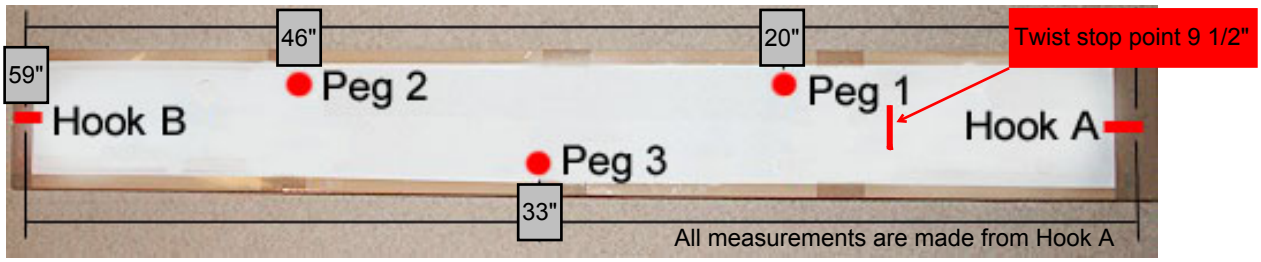
How to – Make a Furled Leader

There are a number of methods, tools and materials with which to construct a modern day furled leader. I use the following when demonstrating furled leaders and want to share with you what I believe to be a simple method to construct a smooth tapered leader.

The equipment you'll require to construct your Furled Leader



- Timber board (The length of which is determined by how long you want to make the leader) this example would require a board of a minimum of 4 1/2 feet. The board in the picture is actually 8 feet long but I'm only using about half of it based on where I've put **Hook A**. With the 10 foot board I can create a leader of circa 75 inches.
- 20mm holes drilled at Peg 1, 2 & 3 to suit 20mm x 2 inch long pegs.

- Bobbin with spool of Uni-thread 6/0.
- Curved Cup hook (**Hook B**).
- Angled Cup hook (**Hook A**).
- 2 x Paperclips.
- 3 x 2 inch long pegs.
- Latch picker.

- A 2 pin hair braider modified and attached to a Dremel like tool. The one pictured is a variable speed engraving multi tool with grip extension that makes leader tensioning a dream.

- This Whisk-O-Lait is nothing other than a battery operated coffee whisker with the coiled whisker removed and shaft angled to represent a hook.
- 3 or 4 ounce lead weight attached to paperclip.

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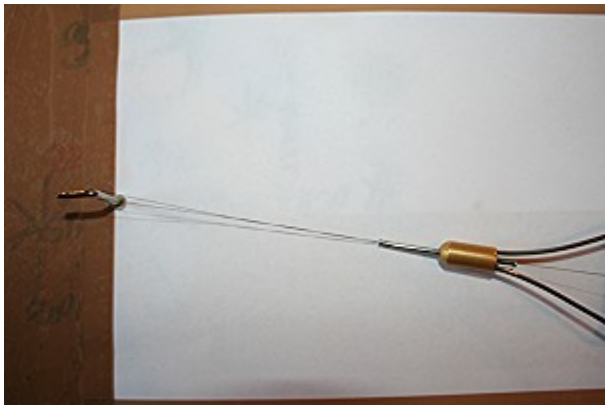
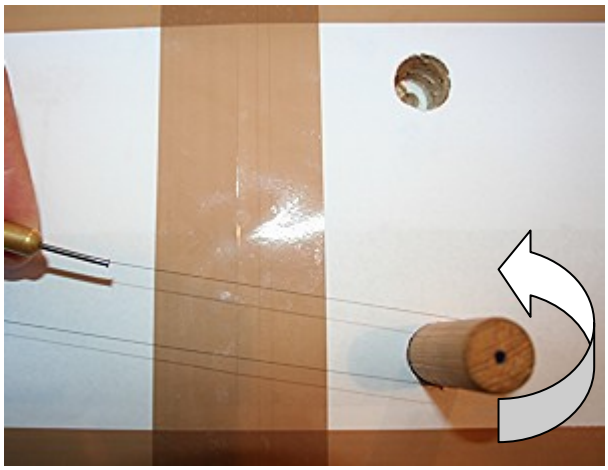


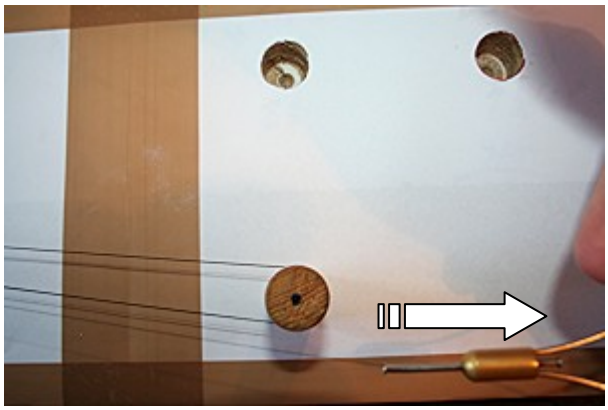
Note: As we construct this furled leader, keep referring to the leader board diagram on page 1 to guide you.

