

TECHNIQUES

The Working Environment by Liz Almond

Part 3 Needles



This series of pdfs will consider different aspects of equipment available with tips and ideas to make stitching easier!

Happy stitching,

Liz

www.blackworkjourney.co.uk

Techniques

In Praise of the Needle!

*"In the rhythm of the needles,
there is music for the soul."*

Anon.

History

Of all the tools in a needlewoman's workbox, none is so undervalued as the humble needle, whose origin dates back to the Stone Age and is probably one of the oldest tools in the history of man. The modern equivalent is far removed from a bone splinter shaped by a piece of flint!

The earliest metal needles date from the Bronze and Iron ages and over the years iron, bronze, gold and silver have all been used to manufacture needles. Fine needles, probably made of iron, have been in existence since the 11th century when the famous Bayeaux Tapestry depicting the conquest of England was produced. However, towards the end of the 15th century, the manufacture of steel, led to the production of stronger and more flexible needles and in England a thriving needle industry developed which continues today through companies such as John James whose products are now used worldwide.

(See www.jjneedles.com)

Because needles were hand-made and expensive, they became highly prized and pin cushions and needle cases became essential requirement to safeguard these precious tools of the trade.



Fig.1 Victorian beaded pin cushion, Hughenden Manor, Buckinghamshire, U.K.

Choosing the right needle for the job

Whilst there are needles for every purpose, I have concentrated in this article, on the needles most commonly used by the embroiderer and I hope you will find my comments helpful for the particular project you have in mind.

All needles have an eye and a point, but there are variations in length, width, eyes and points egg. ball, blunt, sharp and those designed for specific purposes. Within a project, several different types of needle may be required or, the same needle in different sizes. For example, a cross stitch project may use both tapestry needles Nos. 24 and 26.

As a guide, the shaft of the needle should be the same thickness as the thread being used and the higher the needle number, the finer the needle.

Use a needle fine enough to pass the thread through the fabric without distorting it and yet large enough to hold the thread without fraying. If you are working cross stitch on 14 psi Aida you should use a No.24 needle, but if you are working on 16 or 18 psi Aida, you should use a No.26. A No.26 tapestry needle is finer than a No.24. Remember, too much thread in the needle eye and it may break!

Finer fabrics require finer needles.

Use the needle guide below to select the correct needle for the job.

Needle guide

Needles can be divided into groups according to their length, width, point, eye, and purpose. The most common groups used by the embroiderer are:

Sharps

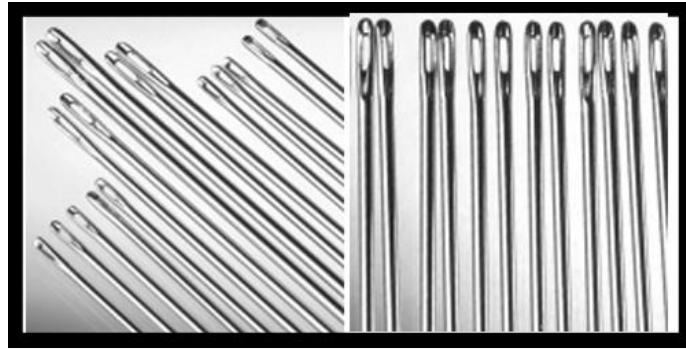


Fig.2 Regular and varied sharps

These are general purpose hand sewing needles. They have a round eye, a sharp point and are of medium length and range in size from 2-12 which is the finest.

Sizes 2, 3 and 4 are used for medium to heavy fabrics

Sizes 5, 6, 7, 8, 9 and 10 are used for light to medium fabrics

Sizes 11 and 12 are used for fine fabrics and delicate stitches

Suitable for bullion knots in Brazilian embroidery.

Between or quilting needles



Fig.3 Between or quilting needles

They are fine, shorter in length with a round eye and sharp point. (Note: I use them as an alternative to beading needles as they pass comfortably through most beads and are much easier to thread and control!)

Sizes range from 5 to 12.

Tapestry

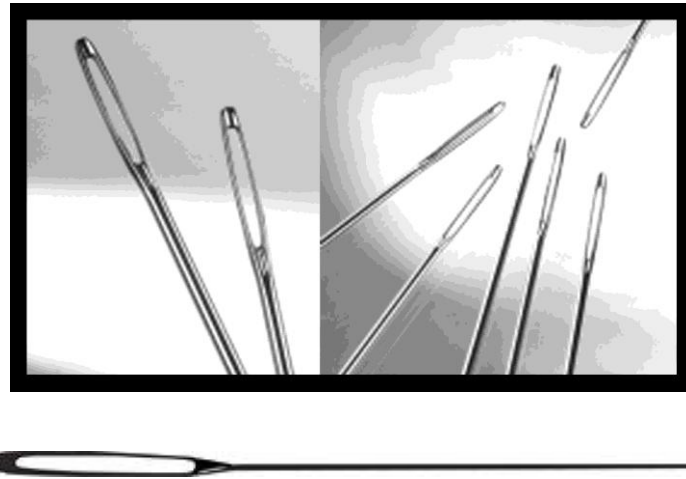


Fig.4 Tapestry needles

These needles have a large eye and a blunt round point. They are used for a variety of techniques ranging from tapestry to blackwork, cross stitch, hardanger, pulled and drawn thread work on evenweave fabrics, Aida, petit point, canvas work, needle weaving and shadow work.

