

Medieval Hand Stitching and Finishing Techniques

by Lady Sidney Eileen of Starkhafn

This handout is by no means comprehensive, but is instead intended to be a practical guide to hand stitching and hand finishing your medieval style clothing. Even if you make most of your garb on a sewing machine, hand finishing can provide a lovely finishing touch of authenticity in those places where a machine sewn seam would be the most visible.

Contrary to modern myth, skillfully hand sewn seams are not only beautiful and durable, they will actually last longer than machine sewn seams, eyelets, and buttonholes.

Supplies

You will need thread, beeswax, needles, a thimble, and small sewing or embroidery snips.

The vast majority of extant garments from throughout the middle ages are sewn with linen thread. Linen thread is available mail order from some specialty embroidery and sewing suppliers that cater to reenactors and historic embroidery enthusiasts, but for many of us there is no local source. If you do not have linen thread, cotton quilting thread, buttonhole thread, or even all-purpose thread will work fine. If your garment is made from linen, depending upon the weight and quality of the fabric, it is sometimes possible to pull threads from scrap fabric and sew with that. Regardless of which thread you use, waxing it (pulling it through beeswax once or twice) will help it pull more easily through the fabric without fraying and extend the life of your seam.

Use whatever needles you are comfortable with. Embroidery sharps or quilting betweens often work very well for hand sewing. Choose a needle that has an eye just large enough for your thread.

Not everyone uses a thimble when they hand sew, but I highly recommend it. Once you are accustomed to using one, it helps greatly in quickly and accurately directing the needle through your fabric, and makes it much easier to push the needle through stiff or thick fabrics. Modern thimbles are a closed cup that sits on the tip of your middle finger, and the base of the needle is braced against the top of the thimble. Medieval thimbles are shaped like a ring with little divots all around the outside. When using one, you bend the tip of your finger and brace the base of the needle in one of the divots on the side of your finger. Medieval style thimbles are sometimes available at SCA events, or from specialty suppliers who cater to medieval reenactment.

Starting and Finishing Your Stitches

There are a few options when starting and finishing your stitches, and which you use is entirely a

matter of personal preference. What I do depends upon my mood and the particular seam/fabric that I am sewing. There are also other knots that can be used to tie off your thread that work equally well, so pick one that feels comfortable and you will remember. Regardless of what you do, be sure to leave a tail of thread that is no less than 1/4" long to prevent your knot from coming undone.

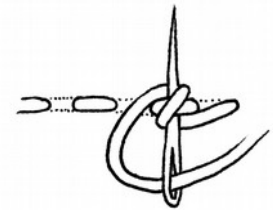
You can stitch over the same spot two or three times. This is the same premise for backstitching on a sewing machine to set the start and end of a seam. When you stitch back over your own thread, it pins it in place and prevents it from pulling free. After two or three stitches, give it a good pull to make sure it is set and won't come free later.

Figure Eight Knot

Put your needle through the nearest stitch, or through a couple threads of your fabric.

Take your thread and pull it under the back of the needle, across the top of the needle, and under the front of the needle.

Pull your needle through and pull the knot tight



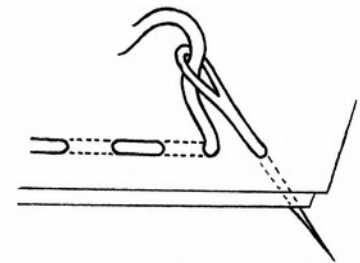
Basic Stitches

Most of the stitches you will see on extant garments, or use for your own hand sewing, will be a variation of just a couple different basic stitches. Learn these stitches, and you will have a strong foundation for hand sewing and finishing your garments.

Running Stitch

Stitch up and down along the fabric in a line, keeping even spacing between the stitches.

The closer you make your stitches, the stronger and more stable your seams will be. Extant medieval garments usually have between eight and twelve stitches per inch.