- We are going to contruct a leader of circa 48 inches in length suitable for a 2-5 weight fly line.
- Put your coloured thread into the bobbin and tie a big enough overhand knot so as to place over the cup **hook A** (This is the butt section of your leader)

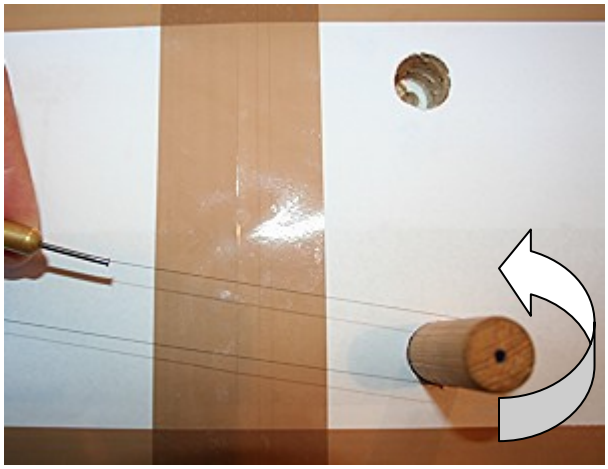


<u>Creating the loops</u>

- Make your way down the board to **Peg 1** and go around as in the diagram heading back to **Hook A.**



- Continue this looping process around **Peg 1** and **Hook A** 4 times. The 4th time being round **Hook A.**
- As you reach **Peg 1** for the 5th time go straight passed it now heading to **Peg 2.**



- Having reached **Peg 2**, come back round it heading now back to **Peg 1**

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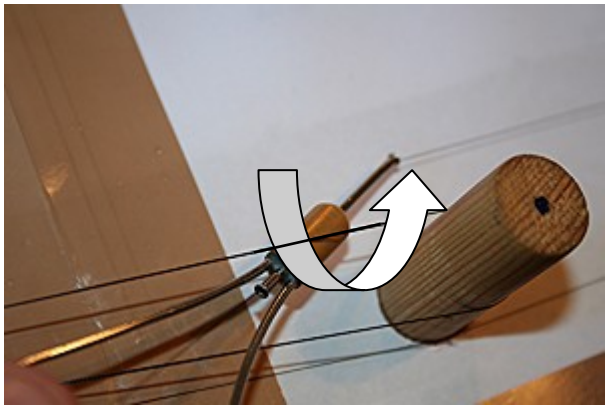
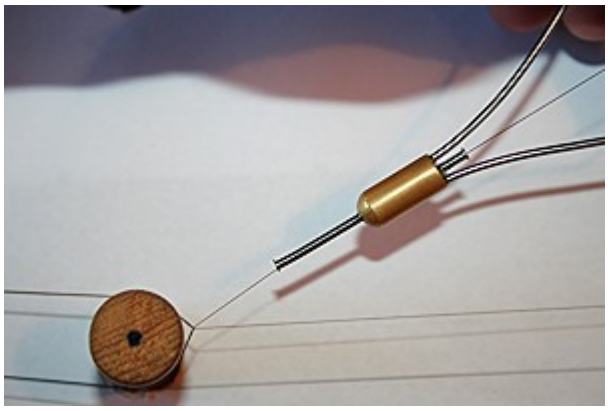
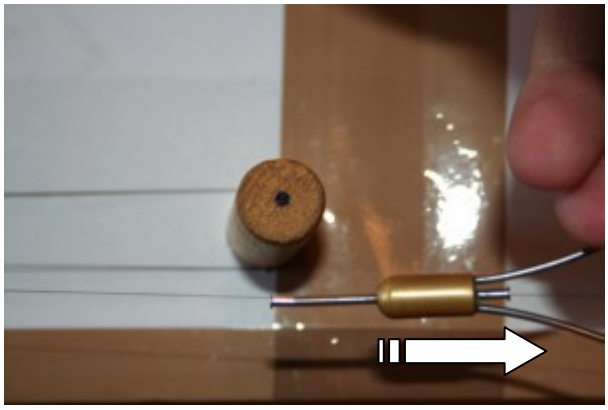


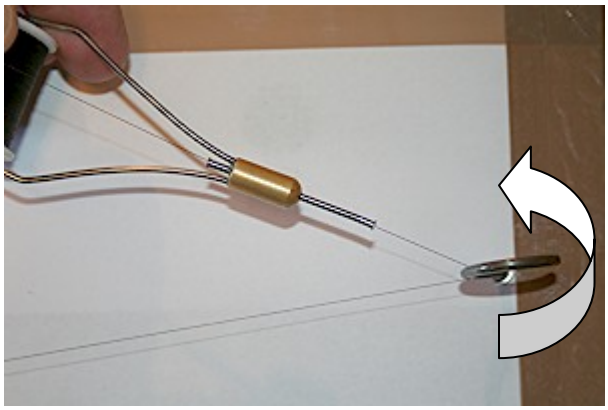
- This diagram shows you peg 1. Having come back from **Peg 2** ensure you pass your bobbin and thread through all of the previous loops created between **Peg 1** and **Hook A**.



