

Cutwork on Cotton Fabric

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Abstract

The tradition of cutwork appears to have emerged in 14th century Italy. Cutwork was very popular during the renaissance period. The term cutwork was how English writers described Italian drawn work. Cutwork embroidery was very highly by royalty and nobility. The patterns for cutwork embroidery differ from other embroidery patterns in that they have two outline lines, which are parallel to each other about 1/8th of an inch (1/3 cm) apart. It is some time called "embroidered lace" but it is not a true lace. This is similar to the appliqué work and differs from the other embroidery patterns. So in this paper, an attempt has been made to summarize the details of cutwork. Two different samples are made for the examples and details understanding of cutwork.

Keywords: Embroidery; Darners and long darners; Thread; Fabric; Network

Introduction

Cutwork is a type of embroidery in which pieces of the foundation fabric are cut away, creating of network of holes and eyelet that are accented by the embroidery pattern. Perhaps the most recognizable type of cut work embroidery is eyelets, called *broderie anglaise*. In this technique small holes are out of the fabric and the edges of holes are reinforced with stitching. Other types include renaissance embroidery and Richelieu embroidery. Cutwork embroidery often resembles lace. This embroidery may be done with multi colors threads, including gold and silver; it may be accomplished in plain white thread simple look. It was often used to ornament the edges of home textiles materials such as pillowcases, tablecloths, curtains and other household materials. Cutwork is a surface embroidery technique and two main stitches are used satin, running and buttonhole stitch. It involves stitching circular or over eyelets, often in floral arrangements and is often used on baby and ladies garments. It is work on fine linen or cotton fabric. Cutwork embroidery is made by tracing a design onto a piece of cotton and linen fabric. In modern time, a crafter can buy a fabric that has a pattern printed on it, or she/he can trace a pattern onto the fabric using a disappearing ink pen or carbon paper. The patterns for cutwork embroidery differ from other embroidery patterns in that they have two outline lines, which are parallel to each other about 1/8th of an inch (1/3 cm) apart. It is some time called "embroidered lace" but it is not a true lace [1]. This is similar to the appliqué work and differs from the other embroidery patterns. In view of the above knowledge, we are formulating two objectives in this paper.

Literature Review

History of cutwork

This tradition of cutwork appears to have emerged in 14th century Italy. Cutwork was very popular during the renaissance period. The term cutwork was how English writers described Italian drawn work. Cutwork embroidery was very highly by royalty and nobility. Cutwork was born ages ago in Italy, and rapidly spread all over the work. It had a good reason to spread, because of to its charming beauty. During the 15th to 17th century upper class ladies took up creating cutwork in addition to making alter cloth to gift for the church. They also used it to decorate their fine linen. There are two kind of cutwork eyelets, which consists of holes cut in the fabric edges with overcasting and true cutwork also called Richelieu work which consist of embroidered shapes against a background which is cut away.

Cutwork dates from the nineteenth century. The name Richelieu derives from the resemblance of this type of work to a kind of needle-worked lace fashionable in seventeenth century France and Patronized by Cardinal Richelieu. Both types are most frequently used to decorate clothing, especially lingerie, and household linens, and both traditionally worked on white fabric and white thread. They can, of course, be worked on a colored fabric, but they look most effective worked in matching thread. In Richelieu work, however, a thread one or two shade darker than the fabric is sometimes used to accentuate the lines of the motifs.

Both eyelets and true cutwork must be worked on a frame in order to prevent any distortion of the fabric during the stitching. Neatness is vital in both these kinds of embroidery; the stitches must not call attention to themselves but must provide a smooth outlines for the motifs. Since the underside is visible, the threads must be fastened inconspicuously.

Two stitches are used for Richelieu and renaissance embroidery, the running stitch and buttonhole stitch, which is also called the blanket stitch. *Broderie anglaise* only uses the buttonhole stitch. Embroidery is created simply by the decorative relationship between fabric and thread [2]. Traditionally, certain fabrics were deemed to be suitable for a given method. While this still holds true, experimenting with fabric and thread will prove that almost anything is possible, provided you take into consideration any restriction imposed by the inherent characteristics of the techniques.

