loop, continue your original serving. It will unwind the right side as you wind up the left side tightly. When you reach the end of the right side winding, pull the end of the string (which is now coming out from under your new twists) tight and your serving is now tied off cleanly. Trim the tail of the thread. Trim any tails that are now protruding from the string just below each knock loop and you are ready to go!  
You can now put a knocking point on your bowstring. I am sure somebody here can tell us how to tie one on. but i don't know that yet. I use a commercial metal knocking point clamped on with pliers.

Anybody who can add to this description feel free to do so.  
hope this is of use for some of you.  
Kirby

## MAKING A FLEMISH TWIST BOWSTRING

### #2

by Ron Harris

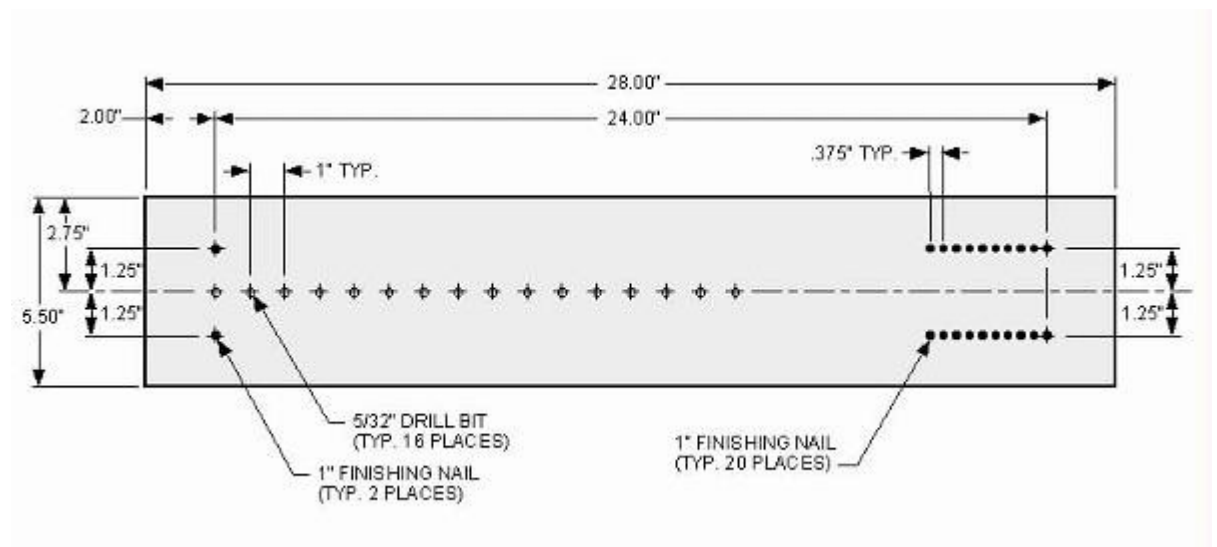
The techniques I use to make a Flemish Twist bowstring are not necessarily the only way to do it, but it works for me. Making a Flemish Twist string is relatively simple. It's sort of like tying your shoes--easy to do, but difficult to describe and a whole lot easier if someone shows you how.

The first thing you will need is a string making jig. For this you will need the following materials:

**A 1X6 pine board 28 inches long. It should be fairly straight and free of knots.**

**About 2 dozen 1 inch long finishing nails.**

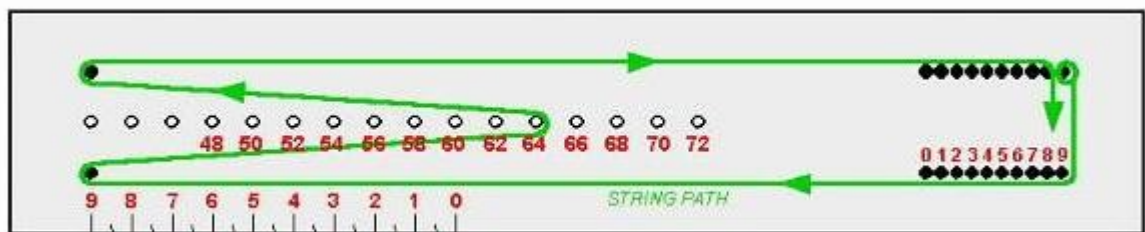
**One 10 penny common nail.**



Lay out the board dimensions as shown on Figure 1. Your measurements don't have to be precise, but try to follow them as closely as possible. When you have all the nail locations marked and the holes marked for the movable peg, go ahead and drill the holes for the peg. I use the 10 penny nail with the head cut off to a length of

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about 1 1/2 in. The 10 penny nail takes a 5/32 inch drill bit. You can substitute whatever you want for the peg, but make sure you drill the hole big enough so the peg can be easily removed. After you have drilled the holes for the peg, go ahead and drive a finishing nail about halfway into the board at each nail location shown. Next, use a permanent marker or ball point pen and mark the board as shown on Figure 2. You don't have to mark the string path I've shown, but I do just in case I forget which way to wind the strands on the jig.



