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Since the publication of my last book, *Weaving Freeform Wire Jewelry* in the fall of 2013, I have been traveling across the US, conducting workshops in venues small and large, and discovering my love of teaching.

Trekking across the country, instructing various groups of students and being amid it all, I have watched the popularity of wire-weaving just explode in front of my eyes and the community of wire artists grow many-fold, both in size and sophistication. In the past few years, I have witnessed many incredible new wire artists emerge, each with their own unique style, and each more amazing than the next.

And I have observed, and also participated in, the advancement of new interpretations and applications of wire and wire-related techniques. One very exciting development in the jewelry arts is the cross-borrowing of techniques between different styles. Increasingly, wire artists are incorporating hot and additional cold techniques into their wire-woven jewelry, and the hot-techniques jewelers are adding woven elements to their soldered pieces.



KasKa &

A few years ago, I started collaborating with my amazing daughter, Katherine (or Kat), who is a silver-smithing jeweler, on developing workshop projects that combine the hot soldering and cold wire techniques.

Originally, Kat was the one who got me interested in jewelry arts many years ago, when she was still a child fascinated with beading. She was in high school when I discovered wire art and became serious about turning my love of jewelry-making into a real business. Kat and I became partners at that time, attending art shows and selling our work. When Kat went off to college and later when she started her adult life and got married, she continued to help with art shows, traveling with me whenever possible. When I started teaching at large venues, she became my indispensable assistant.

In the meantime, Kat was developing her own beautiful style of jewelry that was based mostly on fabrication and soldering techniques. And so, it felt like a natural progression for us to combine our two distinctive methods and create jewelry workshops based on both.

This book is an exploration of wire-weaving skills married with fabricating techniques. As many artists have already discovered, being able to combine these styles opens up a whole world of new design possibilities. In addition, when done right, soldering can be a quicker way of connecting elements than weaving, shortening the time needed to create a piece. This is especially important for artists who sell their work and want to keep the costs of production to a minimum.

Our goal here is not to teach every possible technique. There are countless resources out there that cover every aspect of soldering and other jewelry making skills. Rather, Kat and I tried to introduce the skills that are relatively simple to learn so that you can start using them fast and ones that are also versatile so that they can be used in numerous applications for many different results.

Kat and I are very excited to share our ideas with you and hope that you will find them helpful and inspiring during your jewelry making adventure. Enjoy!

Hello, and welcome everyone! I am Kat Firor Colque, and I am very excited to share this book with you. This is my first published book, after years of teaching around the country with my mother, Kaska Firor. Although I am now a metalsmith, this love of working with metals and various jewelry techniques has been with me since childhood. At the age of six, I learned basic seed beading and even taught myself bead weaving from a kit that my mother gifted me for a holiday.

My parents always exposed me and my siblings to many creative outlets, classes, and community offerings to explore art and music. This has greatly enriched my life and career. When I was twelve, my mother and I took a traditional wire class with a traveling artist. While I enjoyed the class, wire was not my jam, but my mother took to it. This experience led us to attend William Holland School of Lapidary Arts in Young Harris, GA, where I was introduced to the wide and amazingly versatile world of jewelry artforms.



Kat

After starting a business together with my mother, college took my time and attention for a few years. I chose to major in Illustration, because I have a deep love of drawing, and have been doing so since the day I could hold a crayon in my hand. Illustration is still the foundation of all of my artwork, including metalwork. You will often see visual stories told through illustrative designs with herbs I find in the woods, animals I encounter, and even dreams and mythology that have inspired me since I was a wild little one.

Although I have wandered into many forms of art, the world of jewelry was never far away. I still attended arts shows and assisted my mother's classes around the country. It has been a great adventure, and I love working with my mother and our fantastic students. They have all inspired me to continue learning and growing in my skills as a metalsmith.

In the last few years, it has been a natural transition to start designing classes together, using my mother's and my own skills in tandem. Our students have been able to create synergistic pieces, learning a range of weaving and basic metalsmith techniques that they can apply to their own work (while we all have a ton of fun!).

My hope is that this book will give inspiration to those who have wanted to wander, but feel like they might get lost—or don't know where to begin branching into other jewelry techniques. This book could be a starting point to venture into focused designs, a humble guide to take your hand in your next jewelry adventure.

