

Back to Basics – Part 3

Winding and working with your bobbins

By Susan Roberts

I started thinking about this article six months ago, ever since I've been looking at my and my students' bobbins much more closely. Apologies in advance but I'm going to apply a bit of science and mathematics to the winding of bobbins – don't worry there is no algebra involved or messy science experiments.

Winding your bobbins seems the easiest of tasks to do but the way they are wound (including hitches) can make such a difference to your work and can affect tensioning.

Lots of lacemakers will wind thread along the whole length of the shank. I don't unless I am working a large piece where the threads will need replenishing. Think about walking on an icy path, there is often no grip and it is very easy to slip but when there is no ice there is good grip. In physics/mathematics this is known as friction (in other words how slippery a surface is). Think about your bobbins, they are deliberately made nice and smooth, much smoother than the surface of finished cloth areas in your lace and the threads the cloth area is made of. So thread will be more 'secure' and less likely to slip when wound on top of other threads; yes you have to start your winding on the shank but try and keep your thread near the top of the shank and wound over other threads.



Full shank wound, hitch can slip at the head

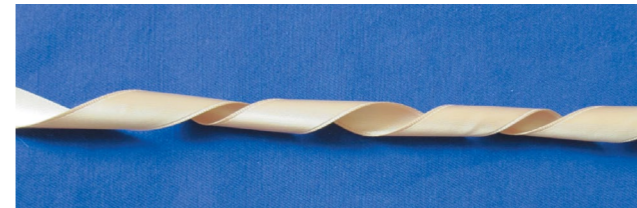
One of the things I've noticed looking at my students' bobbins is that the bobbins of those who wind along the whole length of the shank find that their bobbins slip more. There is a simple explanation for this; when the thread comes off the winding at the far end of the shank there is a couple of inches to the hitch at the top of the bobbin and not a lot to grip to in between (especially if they put their hitches on the top head of the bobbin). If I'm working with a lot of thread on the bobbins if my thread is getting near the bottom I do a quick rewind of a short length so the most recent winding is at the top of the bobbin.

Have you ever tried rewinding a full reel of thread and finding there always seems to be more than you started with? If you wind close and in a set pattern you will find that you can fit more thread on your bobbin. Yes it takes a bit more time and care when winding but it should reduce the number of joins you need to make in your work which has to be worth it.

The way you wind off the reel of thread and on to the bobbin is also important. Think of how the thread comes off the reel on a sewing machine, the reel twists round while the thread comes off. Where possible you should try and do the same when taking thread off a reel/ball



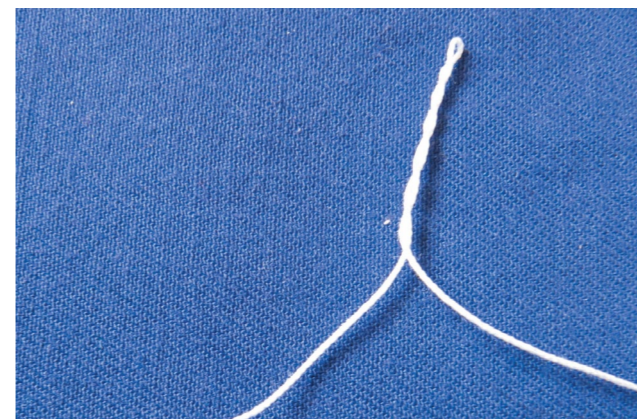
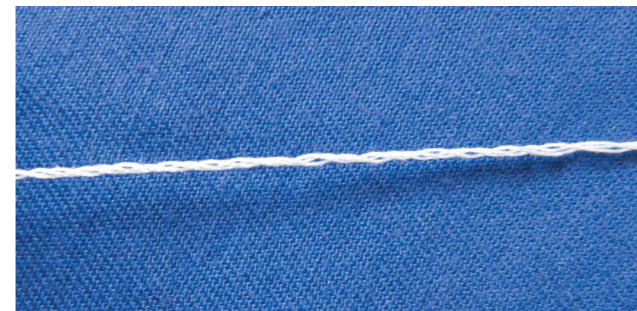
Bobbins wound full and half shank



Unwinding by pulling over the top changes the twists as shown in this piece of ribbon

to wind your bobbins. Why? Because any other way adds or removes twists from the thread. The easiest way to see this is with a piece of ribbon. If you wind it up keeping hold of the centre then pull from the other end see how it twists?