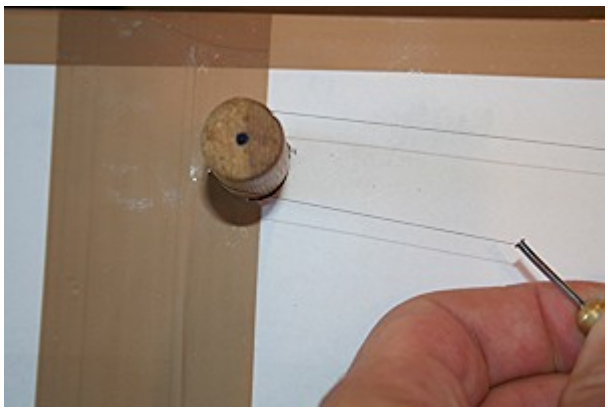
- Having gone through the pegs, bring the thread around the front of **Peg 1** as shown in this diagram.
- Do this 3 times between Peg 1 & Peg 2 ensuring you go through linking all the loops in the same way.



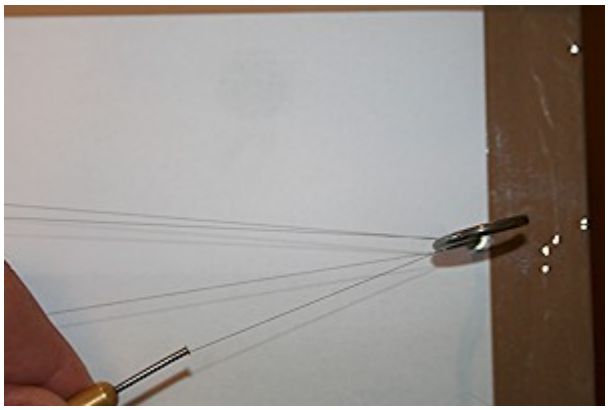
- Having returned to **Peg 1** for the 3rd time as you go back to **Peg 2**, go straight past it……



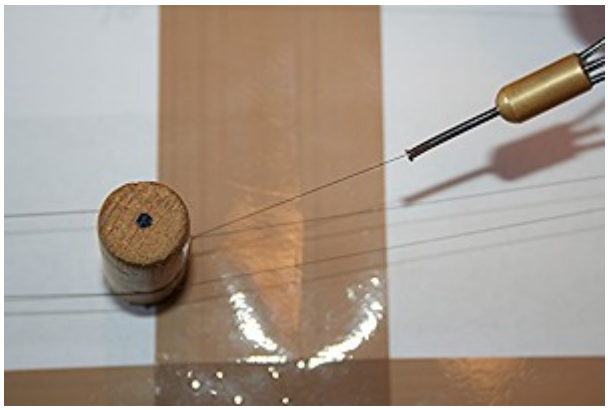
- Having passed **Peg 2** as above, go around the outside of the **Hook B** (This is the tip section of your leader) heading towards **Peg 3** on the other side of the board



- Go around **Peg 3** heading back towards **Hook B**.

