

How to:



Chain with rock crystal pendant—Simon Lidwell

## Trichinopoly

Examples of this technique for making chains from wire are found throughout the 9<sup>th</sup>,

10<sup>th</sup> and 11<sup>th</sup> centuries across a wide range of Viking-influenced lands. I know of neck chains which have been found in the Western Isles of Scotland, Northern Finland, Fröjel Harbor Sweden, attached to a cross in the hoard found in Bonderup, Zealand from 11th Century and to a hammer in a hoard from Sejro island off N.W. Zealand.

The technique itself is very similar to naalbinding, and therefore it is perhaps unsurprising to find the technique used on the Birka textile finds to combine wire work with textiles. Chains constructed like this were also used to suspend items from brooches by women, and they have been found attached to needle cases.

This worksheet will show you how to make a simple chain; If you are learning this technique to use in contemporary jewellery making, then there are many variations to be explored like those using enamelled wires and beads to make bracelets, necklaces, earrings and so on.



Contemporary designs by Claire Watson www.bluekitycreations.co.uk



### Materials

0.4 to 0.8 mm diameter wire, silver or copper, about 20m for a neckchain or 8m for a suspension chain

For the drawplate, a block of hardwood 40mm by 150mm by 20mm OR flat section of bone 25mm by 80mm by 10 mm

### Tools

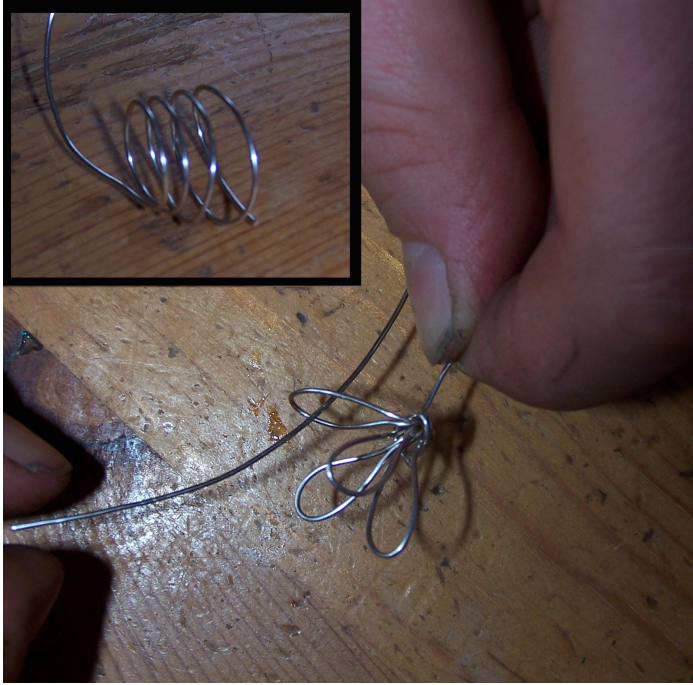
A pair of pliers

Wire cutters

Gloves if you are worried about your hands

Drill and drill bits of between 5mm and 15mm in about 2mm increments

Mandrel, or Allen key, or a nail of about 5mm diameter

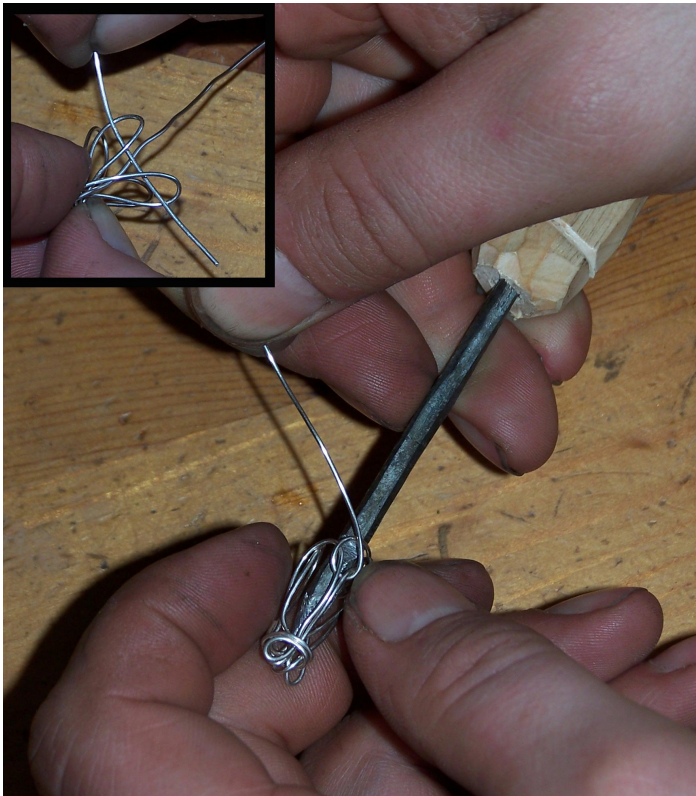


## Method

Cut a length of wire which is around half a metre long.

To start, form a 'flower' by making three or four loops in the end of the wire. Squash the loops to make them ovals and then hold the loops together by wrapping the short free end round them. Vary the diameter of the finished chain by choosing the number of loops you start with. You will also need to use a different diameter of mandrel for thicker wire or thin wire with many starting loops. This example in the pictures uses four loops

Squash the flower round the end of the mandrel, take the long free end and thread it through one of the loops from outside the flower into the centre where the mandrel is.