STONE-SETTING MATERIALS

Here are a few options for displaying a cabochon or stone in a metal setting.

Bezel cups

Bezel cups are settings for the opaque cabochons we used in these projects. Commercially available cups are made for standard size cabochons, most commonly round and oval shapes, but also in square and some teardrop sizes. Bezel cups come in several different styles and are great time savers. The drawback to using them is that you are confined to certain shapes and sizes, which limit your design possibilities.

These are the sizes we found most readily available (measured in millimeters):

Round bezel cups: 2, 3, 4, 5, 6, 8, 10, 12, 14, 20, 25, 30

Oval bezel cups: 6x4, 8x6, 10x8, 12x10, 14x10, 16x12, 18x13, 25x18, 30x22, 40x30

Tube settings

Tube settings are short metal tubes with a step on the inside to support a stone. Traditionally used for faceted stones that are transparent, they are open on both ends to allow light to shine through the stones. These can also be used for small cabochons. Making custom tube settings is beyond the scope of this book. However, just like bezel cups, many standard sizes are available commercially. You can easily find these in round sizes from 2 to 12mm, and oval shape of the same sizes as oval bezel cups. Square and other shapes are also available.



Prong settings

Prong settings were traditionally made for faceted stones that come to a point on the underside. These settings are designed to hold a faceted stone suspended within its structure to protect the pointed end. The stone is secured with short wires (prongs) that are bend over the top of the stone to hold it in place. The prongs for these settings are soldered either to sheet metal or wire base that secures the stone from the bottom.

NOTE

The stones for commercial settings have to be calibrated (cut to a precise standard size)

Bezel wire

Bezel wire is a flat and thin strip of metal that is used for making bezels for cabochons. Bezel wires are available in many different patterns, from plain solid metal,

to cut-out filigree, to fancy sculpted designs. Learning how to use these wires to make your own bezels will give you freedom to create with stones of various shapes and sizes.

Solid strip bezel wire comes in several widths to accommodate cabochons of different thicknesses. These can also be trimmed or sanded down to the right size.

Gallery wire bezels are decorative strips, often with prong-like cut-outs at the top. These cannot be sanded down, but are able to come up much higher on the cabochon than the plain strip, without bunching up.

Step bezels have a built-in step on the inside that supports the bottom of the cabochon. It means that a bezel made with one of these strips does not need to be attached to a base to hold the stone in.



Metal texturing toolkit

Texturing hammers are designed to apply patterns and textures to the surface of metal. These hammers are available with many different designs.

Metal stamps, similar to texturing hammers, are designed to apply pattern to metal. These can be bought with many different images; animals, symbols, etc.

Chisels are used here just like stamps. These will create hard lines on metal. The sizes we use most often are 1/8", 3/8", 1", and 3" (3, 10, 25, and 76mm).

You will also need a **hammer** for striking stamps and chisels. You can use any brass hammer with a flat face.



Soldering toolkit

Torches with concentrated high heat flame are used in jewelry making to solder, melt, fuse, and anneal metal. There are many different types of torches that can be used for metalwork, and every artist has his/her own favorite setup. Beginner silversmiths often start with a hardware-store butane micro torch, and that is what most of the projects in this book can be made with. Make sure the torch you get heats up to at least 2000 degrees. BernzOmatic brand is a good choice that Kat uses. Blazer is a really good jeweler's quality micro torch that Kaska uses. Another good torch to have is a professional grade chef's torch, such as Sterno or Iwatani brands. These torches have larger flames that are great for beading wires and annealing. When you are ready for a more professional torch, you should do some research to see what kind will work best for you. We each have a set-up with the Little Smith Torch with disposable propane tanks and an oxygen generator. It is a good compromise if you want an oxygen torch, but are not ready for the big gas tanks.

Soldering blocks are heat-resistant surfaces to safely heat and solder metal. There are several different types of soldering blocks. For the project in this book, we will be using a hard Solderite Pad and a soft Vermiculate Pad.