Types of needle

The needle is our most important embroidery tool, it is essential to choose one that is suitable for the piece of work. Needle size designated by number, the lowest number signifying the longest and thickest needle in each category. As a general rule, if the needle is too small for the thread, it will make too small a hole, causing the thread to become frayed as it passes through the fabric.

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Received April 13, 2015; Accepted May 30, 2015; Published July 15, 2015

Citation: Mohapatra HS, Singh N, Shukla P, Pal SK (2015) Cutwork on Cotton Fabric. J Textile Sci Eng 5: 203. doi:10.4172/2165-8064.1000203

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Embroidery or crewel needles: They have long eyes to take one or more threads of stranded floss. Crewel needles have a long eye which makes threading the needle so much easier when using multiple strands of threads (Figure 1). The most popular sizes used in embroidery are 7 and 9.

Quilting needles: They are traditionally used by tailors, are short with small round eyes. They are suitable for quick, even stitching, such as that used in hemming or quilting. It is a very short and fine needle with a round eye. The diameter of the needle is the same as the sharp needle however they are the must shorter in the length to allow the quilter to create quick and even stitching (Figure 2). The most popular size used by the most experienced of quilters is either a size 11 or a size 12.

Darners and long darners: They are, as their name implies, longer than other needle and manufacture darning (Figure 3). These hand sewing needles are suitable for darning and mending. Our range includes short cotton darning needles, yarn darning needles and long darning sewing needles.

Tapestry needles: They have large eyes and blunt points which slip easily between the weave of the fabric without damage (Figure 4).



Figure 1: Embroidery or crewel needles.



Figure 2: Quilting needles.



Figure 3: Darners and long darners.



Figure 4: Tapestry needles.



Figure 5: Chenille needles.



Figure 6: Beading needle.



Figure 7: Leather needles.

Apart from use in needlepoint, they are essential for work on even weave material, i.e. pulled work, black work, drawn thread and needle weaving (size 13-24).

Chenille needles: They are similar in shape to tapestry needles but they have sharp point. They are short with large eyes and were originally used for chenille work which uses furry yarn (Figure 5). Today they are ideal for embroidering with thick knitting or weaving yarn, ribbon raffia etc, particularly on closely woven fabric (size 13-24).

Beading needle: They are for threading beads, sequins and pearls as they are extremely long and fine with long eyes (Figure 6). They tend to bend in use and should be replaced as soon as they do. They are used in metal thread embroidery for threading metal purls (small coils of gold wires) (size 10-15).

Leather needles: They are a specialist item used by glove makers and leather workers (Figure 7). Use them if we are working with leather, suede, plastic or vinyl for appliqué, since their triangular points will pierce the fabric without tearing (size 1-8).

Circular needles: They are used by upholsterers, are good for awkward jobs, particularly for three-dimensional embroidery. Circular needles are a lot of fun to work with. They allow you to make bags and sweaters without seams (Figure 8). As well as other fun projects, but most patterns assume that people know how to work with circular needles, which can be intimidating for people who do not.

The variety of yarns available can be overwhelming not only are

there plenty of specialist embroidery threads in a full range of colour but, with the continuing popularity of knitting and crochet, each season produces a whole new selection of versatile textured yarn. There are many types of embroidery threads such as:

Specialist embroidery threads

Stranded floss: They are available in a good choice of colours, both plain and shaded, is probably the most widely used embroidery threads (Figure 9). It is useful for traditional surface stitches and can be incorporated in needle point. One drawback of stranded floss is that it can separate out when used in a long stitch.

Matte embroidery cotton: It is a tightly twisted, matte, 5-ply thread and is mostly used for couching or on coarsely woven fabrics (Figure 10). It is great for long stitch and in tapestry and canvas work it can be used instead of wool.

Silk thread: They are available in twisted, twisted buttonhole and 6-stranded floss, can be used in most type of embroidery wherever a luster is required (Figure 11). It is usually chosen for shadow work.

Machine threads: They can also be used for hand work, includes ordinary sewing threads and the thicker button twist (Figure 12). There is also a large range of cotton and rayon machine embroidery yarns in thickness and, more recently available, some metalized and textured examples.



Figure 11: Silk thread.