The long eye of this needle is designed to hold several strands of thread or wool which pass easily through the fabric without splitting the material.

Sizes 13, 14 are used for stitching on Binca or 6 or 11 psi Aida fabric.

Sizes 16, 18, and 20 are used for tapestry

Sizes 22, 24, 26 and 28 are used in cross stitch and petit point

Embroidery/Crewel

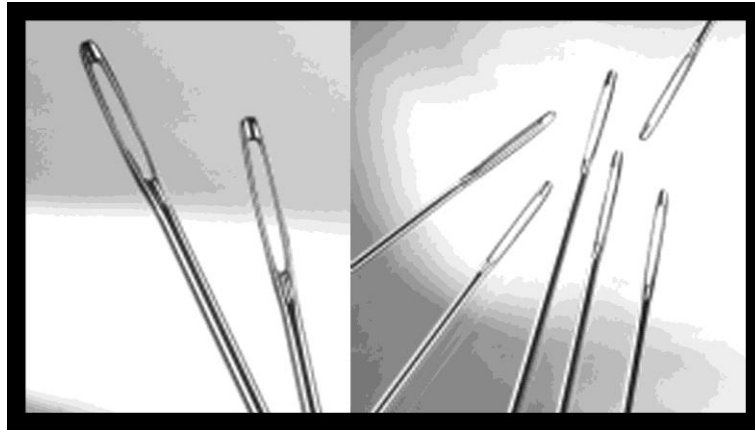


Fig.5 Crewel needles, assorted sizes

These are also general purpose sewing needles. They have a sharp point and a long eye which makes them easier to thread when using several strands of cotton. They are used for cotton a broder, perle cotton Nos. 8 and 12 and fine metallic thread.

The most popular sizes for embroidery are sizes 7 and 9 and I use these when working freestyle embroidery on Aida, where I have to split a square to create a smooth outline.

Beading

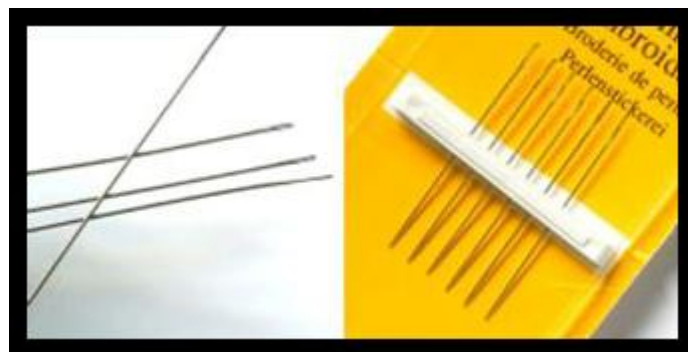


Fig.6 Beading needles

Very long thin needles with a very small, long eye and a sharp point. These are fine enough to go through the hole in a seed bead and are capable of holding a number of beads.

Sizes: 10-15.

I often use a quilting needle as an alternative, because it is shorter and easier to thread. Beading needles can bend and break easily.

Easy thread



Fig.7 Easy thread needles and Spiral Eye (R) needle

Made with a special slotted eye at the top, into which the thread is pulled. They are used for the same general purpose sewing as the sharps needles and are especially helpful for those with poor eyesight.

Sizes 4-8

Pam Turner has recently developed an ingenious easy thread Spiral Eye (R) needle with the slit on the side. Whilst I haven't had the chance to try it out yet, I think it could be a very practical solution to a difficult problem.

Chenille



Fig.8 Chenille needle

A thick, strong needle with a long eye for thick metallic threads, tapestry wool, 6 strands of stranded cotton, perle Nos. 3 and 5 and ribbon embroidery. It has a sharp point for coarse fabrics and can be used for crewel work and ribbon embroidery.

Sizes 18-24

Milliners or straw



Fig.9 Milliners or straw needles

The long shaft tapers towards a sharp point and has a small, round eye. They are mainly used for bullion knots, smocking and millinery.

Sizes 3-10

Ballpoint



Fig.10 Ballpoint needles in assorted sizes

The ballpoint makes these ideal for needle lace. The tip slips easily across the pattern without piercing it, or the threads making up the lace stitches. They have a round point and are of medium length.

Sizes 3-9

Curved Needles



Fig.11 Curved needles

These are a valuable addition to the workbox. They come in a variety of sizes for different techniques and I find them especially useful for box making and joining stiffened fabric.

Curved tapestry needles - Sizes 16 – 24
Curved beading needles - Size 10
Curved quilting needles - Assorted sizes

When stitching with metallic threads, try working with a larger needle than usual and use shorter lengths of thread. Knotting the thread to the needle eye or damping the thread will also help with control.

Most modern needles are made of nickel, but may be gold or platinum plated. Nickel needles can sometimes irritate causing a rash and if so, I suggest you try the plated needles as an alternative.