Soldering aids are tools used for handling, moving, and holding pieces

in the process of soldering. Fine-tip **tweezers** are used to place and arrange small elements in preparation for soldering. **Soldering picks** are great for holding and adjusting elements during soldering. **Cross-locking tweezers** are designed to hold onto pieces without you having to squeeze the handles. They are great for holding pieces while soldering

or balling up wire ends. **Steel pins**, such as T-pins, are great for pinning elements down to a soldering block to prevent them from moving while soldering. **Steel binding wire** can bind elements that cannot be held together with other means while you solder them. Solder will not stick to steel. A **third hand** is a set-up of one or more pairs of tweezers attached to a base. These are used to hold pieces in a certain position, or at a specific angle while soldering, leaving both hands free to work. **Paintbrushes** are useful for applying flux or paste solder.



Wire-Woven Bails

One of the simplest and easiest ways to create a beautiful pendant with a cabochon as a focal point is to use a commercial bezel cup and add your own custom woven bail. Simply solder a wire or two to the back of the bezel, then shape and weave the bail. Alternatively, you can solder a loop to the back of the bezel, and shape and weave your bail as a separate piece to be added to the loop. There are many different bail designs that can be created with these simple techniques. Here are a few examples that I think you will find very useful.

— Kaska

ALL BAILS

Skills

- Soldering, p. 33
- Setting a cabochon, p. 36

Tools

- Weaving toolkit
- Soldering toolkit and supplies
- Stone setting toolkit
- Anvil and hammer
- Patina toolkit (optional)
- Polishing toolkit

SIMPLE WOVEN BAIL

Additional skills

- Elongated leaf, p. 24
- Over-under weave, p. 21

Additional tools

- 6 and 8mm dowels or bail-making pliers
- 40x30mm standard size oval bezel cup
- 40x30mm oval calibrated cabochon

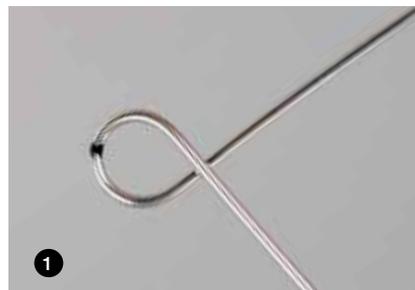
Materials

- 6" (15.2cm) 16-gauge dead-soft sterling silver round wire
- 5' (1.52m) 26-gauge dead-soft fine silver round wire

SIMPLE WOVEN BAIL

1 Cut a 6" (15.2cm) piece of 16-gauge wire. Mark the wire in the center.

2 Use the 6mm dowel to create a loop at the center of the wire (**1**).



3 With flatnose pliers, bend the wire ends at the point where they cross. Bend them to the outside until they are parallel to each other or slightly flared out. Make sure there is a narrow space between the wires at the top of the loop (**2**).

4 Hammer the loop to flatten it a bit.

5 Grasp across the bottom of the loop with your flatnose pliers, perpendicular to the wire ends and about a third of the way up the loop (**3**). Bend the bottom of the loop up slightly. Make sure the top



NOTE

You will need to ensure that you have made the middle of your shapes tight enough for your bezel cups to sit on top, and not fall inside the hole when you solder them!

7 Place the finished triquetras inside of the triangles. Check to make sure they fit up to the edges of the triangle walls, but with enough space for your weaving wire (**4**).

8 Set the cabochons. Pop in the stones and burnish the bezel cups.

9 Mark $\frac{1}{2}$ " (1.3cm) from each corner of both triangles on each side. This is meant as a guide to make sure that you start and end your woven corners in the same place to make your two sides match (**5**).

10 Cut 3' (91.4cm) of 26-gauge round copper wire. Leaving a 2–3" (5–7.6cm) tail, start a coil on the triangle to the left side of the triquetra loop. Coil about $\frac{1}{8}$ " (3mm).

11 After coiling, start weaving in your triquetra by making seven over-over weaves (**6**).

12 On the seventh weave, drop to coiling on your 12-gauge triquetra loop until you reach the $\frac{1}{2}$ " (13mm) mark on the other side. Make sure you are even with the weave you just made, and create the same over-over weave on the other side of your triquetra loop seven times. Finish by coiling $\frac{1}{8}$ " on the triangle.

NOTE

I like to make reference marks on each side to guide my weaving to make each corner even (**7**).

13 Repeat steps 10–12 on all corners of both sets of triangles and triquetras (**8**).