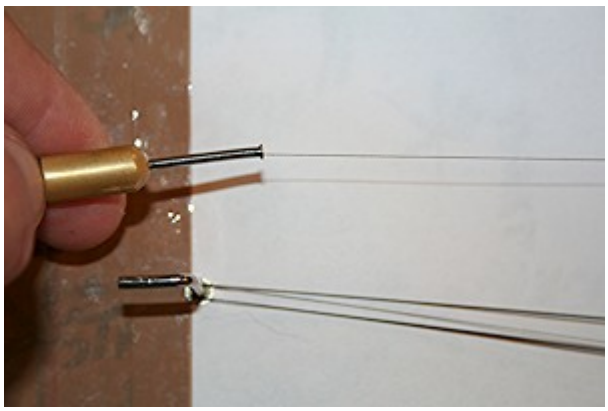


- Go back around the outside of **Hook B** towards **Peg 2**

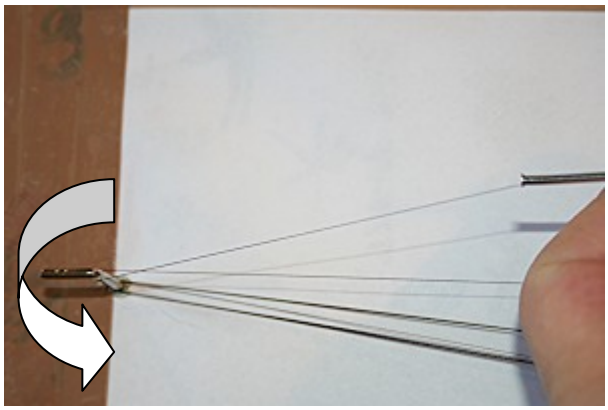


- Now link all the loops in the same way as you did at **Peg 1**

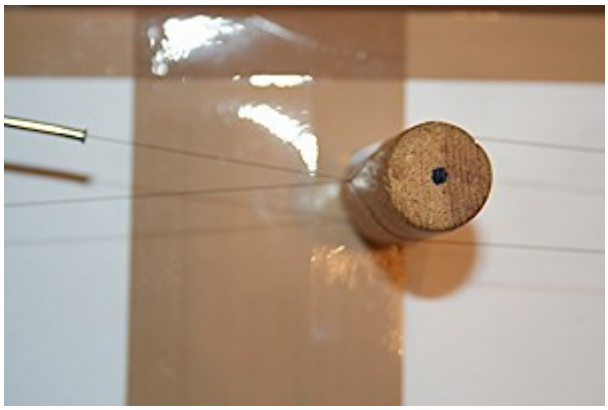
- Do this from **Peg 2** to **Peg 3** twice. Upon reaching **Peg 3** for the third time, go straight passed it and onto **Hook A** at the top of the board.



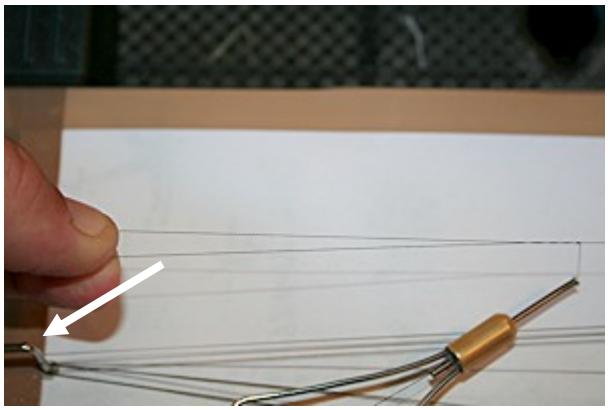
- Having passed **Peg 3**, you return to **Hook A** where it all started.



- Go around this hook and head back to **Peg 3**.

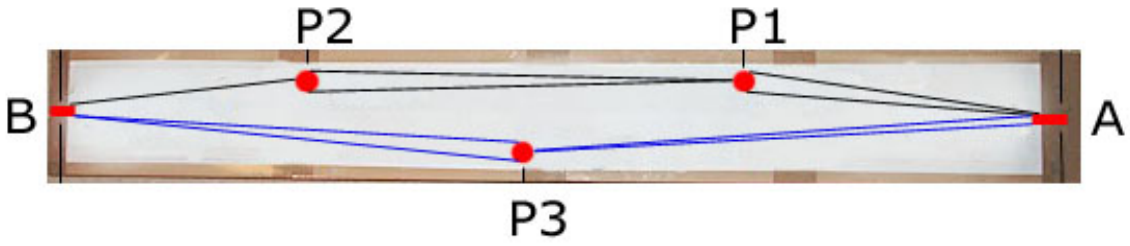


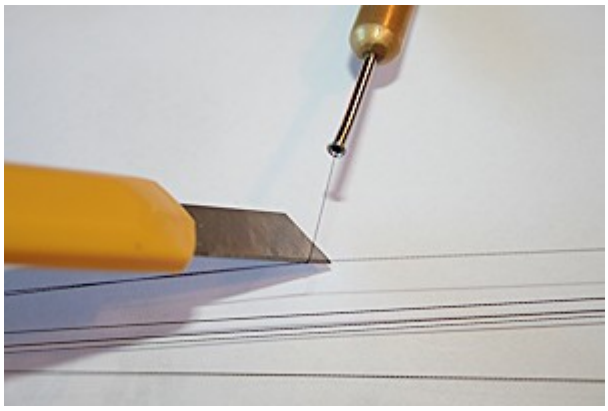
- Having reached **Peg 3** you now need to link the loops between this peg and **Hook A**, very much in the same way as you have between all previous pegs. You'll notice however that this time the link is visible going in the opposite direction to **Peg 1** & **Peg 2**



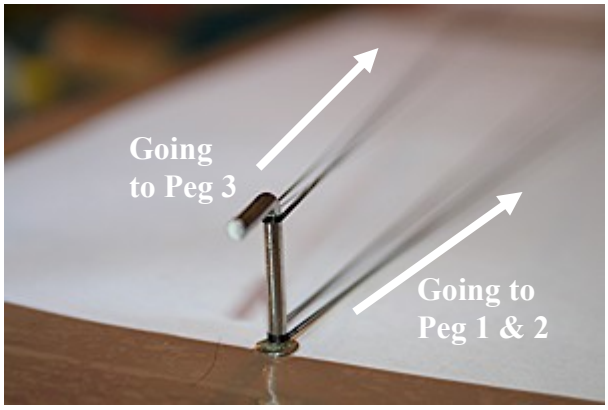
- Go around the **Hook A** and **Peg 3** three times, when approaching **Hook A** for the last time, make an overhand loop while under tension and put it over **Hook A** to complete the process.