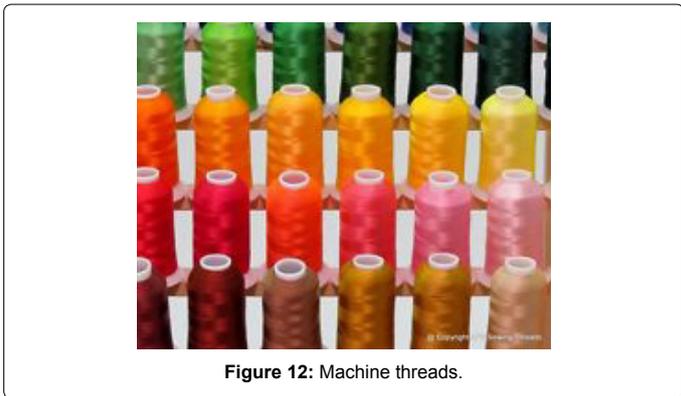


Figure 12: Machine threads.

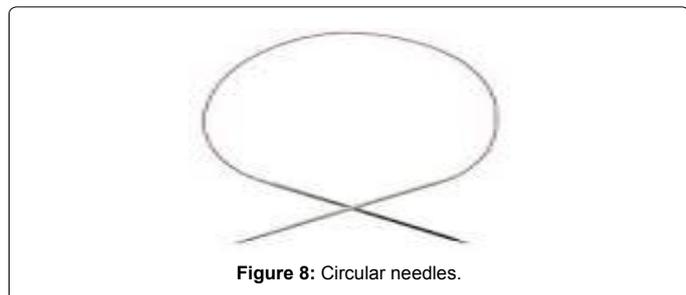


Figure 8: Circular needles.

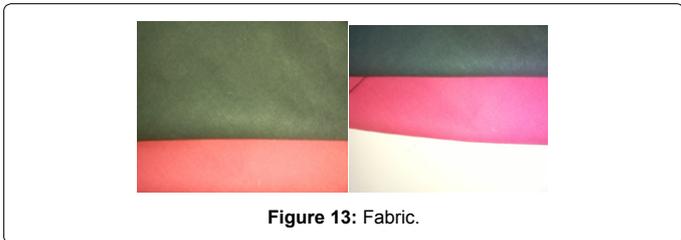


Figure 13: Fabric.



Figure 9: Stranded floss.



Figure 10: Matte embroidery cotton.

Experimental Work

Material used for cutwork

Fabric: Linen can be fine or heavy and either evenly woven or with a slub effect. Traditionally used for table and bed linen because of its fine washing and wearing qualities, it is also suitable for cloth and depending on its structure, may be appropriate as a basis for counted thread decoration [3]. Specialist embroidery fabrics, normally in cotton and linen, are available in selection of different width from 22 inch to 60 inch. Some are specially woven to lend themselves to a particular embroidery method (Figure 13). Those plain weave fabrics produced with surface embroidery in mind, like fine linen, are most appropriate for traditional designs on such items as table linen. While choosing Fabric, select a good quality fabric, which will be easy to stitch. Knowledge of various types of fabric, their cost and width of fabric, is necessary for good sewing. Linen or cotton fabric are used because of avoid the fraying property.

Threads: For creating the design select thread from spool or reel of good quality from a reliable brand, matching to fabric in color and size reel of good quality from a reliable brand, matching to fabric in color and size. Various type of threads like cotton, silk, terylene and nylon threads are available in the market (Figure 14).



Figure 14: Threads.



Figure 15: Pencil.

Tools used for cutwork

There are following tools are required for cutwork such as-

- Embroidery needles
- Sharp cutwork scissor
- Iron
- Linen or cotton fabric
- Thread
- Straight pins
- Measuring tape
- Frame (Hoop)
- Pencil

Pencil: Mechanical pencil tends to leave the smallest line on the fabric, white pencil for marking on dark fabric. While drafting pattern on a newspaper, red and blue pencil is necessary (Figure 15). The stitching line is marked using blue pencil and cutting line is marked using red pencil.

Embroidery needles: Used for general hand sewing built with a sharp point, a round eye and are of medium length. These are considered another all purpose needle for sewing, such as applique, cutwork and patchwork. Select needle according to type of stitches. Usually there are 3 types of needle (Figure 16).