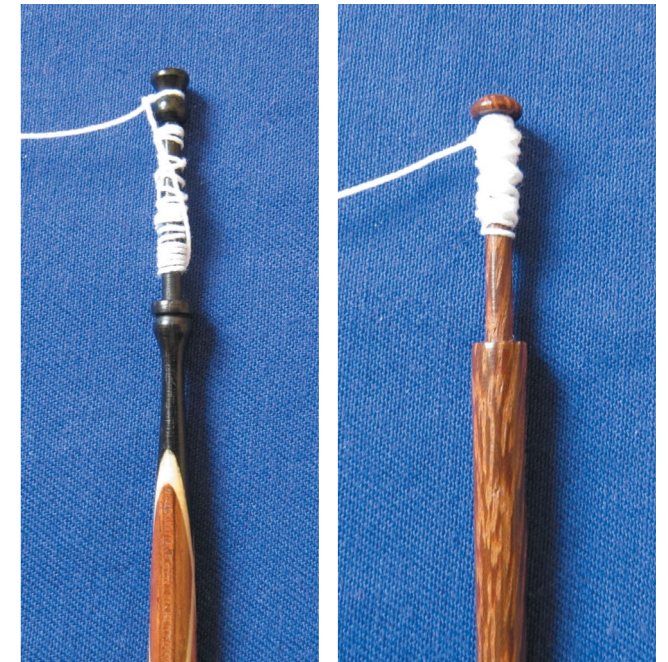
If you add extra twists you will find your threads twist when there is no tension on them. If you take off twists you weaken the thread as twisted threads get their strength from the twists.



**Top - removing twists causes the thread to split
Bottom - adding twists causes the thread to buckle when tension is taken off the threads**

The same principle applies when winding your bobbins; twist your bobbin to wind the thread on (as you would with a bobbin winder) rather than leaving the bobbin still and winding the thread around.

Midland bobbins are one of the few types with a ridge to hold the thread hitch at the top of the bobbin. There is no ridge in Honiton bobbins or Continentals that a lot of us use. You will find your hitches hold much better if you put your hitch at the top of the shank, on top of the thread that is already there rather than on the ridge.



**Left - Midlands bobbin with ridge to hold hitch
Right - Honiton bobbin with plain head**

I've seen three different hitches on my and my students' bobbins; these are shown below with any pros and cons.



Simplest hitch - easy to do but it does slip easily



***Twisted hitch (held open so the twist is visible)
- bit more difficult to work, holds well but allows
you to loosen off more thread from the bobbin
when you need it***



***Variation on the simple hitch with the thread from
the loop wrapped round the bobbin twice - bit
more difficult to work, holds well but a bit more
difficult to loosen off more thread from the bobbin
when you need it***

Whichever hitch you use it needs to be kept under tension to help prevent the hitch slipping. While this sounds simple the design of modern pillows can work against you.

For slippery worker threads some of my students have used tiny spring hair clips to stop worker threads unwinding off bobbins. They have to be the smallest size available and are more difficult to work with.



***Bobbin with sprung hair clip helping to hold the
thread***

The whole idea of the spangle on a bobbin is to give it weight and help tension the thread; (the bulb on continental bobbins works in the same way). This tensioning happened without us having to think about it most of the time on the 'original' domed and bolster pillows but the majority of new pillows these days are polystyrene and relatively flat so the spangle on Midlands bobbins doesn't help with tensioning in the way it used to. Propping your pillow at an angle brings back some of the natural tension that has been lost when working on a flat pillow.