Your completed board should look similar to the following in the way that the loops connect and link each peg and hook





- Now **carefully** trim the waste ends of the threads.



- Sets of loops as viewed fro **Hook A**

Important:

- You must keep a good degree of tension (Not too much) on the bobbin & thread through the looping and linking process.

- My demo board is placed on a light weight high bench for ease. Either place it on a low bench so you can work from a chair *(Whizzing about on wheels)* or on a high enough bench that when completing the looping and linking process it doesn't put too much stress on your back…because it will if you're not careful.

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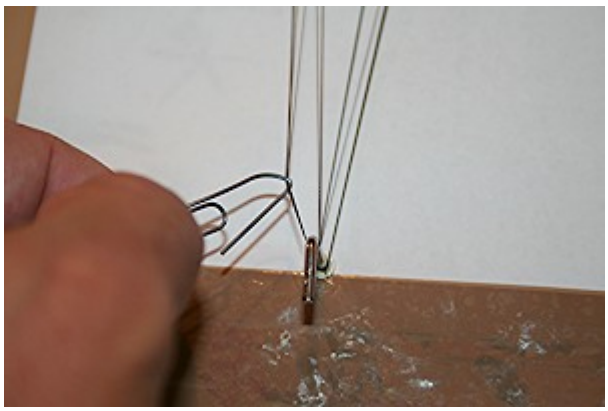
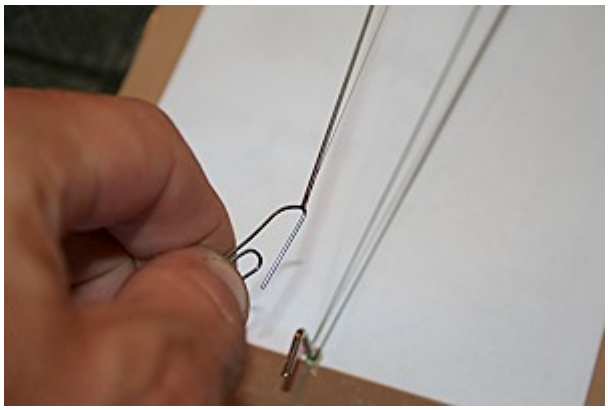
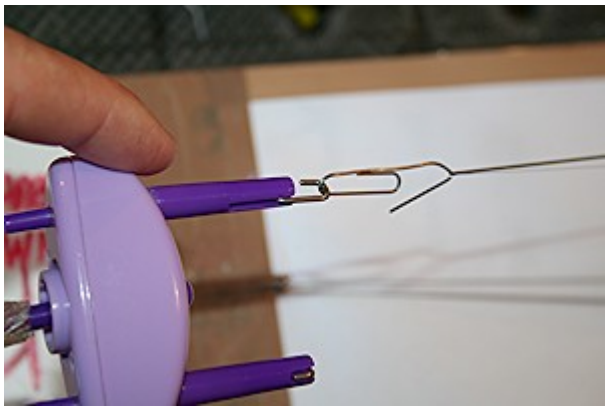


<u>Preparing to twist the leader</u>

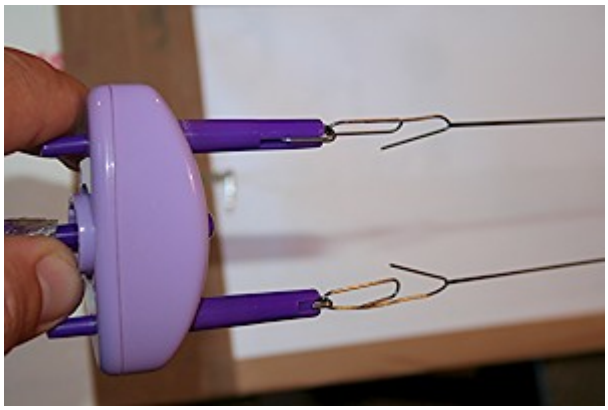
- Take a paperclip and gather all of the loops between **Hook A** and **Peg 3 <u>ONLY</u>**



- Remove the loops from **Hook A** once secured by the paperclip. You can rotate the hook for ease of removal if required but make sure the other loops don't spring off as they're under tension remember!

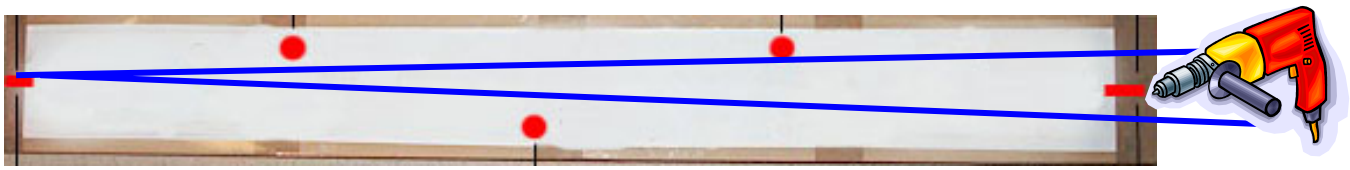


- Attach your paperclip to the braider as shown in the diagram.