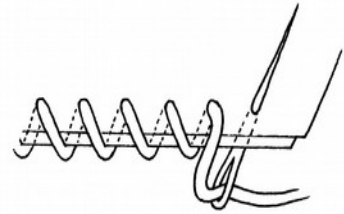
Basting Stitch – This is a variation of a running stitch where the stitches are deliberately far apart, with no more than six stitches per inch, often fewer. I recommend using a contrasting color of thread. It is used when you need to quickly hold two or more pieces of fabric together, with the intention of removing it after sewing is completed. This can be helpful when appliqueing decorations or trims to make sure they lay smoothly and are placed properly, or before sewing a garment seam to make sure the layers stay even along the entire length of the seam.

Whip Stitch

Stitch at an angle, creating a zig-zag pattern.

The closer you make your stitches, the stronger and more stable your seam will be.

This is the fastest hand stitch I have used. It is extremely handy for tacking things, hems, and for seams where you want to preserve bias stretch.

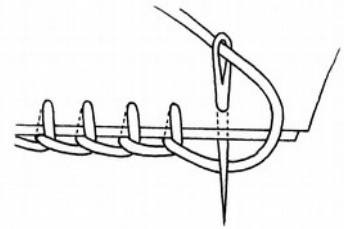


Blanket Stitch or Buttonhole Stitch

Stitch straight towards where you want the line of loops, catching the loose thread underneath the tip of your needle. Pull in the direction the needle points until the loop is snug.

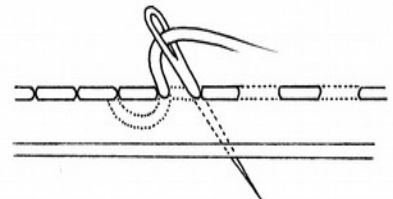
In modern use, this is called a blanket stitch when there is distance between the stitches (as shown in the illustration), and buttonhole stitch when each stitch is made directly adjacent to the previous stitch.

This stitch is used for buttonholes and eyelets, to edge fabric, to attach trim or applique, or decoratively as an embroidery stitch.



Double Running Stitch

This is when you sew with a running stitch, and then sew a second running stitch to fill in the empty spaces. This is most often used decoratively, often in a contrasting thread, anywhere that you might use a regular running stitch.



Hand Finishing Stitches

I am describing hand finishing first because even if you sew the majority of your garb on a sewing machine, hand finishing can add a special touch and look of authenticity in those places where machine stitching would be immediately obvious. It also provides a less daunting introduction to hand stitching because it is less time consuming to finish a few details than to hand sewn an entire garment.

This handout shows the most basic kinds of hand finishing stitches. There are a great many more options for hand finishing, including complex decorative stitches and tablet weaving directly to the garment. If you enjoy detailing your garments by hand, it's worth taking the time to look into those techniques as well.

Eyelets

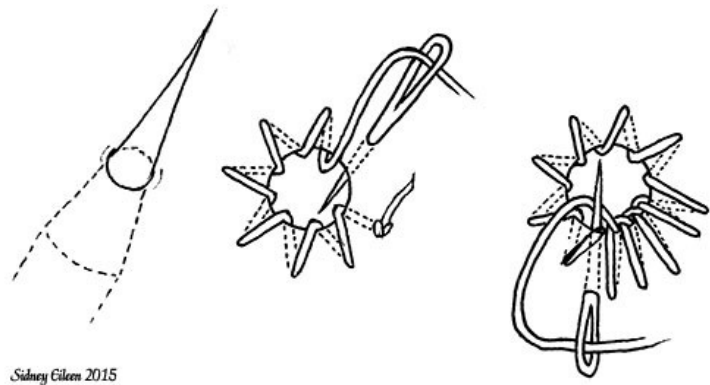
There are two primary ways to sew eyelets: with the buttonhole loop facing inward, or the buttonhole loop facing outward. Both are equally acceptable, and in both cases the side of the garment where the loops are visible should be the inside. It can also be helpful to first sew a running stitch in a circle slightly larger than you want your eyelet opening to be. I am not aware of any extant medieval garments where this was done, but it helps to ensure the eyelet ends up exactly where you want it and the correct size. It is also completely covered by the eyelet stitches, so it should not be visible on your finished garment.

Inward Loop Eyelets

Create your hole with a tapered awl. Re-widen the hole as needed while working.

Whip stitch in wide stitches around the hole to hold it open.

Use a buttonhole stitch, stitching **towards the center** of the eyelet. Be sure to place your stitches very close to create a strong eyelet that will last.

