Getting Started: the fundamentals

**TOOLS**

The three basic pliers required are: round-nose pliers, flat-nose pliers and flush cutters. Add to these a chamois cloth (or jeweller’s cloth), ruler, masking tape, felt-tip pen, file, caliper, pocket knife and pin vise. These items are all affordable and some can be purchased from your local store but, for the right type and for better quality, it is recommended that you pick up the pliers, file, caliper and pin vise from a bead or jewellery craft store.

Making jewellery from wire does not require the use of solder, torches or acids. It is simply the ability to strategically manipulate the wire in such a way that you can make a beautiful ring/earrings/bangle/necklace/bracelet — whatever you can think of. And it’s fun! (For more information on what to look for in pliers and how to select them, refer to the feature story in the February, 2000 issue.)

It is important to note that, though you normally use pliers for leverage and ‘brute strength’, when making jewellery from wire, you need apply only enough pressure on the handle of your pliers to hold on to the wire. (Whatever pressure is being applied to the handle will be magnified on the tip of pliers by 10, 20, 30 times, etc.) If you apply too much pressure, you will end up with a tool mark on the wire even before you get started.

Contrary to what you might have thought, you control the wire by using your non-dominant hand — the hand that holds on to the wire — and through finger positioning. The best results are achieved when you remember to hold on to the wire as close as possible to the jaws of the pliers. While holding on to the wire, you will either turn the handles of the pliers — thus forcing the jaw(s) to shape the wire — or you can use your fingers to shape the wire around the jaw(s) to get the desired outcome.

**WIRE**

Your wire will come loosely coiled and will remember holding that shape. This is evident when you let out a short piece of it — let’s say a foot or two. A chamois (or jeweller’s cloth) is used to straighten it. Simply hold the coil in your non-dominant hand, with the protruding end between your finger and thumb. Use your dominant hand to hold the chamois between your first two fingers and thumb. Place the cloth onto the loose end right next to the coil and draw the cloth along the wire towards its end. You will need a firm touch without bending the wire. Repeat several times until that portion of the wire is straight. We suggest that beginners start with really short pieces — anywhere from six to eight inches.

The longer the wire, the harder it is to control. Learning to straighten your wire is the first step in this process; you will also learn to feel the temper of the wire and recognize how that will change as you work. You can order wire that is tempered from soft to spring hard, soft being 0 and the grades of hardness being 1#, 2#, 3#, 4#, etc. But at 4# hard, you are already at spring-hard wire. You should know that, as you work the wire, you will work-harden it. This means that you can change it simply by straightening it and manipulating it into the shape desired. The more you work it — and the smaller circumference you shape it — the quicker it becomes hard. So you can take a wire which is 0 and change it to 1# hard, 2# hard, 3# hard and, if you were to work it even more (all the way up to 4# hard), you could break it. That’s why wire-art jewellers do not buy wire that is harder than 2# hard (otherwise known as half-hard).

**TWISTING WIRE**

Understanding that wire hardens as you work explains the two different techniques used to twist wire. To twist a length of soft wire, place about 1/4-inch of one end into a pin vise and hold the other end with your flat-nose pliers. While keeping the wire straight and moving the two tools together in the same direction, roll the pin vise down the length of your thigh. Pick the pin vise up and repeat several times until you have the degree of twist desired. The wire will twist evenly along its entire length. (In effect, you have taken a soft wire and worked it to about a half-hard wire.)

However, starting with a 2# (half-) hard wire requires a different technique. Beginning at one end, slide your pin vise along the length of the wire, stopping about two inches from the other end. Tighten the vise and hold the tip of the (small) end with your flat-nose pliers. Twist the section between the tools by turning the vise until you achieve the degree of twist desired. Open the vise and slide it back along the wire about 1-1/2-inches, tighten the vise and then move the pliers over on top of the last few twists in the wire. Again, turn the vise until you have the same degree of twist between the two tools. Repeat this process along the entire length of the wire. Be careful not to over-twist the wire, as it may work-harden to spring hard and break.

**PRECIOUS METAL (SCRAPS)**

When working with any of the wires made from precious metals, keep your scraps in a container, because the precious-metal content can be sold back to the supplier for either a credit on your next order or a cash payment. This way you can give yourself permission to use the better-quality wire. Check with the supplier as to how much you would need to save before sending it to them.

**GAUGE SIZES**

Wire sizes range from 30 gauge through 10 gauge. The higher the gauge number, the thinner the wire. Wire is very versatile and, depending on the project, gauges can be substituted by either going up or down a size. Generally, the thinner gauges (28 and 30) are perfect for knitting, the medium ranges (20 to 22) work well for bevel settings, bindings, necklaces, chains and ear wires, while the thicker gauges (10 through 18 as well as 20) lend themselves nicely to work in jump rings.

For information on the properties of gold, gold-filled, silver and copper wire, please refer to feature stories in the September, October and November 1999 issues.

In addition to all this information, four earlier issues — January through April 1999 — of The Wire Artist Jeweller (known at that time as Wired) teach four beginners’ projects that step you through the fundamentals very carefully, with each lesson building on the one before it. Once you have worked your way through these four projects, you can then go on to the intermediate/advanced projects.

Like everything else you may do, the more often you do it, the better at it you become. So, go ahead and give yourself permission to practise and to make mistakes. Some of the most beautiful designs originated from a happy mistake!

— Helen Goga

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