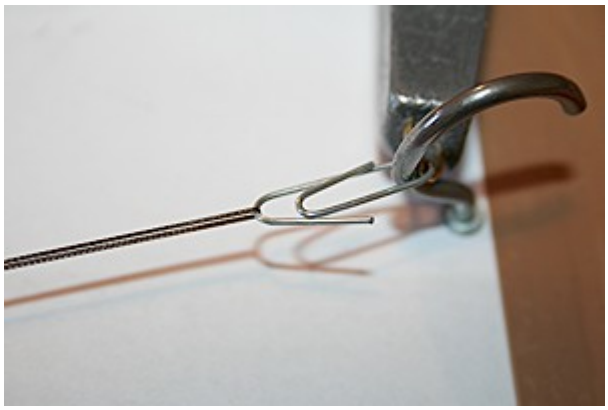
- With your second paperclip gather the remaining loops on **Hook A**, which are those going between the hook and **Peg 1** and place on the braider as shown in the diagram.
- Now lift all intersected loops from **Pegs 1, 2** & **3**.

The leader should now be secured and suspended between your braider and **Hook B**



- I need now to be at the tip end of the leader so have hung the braider **still under tension** (its own weight) to the side of my bench as in the diagram.

- Take your lead weight and with the attached paperclip gather all the loops at **Hook B**.



- Remove the secured loops and place the paperclip attached to the weight as shown back onto **Hook B**.

- Picking up your braider and regaining the tension, SWITCH ON and start twisting your leader. A variable speed tool better helps you control this process. Another reason for this superb tool is you'll see that it rotates each leg of the leader simultaneously so you have exactly the same number of twists in each.

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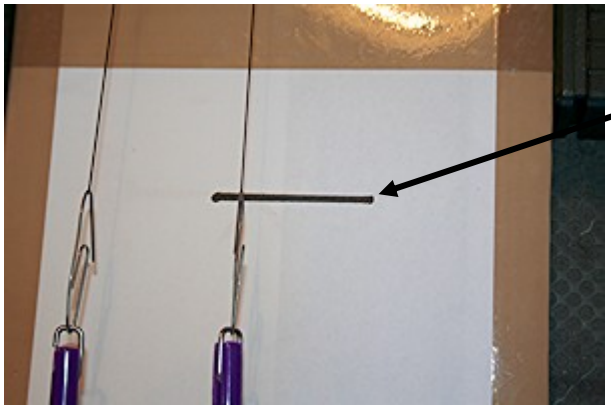
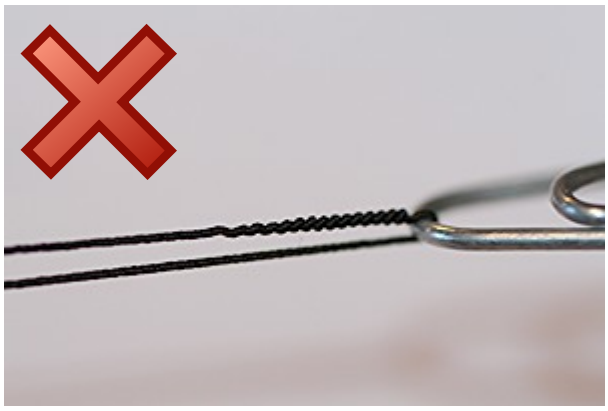


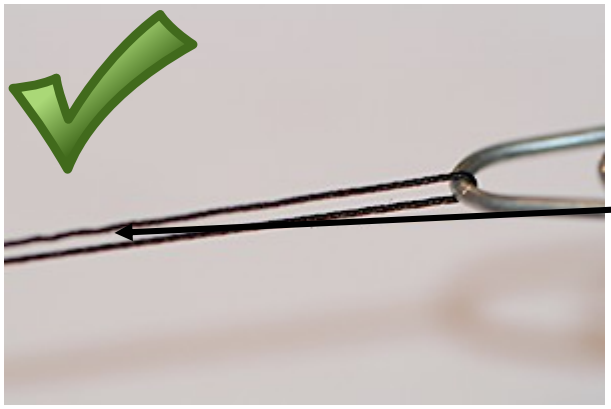
I now need to stop **HERE** at this line which is 9 1/2 inches from Hook A

- To determine where this stopping point is will require you to make a number of test leaders based on the tension you put in and the types of threads you'll use. *(**See paragraph at bottom of this page**)*



What happens if I twist too far?

- This is the tip at **Hook B** - This '**pig tailing**' as I call it is what happens if you go too far with the twisting.
- You won't recover this and will probably need to start again; to furl this will instill a horrible kink in the tip when finished. 'Seek perfection'



What should it look like?

- Just like the diagram.