1. Long needles used for darning are of size no.6 or no.7.
2. Ordinary needle used for stitching normal stitches and for tacking are size no.8 or no.9.
3. Embroidery needle with a long and oval hole. The points may be sharp or blunt depending upon the stitch. Store the needles carefully in a rust proof paper to prevent from rust.

Sharp scissors: For the perfect cutwork scissors are required. It is choosing as we are comfortable to use and cut right up to the point

(Figure 17). These have round handles and the blades are usually 6 inch or less than 6 inch. They are designed mainly for snipping threads and trimming seams. However, scissor with 5 inch blade can be used by beginners for cutting fabric as well.

Iron: Iron is used for removing the crease before the cutting of the fabric. Iron box made of steel with teflon coating along with adjustable regulators are usually best. Fabric should be free from creases while cutting (Figure 18). Pressing helps to remove creases, if present. Keep an automatic handy iron box for pressing fabric before cutting, during construction and after the garment is completed.

Straight pin: It is used for basting and fixing of pattern pieces to the fabric make work easier, quicker and more accurate. Select sharp medium lengthy pins that will not leave pin marks, on all types of fabrics (Figure 19). For silk, satin and other flimsy slippery fabrics patterns must be pinned to the fabric before cutting.

Measuring tape: It is the important tool for sewing. In this, wrinkles must be removed when measuring from stitching garments (Figure 20). This is commercially available in different models. With the use of this one can take their own body measurement from a garment for stitching a new garment and to check the measurement of garment to be sewing in between stitching. Wrinkles must be removed when measuring from stitched garment. Note that the tape must not get twisted while measuring.

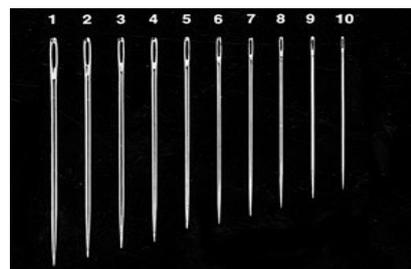


Figure 16: Embroidery needles.



Figure 17: Sharp scissors.



Figure 18: Iron.

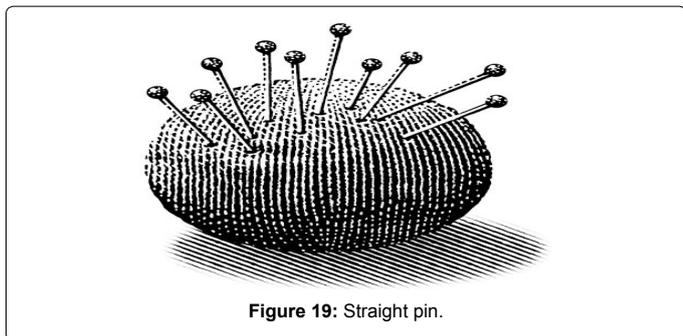


Figure 19: Straight pin.



Figure 20: Measuring tape.



Figure 21: Frames (Hoop).

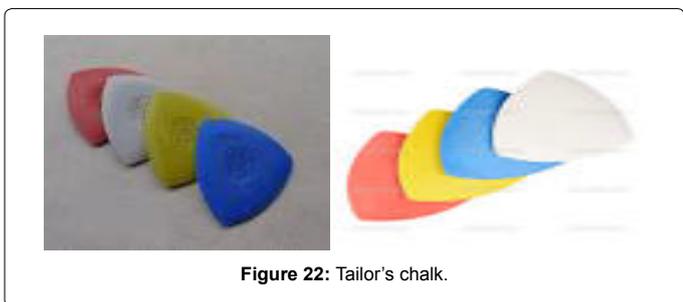


Figure 22: Tailor's chalk.

Frames (Hoop): An embroidery hoop consist of a pair of concentric circular rings. The larger ring has a tightening device, usually in the form of a metal screw. Embroidery hoop comes in various sizes and material such as wood, plastic and bone (Figure 21).

Tailor's chalk: This chalk is available in different colours always used contrast but light colour chalk which will not leave diagram marks on the cloth. Seam lines and other pattern details on fabrics as an aid in stitching. This is available in assorted colors in rectangular and triangular shapes (Figure 22). This can be selected according to

the fabric color. The edges can be sharpened for drawing straight and curved lines easily.