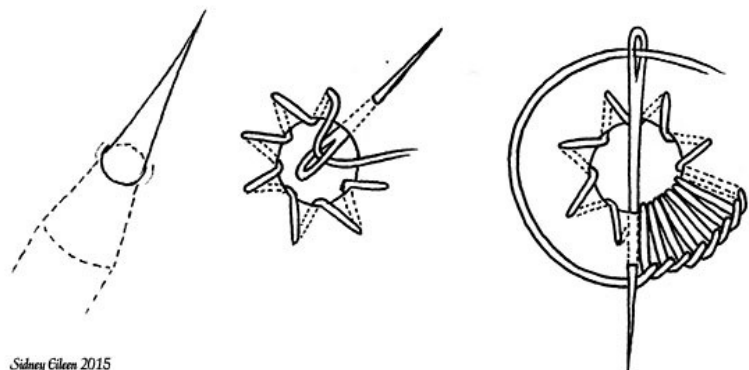


Outward Loop Eyelets

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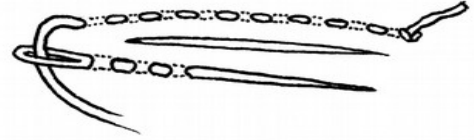
Use a buttonhole stitch, stitching **away from the center** of the eyelet. Be sure to place your stitches very close to create a strong eyelet that will last.



Buttonholes

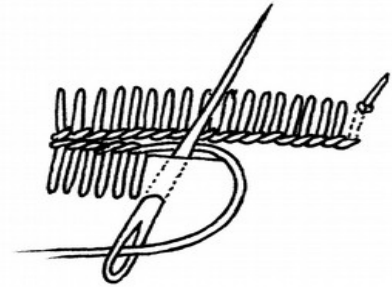
Medieval buttonholes were cut before being sewn. To stabilize them while working some sort of clear glue, like fish glue, was applied to the buttonhole area before cutting and sewing. Fray check is the easiest modern option. Mark your buttonhole, apply glue to the mark and allow it to dry, cut your buttonhole, and then stitch.

I am not aware of any medieval garments that used a running stitch to border buttonholes, but it can be handy to clearly mark the area and to help prevent fraying of the fabric while stitching. If you choose to take this step, either a running stitch or a back stitch can be used. I would apply this stitch first, before gluing and cutting the buttonhole. It should be completely covered by buttonhole stitch when the buttonhole is finished, and therefore not visible on the finished garment.



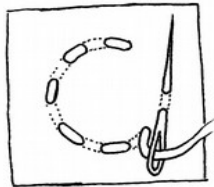
Use a buttonhole stitch, stitching towards the buttonhole opening, and placing your stitches close together.

Medieval buttonholes did not have any stitching at the terminal ends. The only stitches are along the sides.



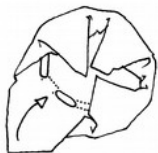
Fabric Buttons

These are most often seen on late medieval garments like cotehardies, and are an inexpensive and period alternative to metal buttons. Other variations did occur, like fabric wrapped around a wooden disk, and this is not the only way to make fabric buttons.



Cut a square of fabric. Experiment with different size squares to figure out how big it needs to be to create the size button you desire from your fabric. The size needed will vary depending upon the weight of the fabric you are using.

Create a running stitch in a circle. **DO NOT TIE IT OFF** at either end.

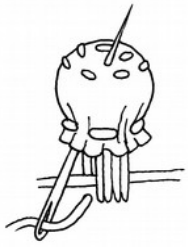


Tuck all the edges into the center of the circle.

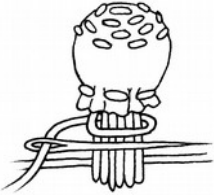


Pull the circle of running stitches tight, making sure to keep all the loose edges inside the pouch you are creating. Then tie off the ends of your thread.

Run your needle through the button, through the base and up through the top.



Thrust the needle back through the button, from the top and down through the base. Stitch through the edge of your fabric where you want the button to be placed, and then thrust the needle back up through the button. Do this repeatedly until your button is securely held to your garment.



Wrap repeatedly around the threads (and the very base of your button if the visible fabric is long enough)



Secure your thread and run the tail either between the layers of fabric at the edge of the garment, or up into the body of the button.

