# Loop-in-Loop Chain By Doña Mariana Francisco Summer University, June 2013

Loop-in-loop chain is an ancient jewelry piece found throughout all of history.

An extremely early "double" loop-in-loop fragment has been dated to between 1981 – 1802 BC! Varieties of single and double loop patterns as well as a "sailors" link pattern can be found throughout the time periods we examine within the society.

Loop-in-loop chains have been found in a variety of materials, from gold to iron. The trick is the ability to form a solid ring and then form that ring into the links. The process is still the same as it was hundreds of years ago. Wire ends are fused together with a flame. The ring is then manipulated with pliers, awls and perhaps a drawplate to achieve the desired look.

This handout provides a sampling of extant examples found mostly at the Walters Art Museum and the Metropolitan Museum of Art. There is also a complete list of supplies and resources needed to get started.







# **Extant Examples**



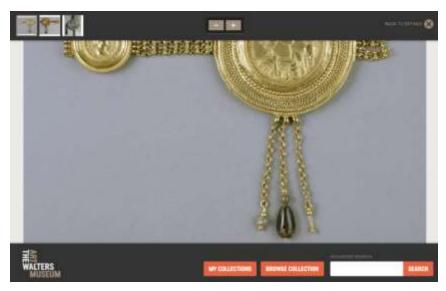
These earrings currently live in the Metropolitan Museum of Art. They are labeled as Byzantine from the 6<sup>th</sup> - 7<sup>th</sup> century. The note about them says that "earrings like these are found throughout the Byzantine world."



A portion of Earrings auctioned by Christies, labeled as Roman from the  $2^{nd}$  to  $3^{rd}$  century.



Lynx Pin at the Walters Museum. Dated to the  $1^{\mbox{\tiny s}}$  Century BC.



These are medallions and danglies from a belt section currently at the Walters Museum dated to the late 4<sup>th</sup> century.



A German Censor dated to 1498 currently at the Walters Art Museum.



Necklace with Head of Helios currently at the Walters Museum of Art dated to the 2<sup>nd</sup> century AD.

## **Supplies**

- **Fine Silver Wire.** This can be purchased in spools. Many of the patterns use 20gauge. A full troy ounce of fine silver wire yields quite a bit of length. It must be fine silver (or gold) because it will fuse to itself. Other materials can be used but you will have to use solder to complete your links.
- **Solderite Pad.** This is the surface you use when fusing the links. It gets very hot and should be supported by a trivet at least. This reflects the heat back onto the silver as it is being heated.
- Flame soldering torch. There are a variety of flame butane torches out there. The cheaper it is, the more frustrating it is. I have a \$60 one that I am more happy with than not. Someday I will have an oxygen/propane torch set-up.
- **Butane fuel.** For the torch. These can be purchased at the counter of your local convenience store/Walgreens/CVS.
- **Steel Block.** This handy gadget is used to transfer your links from the Solderite pad for quick cooling.
- **Wooden Dowel of appropriate diameter.** 7/16<sup>th</sup> inch dowel is recommended for many patterns. There is a ratio of recommended wire gauge to dowel diameter for different patterns and desired finished piece size.
- **Shop Shears.** Any heavy duty scissor type, that will cut FLUSH can be used. A flush cut end is important so the ends will meet and touch completely.

**Needlenose pliers.** Used for forming and shaping.

**Awl.** Used for forming and shaping.

Rotary Tumbler with steel shot (optional)

Classic Loop-in-Loop Chains Book. See resources

### **Directions:**

- 1. Wrap the silver wire tightly around the wooden dowel.
- 2. Cut the coil to form "jump rings."
- 3. Fuse these rings until solid. Be careful because it is a quick process.
- 4. Using the needlenose pliers, pull the ring into a long oval.
- 5. Fold the ends over to touch. Form the link as the pattern you chose directs.
- 6. Finish as appropriate for the project.
- 7. Clean your chain by tumbling in a rotary tumbler with mini steel shot.

A great video of the process can be found at the Rio Grande website. When at <a href="https://www.riogrande.com">www.riogrande.com</a> do a search for loop chain and go to the video learning section.

### References / Resources

BC Chain Fragment. Metropolitan Museum of Art.

http://www.metmuseum.org/Collections/search-the-

collections/100013489?rpp=60&pg=1&ao=on&ft=chain&pos=42

Belt Section with Medallions. Walters Art Museum <a href="http://art.thewalters.org/detail/27951/belt-">http://art.thewalters.org/detail/27951/belt-</a>

section-with-medallions-of-constantius-ii-and-faustina/

Byzantine Earrings. Metropolitan Museum of Art.

http://www.metmuseum.org/Collections/search-the-collections/170003935

German Censor. Walters Art Museum http://art.thewalters.org/detail/9570/censer/

Lynx Pin. Walters Art Museum. <a href="http://art.thewalters.org/detail/9557/pin-with-lynx-head/">http://art.thewalters.org/detail/9557/pin-with-lynx-head/</a>

Necklace with Head of Helios. Walters Art Museum

http://art.thewalters.org/detail/35425/necklace-with-head-of-helios-or-medusa/

Roman Earrings sold by Christie's.

http://www.christies.com/lotfinder/LotDetailsPrintable.aspx?intObjectID=5628146

\*

Rio Grande Supply. You'll want an account with this supplier. They have all you need.

Video of loop-in-loop chain: <a href="http://www.riogrande.com/Content/loop-in-loop-chain-VID-psd?Pos=3">http://www.riogrande.com/Content/loop-in-loop-chain-VID-psd?Pos=3</a>

Bone, Elizabeth. Silversmithing for jewelry makers: a handbook of techniques and surface treatments. Loveland, CO: Interweave Press, 2011.

Campbell, Marian. Medieval jewellery in Europe 1100-1500. London: V&A, 2009.

Hawthorne, John G., and Cyril Stanley Smith. *On divers arts: the foremost medieval treatise on painting, glassmaking, and metalwork.* New York: Dover Publications, 1979.

Stark, Jean Reist and Josephine Reist Smith. Classical loop-in-loop chains & their derivatives. Portland: Brynmorgen Press, 1999