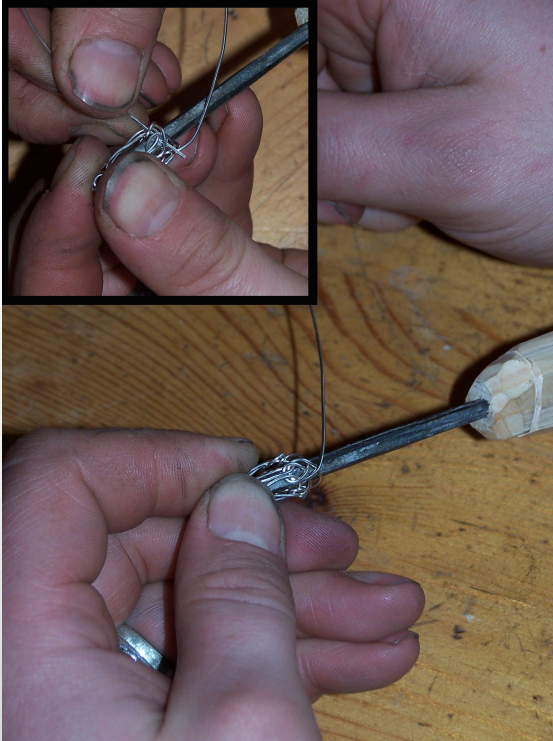
Now thread the free end through the next loop from the outside towards the centre and then back out of the previous loop. Pull the wire through both loops and bring the free end round again ready to go through the next loop.

Working round the flower, miss the loop you threaded the end into last time and thread it into the next loop. Again the wire goes from the outside towards the centre and back out of the preceding loop. You should begin to see a new layer of loops beginning to form.

Continue to work round the flower forming new loops. When you get back to where you started use the new loops to extend the chain in a spiral.

*Your work may look a bit messy at this stage, but don't worry too much about it. It is more important to get the idea of looping the wire right than it is to make a perfect start. You can always make the chain a bit longer and cut the start off. You will also find it easier to start the next chain once you have finished this one.*





Use the mandrel to keep the core of the chain hollow and in approximately the right shape.

Try to keep the loops evenly spaced. If you find that they are going squint you can get back on track by varying the tension in the next row of links. If you find that the gaps between the loops are too tight to thread the end through, you could use a needle or awl to force them open. Another method is to use a tapered mandrel of increasing diameter like the bone one in the photograph. The hollow centre of the chain can then be enlarged by pushing the mandrel further in and then drawing it out.



Once you reach the end of the first piece of wire you will need to join the next piece onto the chain. Do this by poking the end of the wire through as normal, but instead of bringing it back out of the preceding loop, leave the end in the centre of the chain. This makes a half loop. You can now trim the end of the wire if it is too long. Cut another length of wire and bend one end of it over into a U shape. Take this end and thread it through the loop where the last piece of wire would have emerged. The U shape should hook into the chain and anchor that end. Now take the free end and continue to poke it through the loops in the last but one row as if nothing had happened.

The loose ends are hidden in the core of the chain, and when it is finished it will be hard to see where the join was made.

Once the chain is three quarters of the length you want the finished chain to be it is time to use the drawplate. The amount by which the chain will lengthen in the next stage of the process is hard to predict. If you are unsure whether your chain will be long enough, it is better to continue as it is easier to make a long chain shorter than it is to add to a chain once it has been drawn. If you want to thread a reinforcing thong through the centre of the chain, it is easier to do this before you use the drawplate.



Start with the largest hole on the draw plate and pull the chain through it. If you poke the start of the chain through the hole and then thread the mandrel through the starting loops, this will give you a secure place to grip. Once the chain will run freely through a hole, move onto the next smaller one and do the same thing. You will usually use two or three holes. Pull the chain slowly and steadily, or else it may start to twist. As you pull the chain through the drawplate it becomes longer and more flexible, but of course reduces in diameter.

Cut off any messy ends to finish the ends of the chain. Take the free end and make a half loop, poking the wire through to the centre of the chain but not out again. If you then pull the end, the chain will close up by collapsing the last ring of loops. The free end can now be threaded through the suspension ring of a pendant, or wrapped back round the outside of the chain. If you have access to cast terminals they can be riveted onto the ends of the chain too. In order to conserve your precious metal you could start the chain by making the “flower” of initial loops out of copper wire. If you then make the chain out of silver wire, this starter piece can be discarded leaving an easy to finish off end made of silver wire.

#### Double “knit” and other tips

*The chain in these pictures has been made using the stitch described, but instead of each row linking to the row before a more solid design is achieved by linking to the last but one row.*

*For this start by making the flower and then the first row of new loops. Instead of threading the wire through the new row of loops this time, thread it through the original loops again. Once you have gone round three times you need to do something slightly different to form the fourth and all successive rows.*

*Instead of threading the free end through the original loops this time, use the loops in the second row. This is where a notch in the mandrel becomes particularly helpful. Turn the mandrel so that the notch lies under the section where you want to make your next loop. You can now poke the free end through the chain into the space below. If you find it difficult to get the end to come out through the preceding loop it might help you if you bend the end into an upturned hook. Now when you poke the end through the chain you can angle it until you see the end emerging from the previous loop.*

*Continue to add more rows, always threading the free end through the last but one row. You could also make a treble knit chain by reaching back two rows to make a very solid chain.*