Stitches used for the cut work

Blanket stitch: The stitch is used as an edging for blanket and other article or as part of a design for which the blanket stitch makes the border. It is also used in cut work and appliqué work. The work should be done form left to right, stitching towards you. Stitches may be of the same size at regular distance apart or grouped and spaced according to the effect desired for which the blanket stitch makes the border. It is also used in cut work and appliqué work (Figure 23). It is worked between a pair of lines (usually parallel). The work should be done from left to right, stitching towards you. Bring thread out on the lower line, insert needle in position on upper line and take a downward stitch with the thread under the needle point [4]. Draw out the thread. Stitches may be of the same size at regular distances apart or grouped and spaced according to the effect desired. To make scalloped edge using blanket stitches, outline two rows of scallops with running stitch and work blanket stitches between the two rows. Trim fabric away close to scallops after the work is completed.

Running stitch: Running is a simple form of hand stitching; consist of small stitches that look the same on both sides of the fabric (Figure 24). This is used for outlining and hand quilting. Take the needle in and out of the fabric at regular intervals, working several small stitches at a time. Running stitches is surprisingly versatile stitch. It can be worked in rows in a regular pattern to form a solid filling stitch, or less regularly to form textured areas within a design.

Button hole stitch: This is used to cover small floral motif closed blanket stitch is usually used for this. Buttonhole stitches catch a loop of the thread on the surface of the fabric and needle is returned to the back of the original start of the thread (Figure 25). The finished stitch in some ways resembles a letter "L" depending upon on the spacing of the stitches is tightly packed together and for blanket edges they are more

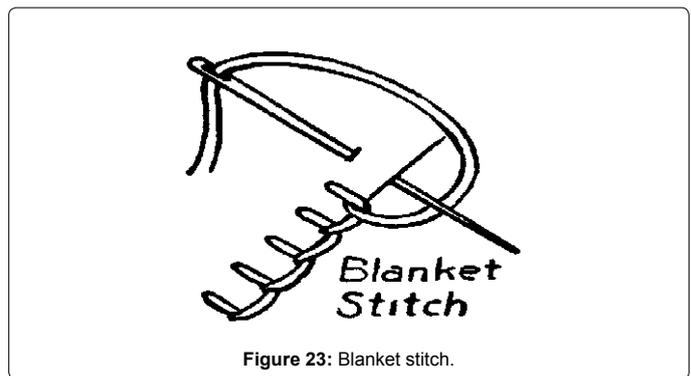


Figure 23: Blanket stitch.

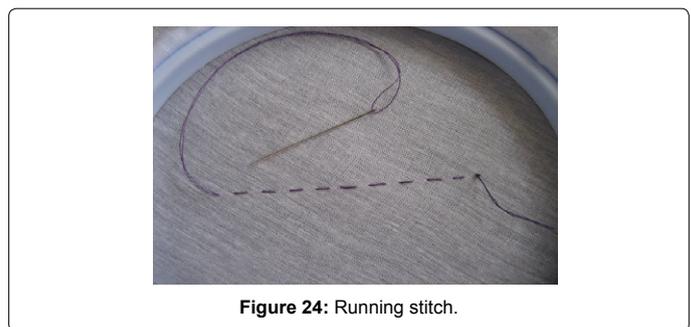


Figure 24: Running stitch.

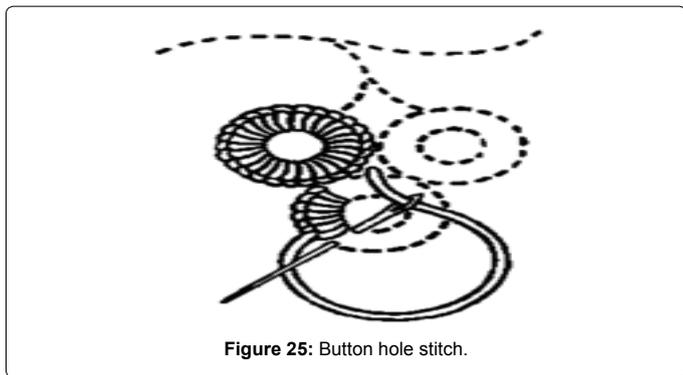


Figure 25: Button hole stitch.

