

NEEDLE TIDBITS –a brief history

Ever wondered about the origin of needles? Used in almost every beading project, for everyday sewing and embroidery, doll making and many other purposes, most of us just take them for granted.

Because of their size and material, not many needles have lasted through the centuries but there have been some incredible finds. In 2018, a needle was found in a Siberian cave that was thought to be over 50,000 years old! It was fashioned from a bird bone and made by a sub species of humans. A needle of the same age was also discovered in Africa. Needles made of bone and ivory and known to be over 40,000 years old have been found in Russia, China, and Slovenia. While some of the early needles had eyes, many used grooves to hold fibres or sinew and acted like an awl to pierce hides.

Metal needles were in use around 4000 BC and were made of copper, iron or bronze. By 900 AD, reasonably good quality steel needles had been developed in China. In that period, gold needles were also made. Greater sophistication in needle production occurred in the Islamic world and then expertise reached Spain and Germany. Records indicate that German cities had needlemakers' guilds in the fourteenth century. The next big development was attributed to Leonardo da Vinci in 1496. He developed a method of making better needle points than had previously been possible.

England has had a longstanding reputation for quality needles. It was an Islamic Spanish refugee who took his skills to London in the early 1500's. There seems to have been a great deal of secrecy in the development of fine needles. Because of their scarcity, they were considered valuable and were carried in a special needle case attached to a woman's belt. Sometimes the needles were made of silver and gold so were even more valuable.

Redditch, England became the centre of needle production during the seventeenth century and remains a needle production centre to this day. It is home to the John James Company, well known for the production of quality needles. The Forge Mill Museum in Redditch has showcases the production of needles. On their website they have these interesting facts:

- In 1850, needles could be exchanged for a wife in Sudan.
- North American Indians bartered land for packets of needles.
- At the turn of the century, Redditch was the undisputed capital of needle making in the world. There is a story that when the Japanese commenced making needles they named a suburb of Tokyo 'Redditch' so that they could legitimately print 'Made in Redditch' on the needle packets!

The basics of needle manufacturing calls for heating steel, shaping it into a cylinder, drawing it through a series of dies to get the desired gauge, cutting it into needle lengths, piercing an eye put into one end which required several steps and then sharpening the other end with a file. This was followed by a hardening process and then polishing. Over time, adaptations were made to design specialty needles to make them more efficient for various end purposes. Take a look at the John James website to be awed by the variety.

Overtime other countries have developed a needle making industry with varying degrees of quality. In today's market, many find that the best quality needles are sourced in Japan but not all Japanese needles are created equal.

There are references to a Japanese needle industry around 300 years ago. Manufacturing was concentrated in the Hiroshima domain where the raw materials for iron were concentrated. After the Second World War, a number of artisans were brought together to produce Tulip brand needles. Tulip needles go through a manufacturing process of 30 steps and the process has been refined over the 3 centuries. Today the company prides itself on the production of very high quality needles having a somewhat larger needle eye with a smooth surface inside and out. There is enough flex in the strong body but the needles are resistant to bending and breaking. And they have a sharp point. Tulip needles are polished lengthwise which results in the needle being easier to pull and therefore causes less hand fatigue. Finally the points are sharp but slightly rounded so they don't pierce threads already in place. The more sophisticated manufacturing process means they are more expensive but they also last longer.

If you are a beader, all of the above relates to "hard" needles. Hard beading needles are used with seed beads and when stitching any beads onto fabric. If one is stringing gemstone beads or pearls, twisted steel needles are used. These come in several sizes and are designed with a large eye hole to make them easier to thread, but the eye hole can collapse to go through the drill hole of the bead if necessary. Hard needles usually can be used many times whereas twisted steel needles are generally single use.

What are the conclusions a beader should draw from all of this?

1. Choose the type of needle appropriate for your endeavour: twisted steel for gemstones and pearls or hard needles when working with seed beads and the like.
2. Think about the size: diameter and length. The industry offers a choice for a reason.
3. Quality affects performance and price. Tulip needles are much more expensive than many others but for the most part they last longer and one is less easily fatigued when using them. Lower quality needles can warp or break easily but are less expensive.

Many creative people advise using the best quality tools they can because it makes a great deal of difference in the outcome and your enjoyment of creating. The choice is yours. Happy beading!

For more information about needles, check these web sites:

<https://www.forgemill.org.uk/web/>

<https://www.jjneedles.com/>

<https://en.tulip-japan.co.jp/catalog/>

<http://www.coulthart.com/avery/History> of a needle by Edgar Bartleet