Hems

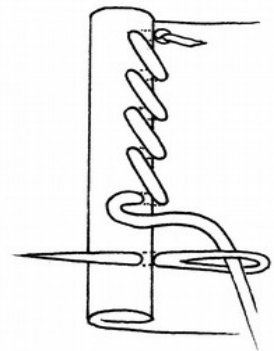
This is by no means a comprehensive list of the exact styles of hems that have been found on extant medieval garments. Instead it shows the major types, and explains why you may want to pick one type of hem over another in particular situations. Hemming is almost always a variation on running stitch and/or whip stitch, and I strongly suspect that the multitude of variations are mostly a result of the personal preferences of individual sewers. I recommend trying multiple kinds of hems in multiple situations, regardless of my personal recommendations, until you find stitch styles that are comfortable and natural for you to sew.

Basic Whip Stitched Hem

I use this kind of hem more often than any other, be it the bottom hem of a dress, or a neckline, or sleeve cuff. It goes quickly and the stitches visible from the outside are very subtle.

Fold over the edge of the fabric toward the inside of the garment so that the raw edge is hidden. Depending upon the fabric and desired final appearance, this roll can be as little as 1/4" wide or an inch or more.

Catch a couple threads of the outer material and then a few threads of the folded over hem.

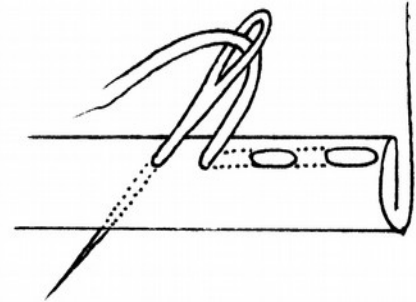


I recommend close stitches, six to ten per inch, on narrow, delicate hems, like around a neckline or the end of a sleeve. Fewer stitches are needed on wider hems, where I usually place them about 1/4" apart.

Basic Running Stitch Hem

This kind of hem can be used anywhere, be it the bottom hem of a dress, a neckline, or a sleeve cuff.

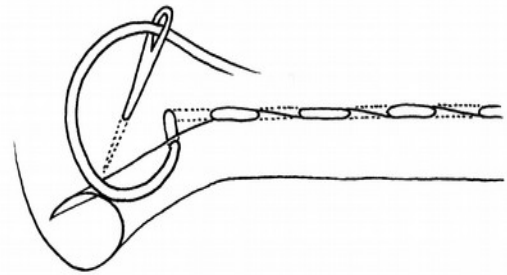
Fold over the edge of the fabric toward the inside of the garment so that the raw edge is hidden. Depending upon the fabric and desired final appearance, this roll can be as little as 1/4" wide or an inch or more.



Stitch close to the edge of the folded over hem, keeping your stitch widths even. I recommend close stitches on narrow, delicate hems. In modern reenactment, this kind of hem stitch is often used decoratively, sometimes in a thicker or contrasting thread.

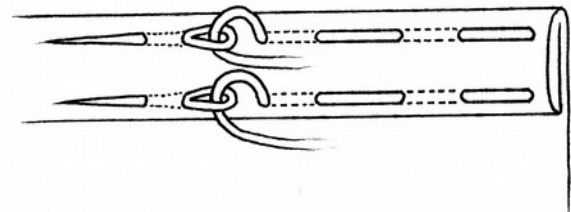
Viborg Shirt Running Stitch Hem

This stitch is specifically found on the Viborg shirt, and is included here to show how a basic stitch can be varied. From the outside, this hem will look identical to the basic running stitch hem, but on the inside it will lack the little lip of folded fabric at the top of the hem. This means the garment will likely wear a bit better, because that lip on the basic hem is going to be subject to the most friction and have a tendency to wear out first, like the outer edge of a t-shirt cuff. When fabric wears a hole that close to a seam, the seam will have a tendency to pull free. This type of hem will also look cleaner and lay completely flush in those situations where both the inside and outside of the hem are likely to be seen, like on a cloak edge, or a large open sleeve.



Two Running Stitches Hem

In this kind of hem, the hem is rolled in the same manner as the basic running stitch hem (alternatively, it can be rolled like the basic whip stitch hem), and then an extra row of running stitches is placed close to the outer edge of the hem.