It's just about to start 'pig tailing' This is perfect as it tells you you've totally optimized the twist within the thread.

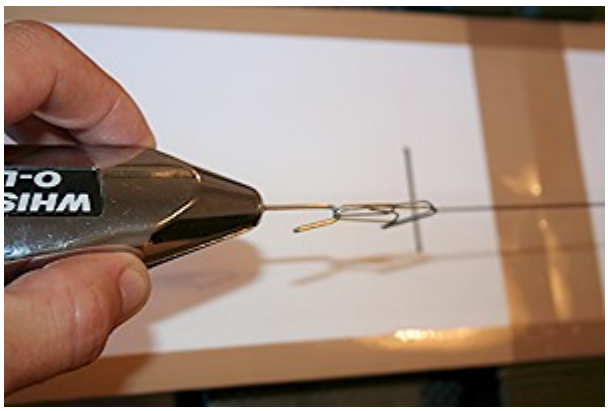
Don't relax - keep that tension!

In order to determine where you should stop the twisting process.

Once you've positioned your pegs, hooks and having created and linked your loops, start to twist your leader in the way prescribed above. Every now and then you need to take a look at the tip section (**Hook B**). Keep doing this until you are sure you've optimized the twist, but, just prior to the '**pig tailing**'.

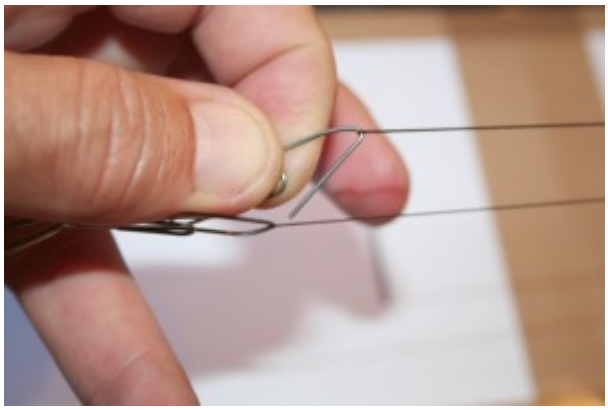
Now mark where your paperclips have stopped on the board. There's your future reference for future leaders of that type and length.

Don't despair it won't be long before you've cracked it!



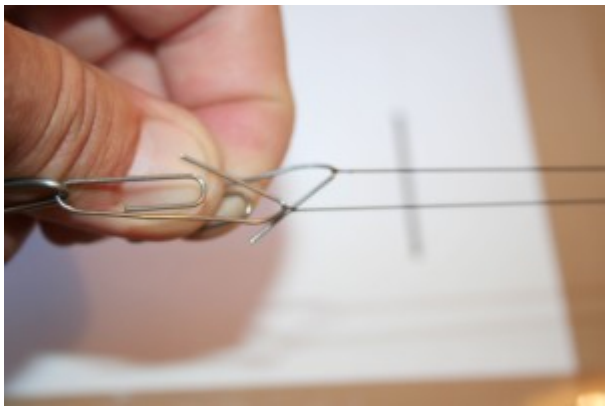
Preparing to furl the leader

- Now, keeping the tension transfer both paperclips from your twisting tool to your furling tool (The Whisk-O-Lait)

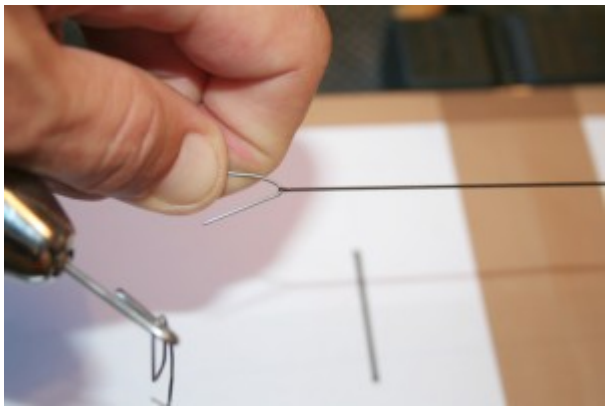


- Here comes the tricky bit – you now need to transfer one set of loops from one of the paperclips to the other.

  I would highly reccommend that you do this rather furl with both paperclips. You'll get a tighter furl and it will be easier to transfer the loops to the latch picker.