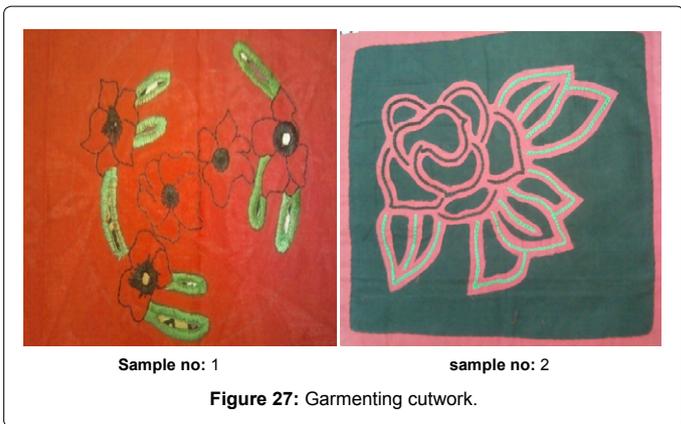


Figure 27: Garmenting cutwork.



Figure 26: Embroidery is one of the decorative stitches.

spaced out. The properties of this stitch make it ideal for preventing raveling of woven fabric.

Decorative stitches: Embroidery is one of the decorative stitches. Embroidery is the art of working ornamental designs on cloth, leathers, etc., with decorative stitches (Figure 26). There are different kinds of embroidery which are known by special names such as cut work, drawn

thread work, appliqué, smocking etc. For successful embroidery work, it is essential to learn basic stitches, acquire the ability to choose the right type of stitches, designs, color combinations suited to the type of fabric, the purpose and use the garment or article on which the embroidery is to be made.

Sample preparation

Sample No. 1:

- Measure the width and length of the fabric with a tape to determine the amount of linen or cotton fabric needed for the sample.
- Cut the fabric as per measurement, fold the edge over ½ inch twice for hem, and pin it in place sew the hem with a needle and sewing thread.
- Then transfer required design for cutwork in the fabric with the help of tracing paper. After this, the design is cut on its outer edges with the help of scissor which is to filled in later stages.
- Place a section of the design in the center of a embroidery hoop and tighten the hoop.
- The cut area in the design is filled using buttonhole stitch, satin stitch or blanket stitch as close as possible.
- Continue moving the embroidery hoop around the sample to cover the entire design with stitches.

Sample No 2:

- Two pieces of fabric are taken as per requirement.
- Measure the width and length of the cloth with a tape to determine the amount of linen or cotton fabric needed for the sample.
- Cut the fabric as per measurement, fold the edge over ½ inch twice for hem, and pin it in place sew the hem with a needle and sewing thread.
- Then transfer required design for cutwork in the fabric with the help of tracing paper.
- Then both the fabrics are given running stitch or machine stitch, but we have used chain stitch to enhance the decorative features. Cut the upper fabric as per traced the design such that the base fabric is only seen in specified area of design.

Application of Cutwork

Cutwork can be used in different sector such as home textile as well as garmenting also. In home textile we can use cutwork to decorate product like table cloth, dish cloth, apron, pillow, cushion, curtain, wall hanging, lamp shade, etc. (Figure 27).

In garmenting cutwork is used in: cuff, collar, bottom edge, jacket, night dress (for decoration purpose), children garment, etc.

Conclusions

Cutwork items are attractive art effect of daily use apart from

being decorative, they are also comparatively costly. The more popular cutwork items today are shoulder bags, ladies hand bags, wall hangings, lamp shades, table cloths, pillow covers etc. Cutwork is an antique embroidery technique. It quickly spread all over the world. To minimize the fabric loss, one should take the right amount of upper fabric.

References

1. Brown P (1987) Embroidery, Cutwork camisole 24.
2. www.annaboveembroidery.com/maemcu.html
3. www.needlework-tips-and-techniques.com/cutwork-embroidery.html
4. www.craftsy.com/blog/2014/07/cutwork-embroidery-tutorial/