Now you're ready to make the bowstring. For this you'll need the following materials:

**Dacron B-50 bowstring or other suitable material such as fast flight string. I recommend at least two different colors of string. It makes for a prettier string and is easier to keep track of what you're doing while making the string.**

**One cake of string makers wax. You can substitute beeswax but string makers wax has a rosin in it that is easier to work with.**

**A spool of monofilament or nylon serving line and a server.**

*These supplies can be ordered from most archery supply mail order companies or purchased at your local dealers.*

Next, you'll need to decide if you want to make a two ply or three ply string. A two ply string is made from two bundles of twisted strands while a three ply string uses three bundles. A two ply string is easier to

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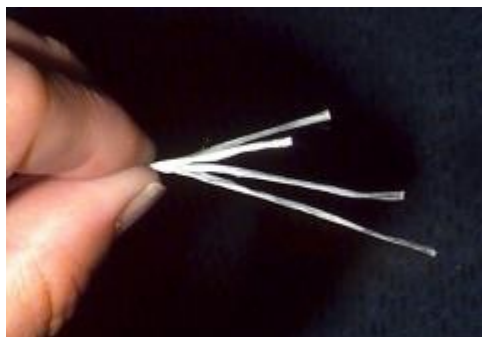
make and for this article I have chosen to illustrate the two ply process.

**how many strands do you need for your bowstring.**

<b>40 to 50 lb range</b>	<b>12 strands</b>
<b>50 to 70 lb range</b>	<b>14 strands</b>
<b>70 to 80 lb range</b>	<b>18 strands</b>

OK, lets say you have a 50 lb longbow, so we're going to make a 12 strand string. For a two ply string we'll need two bundles of 6 strands each or three bundles of 4 strands each for a three ply string. Grab you string jig and tie the end of the B-50 dacron string to the top left-hand nail as shown in Figure 2. If your bow is 64 inches long, put the movable peg in the hole marked 64 and start winding the strands onto the jig until you have 6 strands of string on the jig. Cut the strands with a sharp knife or razor blade right down the center line between the top nails.

Carefully pull the bundle off the jig making sure that the ends of the strings don't move. You'll notice that the ends of each strand is slightly shorter than the others as illustrated in Figure 3. Staggering the string ends helps to lock each strand in place as you make the bowstring loops. Set this bundle aside and repeat the process using a different color of B-50 dacron string.



Wax both ends of each string bundle for about 10 inches. You may have to warm the wax so that it will stick to the strings. Use a candle



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or alcohol burner. Thoroughly work the wax into the bundles.

Lay both bundles side by side so that the longest strand in each bundle is aligned with the other then lay the two bundles on the ruler you marked on your jig. Grasp both bundles about 7 inches back from the ends. Hold the bundles between your thumb and forefinger as shown in Figure 4.



Using your other hand, twist the top bundle six or seven times in a counterclockwise direction (twist away from your body). Now take the twisted bundle and rotate it over the top of the bottom bundle (towards your body). The bottom bundle is now on top and vice versa. See Figure 5. Keep repeating this twisting and rotating process until you have braided enough to form the loop for the top limb on your bow. The width of this loop will vary as does width of different bow limbs. The loop should be wide enough so that it will slide down the bow limb 5 or 6 inches when the bow is unstrung.

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Form the loop as shown in Figure 6. Make sure you align the bundles as shown (same color over same color). Grasp the bundles at the bottom of the loop and twist the two bundles of same color together. Figure 6 shows white twisted onto white forming one large white bundle and yellow twisted onto yellow forming one large yellow bundle.



Holding these two bundles between the thumb and forefinger, perform the same twisting and rotating process until the last tag end of the strings have been braided into the bow- string. Your finished loop should look like that shown in Figure 7.

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After finishing the top loop, separate both bundles all the way down to the bottom. Take your 7 inch measurement at the bottom of the bundles and repeat the whole process again just as you did when forming the top loop. When braiding the bottom loop you may have to stop occasionally to separate the bundles. The bottom loop has to be just wide enough to fit over the nocks on your bottom bow limb.

Rather than forming a permanent braided bottom loop you can also choose to just braid about the last 8 to 10 inches of the bottom bundles and tie a timber hitch for your bottom loop.

Now that you have completed the loops you will need to put a twist into the bowstring. Make sure you twist the bowstring in the same direction as your braids otherwise you will untwist the loops. Put the string on your bow and adjust for proper brace height. Allow the string to stretch for a day or two or go out and shoot the bow. Remember to keep adjusting the brace height by twisting or untwisting the string until all the stretch has been worked out of the string.

With your bow strung, mark the string about where you think your nocking point will be. Mark the string again about 2 inches above the nock point and 6 inches below the nock point. This 8 inch area of the string is where you will apply the monofilament serving. Put your spool of monofilament on the serving tool and pull a few inches of line out. Now is a good time to adjust the tension of the serving tool. You want the line to come off the server with some tension so that you get a tight wrap around the bowstring. Don't use too much tension or your serving could cut through the bowstring.

Separate the bowstring at either end of the serving area and insert about 1 inch of the monofilament line through the bowstring. Begin wrapping the monofilament around the bowstring while keeping the loose end under the serving wrap. Keep wrapping the monofilament around the bowstring until you are about 1/4 inch from the end of the

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serving area.

Cut a 10 to 12 inch strand of the B-50 string. Fold the string back to form a loop at one end. Lay the string on the bowstring with the loop facing towards the end of the limb. Wrap the monofilament line over the dacron string about 6 to 8 more times. Keep these last few wraps a little loose. When you get to the end of the serving area pull a couple of inches of monofilament off the spool and cut the line. Cut the line and insert the end of the monofilament through the loop in the dacron string. Grasp the loose ends of the dacron string and pull them back under the last few wraps of monofilament. This will lock the end of the monofilament under those last wraps.

Now that the bowstring is finished give it a good waxing with a quality bowstring wax. Rub the wax in thoroughly using a piece of scrap leather. Rub it hard and fast so that the wax gets hot from friction and flows into the strands of the bowstring.

**Now, go out and enjoy shooting your bow, equipped with a string created by your own hands.**