- With your 3 hands and 15 fingers, if you can, try and untwist the loop slightly on one of the paperclips and insert the other into it… like this



- Voila!… all on one paperclip

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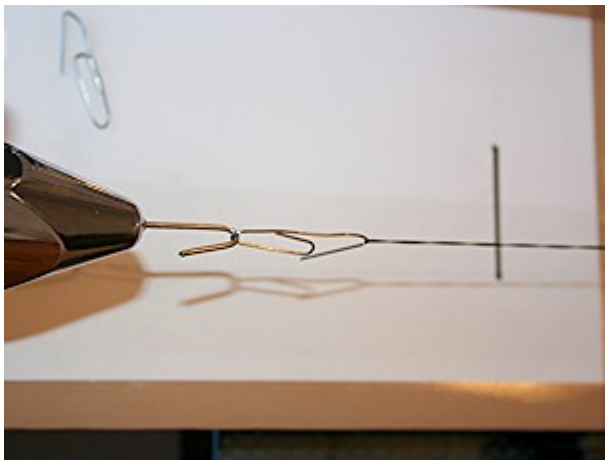
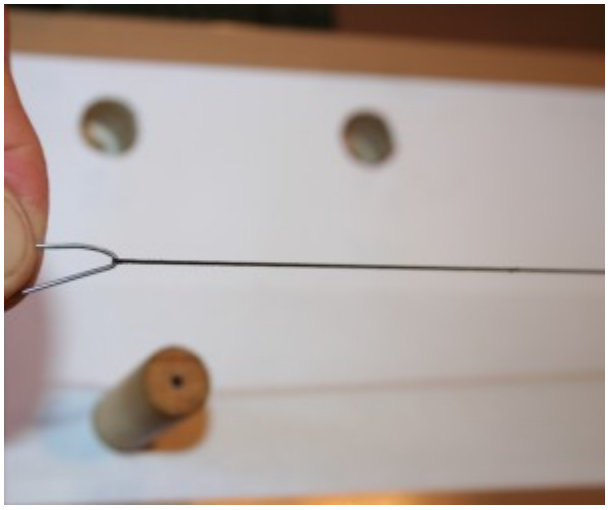
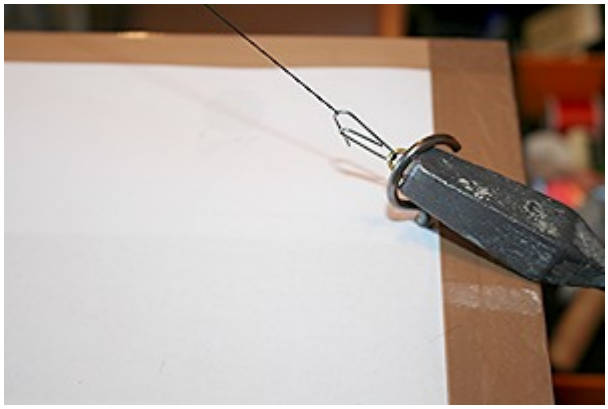


- Put the paperclip with all loops attached back onto your Whisk-O-Lait … and GO!
- Now watch it all furl.
- The great thing about this battery operated tool is that it puts only enough power into the furl without over furling and snapping it, all you do now and again is replace batteries.
  <u>Important point to note here</u>!
  Your furling tool must go in the opposite direction to the twisting tool (Which ever tools you use)



- Once furled, grip the paperclip and remove it from the furling tool (Whisk-O-Lait)



- Keeping it all under tension, remove the paperclip from **Hook B** as well as the weight that's attached

- Now suspend vertically and let the leader twist and untwist to a settling point.

  If you're making a leader taller than yourself, just stand on a chair or put a hook on a pole that allows you suspend it by reaching up!

- Hey presto! – Leader almost complete
- Having now settled you should have one end (the butt section) attached to the paperclip and the other end (the tip section) should have a small loop similar to the diameter of the paperclip it was attached to.
- Don't worry the leader will not untwist
- Now see the section within my furled leader forum under the How to section: **Making a Shorb Loop** This will help you finish the process and complete your leader.

Why, What & When

Q. What materials can I use to construct a leader?
A. Anything you please, just understand what you want the leader to do.

Q. How long can I make a leader?
A. How long a board can you find, just remember what you want to use it for. The leader I use most is approx 48 to 55 inches long, especially on rivers. For brooks I'll be down to 36 inches.

Q. What about tapers?
A. The length of your leader will be determined by where you put **Hook A** as **Hook B** in the main is always fixed. The taper is determined by where you position the pegs in between these hooks on either side of the board, you can use as many as you wish.
I would recommend a 3, 4 or 5 step taper (*The example is a 3 step taper*).

Q. Why do you use the braider instead of a drill?
A. The braider has spring loaded clips to aid tension. It's also very light when attached to the power tool extension and I can feel the process better, I found drills too heavy in the hand and seeing as though I make hundreds of these things, the lighter the better. However, this braider is totally useless unless you attach it to an electrical tool, its battery operated and has no guts otherwise.

Q. What about the whisker then – isn't it battery operated?
A. I use it for the same reason, very light and very fast. It's also not a problem that its battery operated; remember it's twisting in the direction the leader wants to naturally twist anyway so it's using very little power to get there.

Remember, the key is all about tapering.

- The butt of your furled leader should be equal too or thinner than the tip of your fly line.
- To increase the turn-over speed of your leader, increase and decrease quite dramatically the number of loops from one peg to another. Be careful though not to over do the step down to much as this will create week points at these intersections.
- To slow turnover down then elongate the distance between pegs and make less of a step down in the number of loops.

Now go have some fun …….. welcome to the furling family