Summary

Choosing which needle to use is often down to personal preference, however understanding the difference between types of needle can help you can you make a more informed decision. I have favourite needles and sizes which I use constantly, but like most people, I have problems seeing to thread needles.

Always use a needle you can see to thread comfortably to make stitching a pleasure, not a chore!

*“I cannot count my day complete
Til needle, thread and fabric meet.”
Author – Unknown*

History of Needlemaking

I would like to thank John James Needles for use of their photographs and assistance in preparing this article.

John James has a long heritage steeped in the history of the needle making industry. That heritage also stretches through generations of needle industry workers and their families and these extracts give an insight into life for the needlemaker through the industry's 300 year history...

"Memories of a Needlemaker"

"By the start of the 19th Century there were over one hundred needlemakers around the English town of Redditch. Needlemaking groups came in all sizes from only a handful of needlecraft workers to a few hundred. Over 250 years ago, scouring and grinding, creating the high polish and 'points' of the sewing needles were very labour intensive, back-breaking processes. Water power from the areas many rivers and streams meant that water mills were eventually converted to the use of new methods of driving machinery. Up to this stage,

grinding the points involved the 'pointer' skilfully tapering the ends of cut wires against a spinning grindstone, to a long point.

It was not pleasant work - the fine particles of dust and sand would be inhaled by the pointers and by the children who used to turn the grindstone by hand. Pneumoconiosis, known as 'rot' or 'pointers disease' meant that few would live to see their 35th year. Despite advances by the mid 1800's, meaning that water power turned the grindstone, releasing the children from this dangerous work, it was still to be many years before modern high-powered fans would extract the dust efficiently. Even so, the workers were unhappy with the introduction of water powered machines, seeing them as a threat to their livelihood. In 1846, the pointers began a strike which would last for a year and cripple trade across the industry. Eventually pressures of loss of income forced the pointers back to work where they began to live longer and demand rose, along with the factories producing higher volumes than before.

The origins of needlemaking in the Redditch area began literally in the cottage industries. Family groups would work together specialising in one or two processes. Children as young as 7 or 8 would be involved alongside parents and grandparents, with needle work skills being passed down through generations. Workshops would be found in rooms and brewing houses behind cottages in and around the Redditch area. Scouring was the first process to be brought under one roof; the first factories where a workforce would be brought together.

Sewing needles in factories

Washford Mill and Studley Mill were converted in the early part of the 18th century, with Forge Mill being built especially for purpose in 1725. Many parts of the process of needlemaking were still housed within the cottages, however until the development of steam power and advancements in machines meant that most processes could be brought into the factory by the middle part of the 19th century. Although output was able to grow and many tasks were undertaken by machine, much of the work was still done by hand. Stamping and Eyeing machines were eventually introduced in the first part of the last century.

Social awareness grew through the latter half of the 19th century, with the emergence of sick clubs and hardship funds - even small pensions paid to retired workers. Some large employers would rent housing at a favourable cost to key staff and long-serving employees. Apprentices would be taught by elder craftsmen, alongside the original 'passing down' of skills within families of the needleworking trade.

Fishing hooks, reels and tackle were manufactured along with needles. John James and Sons (formed in 1840) were making hand sewing needles, fishhooks and hardware needles at their Victoria Works before transfer of the needle production over to Washord Mills after 1912. Victoria Works in Studley continued then to concentrate on the production of fishhooks. Companies expanded and merged from the family businesses which were working side by side with other needle and tackle manufacturers across the area. In some factories, works committees brought together the management and the shop floor, raising and resolving issues and concerns, all with the aim of making production run as smoothly as possible as the needlework supply industry grew. There was much forward thinking in the developing industrial age. Educational trips by works committee members to other factories and even overseas kept the Redditch factories informed and moving onwards. Redditch became the centre for the needle making industry through the 19th century.

Needles were also manufactured in London in parts of the north and west of England and no-one is exactly sure why this particular part of the midlands came to have such a hold over the industry. The entrepreneurial spirit of the Redditch industrialists saw machines being developed and introduced to the benefit of production levels. Water power being used to polish needles was an important step and gave the Studley and Astwood manufacturers some early advantage over the competition. The introduction of machines to stamp, press and drill the eyes progressed the production process throughout the middle part of the 19th century and hardening techniques were refined. Redditch gained the reputation for producing the best quality needles and handworkers were re-trained in the use of machines."

The traditions still continue today and I would like to thank John James Needles for use of their photographs and assistance in preparing this article.

To find more information on John James Needles go to:

<http://www.jjneedles.com>



Fig.12 Forge Mill Needle Museum

Needle Mill Lane, Riverside, Redditch, Worcestershire, B98 8AH

Forge Mill Needle Museum in Redditch is an unusual and fascinating place to visit. This historic site illustrates the rich heritage of the needle and fishing tackle industries. Models and recreated scenes provide a vivid illustration of how needles were once made and how Redditch once produced 90% of the world's needles.

<http://www.forgemill.org.uk>

Take your needle, my child, and work at your pattern;
it will come out a rose by and by.

Life is like that - one stitch at a time taken patiently and the pattern will come out all right like the embroidery.

~ Oliver Wendell Holmes