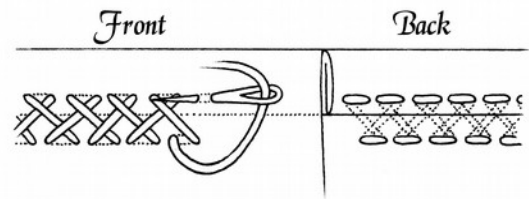
This type of hem is most useful on wider hems, when the material is thick and will have a tendency to bulge, rather than folding nicely at the bottom, like some wool fabrics or when multiple layers are involved in the hem.

This stitch is also used decoratively, sometimes in thicker or contrasting color threads. When the

stitches are kept perfectly even with each other they can be used as the foundation for some woven embroidery stitches and other embellishments.

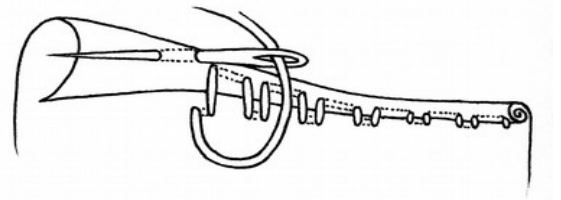
Herringbone Stitched Hem

This is a very decorative stitch that can be used to hem a garment. It is most often seen on Scandinavian garb from the Viking era. For reenactment purposes it is sometimes applied over a hem that is already finished with another stitch.



Basic Rolled Hem

This type of hem is most often used on very lightweight and delicate fabrics, like chiffon. In medieval reenactment you will see this used on lightweight veils, especially silk, more often than anything else.

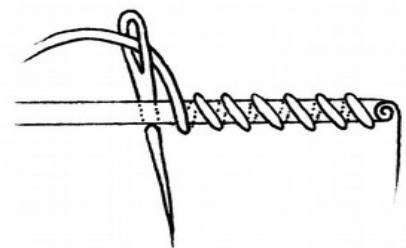


When hemming in this manner, several stitches are worked at one time and then gently pulled so the thread is straight. With very lightweight fabrics this will cause the fabric to naturally roll into position. If you have trouble with this stitch, there are a number of excellent videos on YouTube that show how to do it. More than most stitches, I feel a visual demonstration is particularly helpful.

I have also used this stitch on lightweight linen, but you must fold the fabric manually as you create the stitches. Linen will not roll on its own when you pull the thread. I found either of the other rolled hem stitches shown below are easier to use on linen.

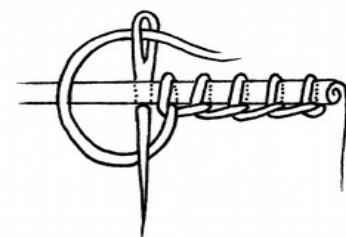
Whip Stitched Rolled Hem

Ideal for lightweight, but slightly stiff fabrics like linen and cotton, hand roll the edge of the fabric and then wrap it with a whip stitch. This can be done in thicker or contrasting thread for a decorative effect.



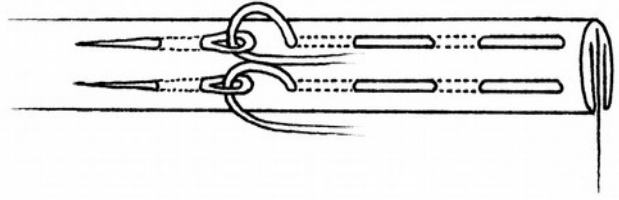
Blanket Stitched Rolled Hem

Ideal for lightweight, but slightly stiff fabrics like linen and cotton, hand roll the edge of the fabric and then stitch around it with a blanket stitch. The illustration shows arranging the loops of the stitches so that they snuggle the rolled over edge, but they can also be stitched to the outer side (needle goes over the rolled edge instead of under it), or so that they fall along the edge (needle goes towards the outside of the fabric rather than the inside). This can be done in a thicker or contrasting thread for decorative effect.



Running Stitch Bound Hem

This is specifically found on an Icelandic garment where the neckline has been bound with a narrow piece of material. It is not bias cut, nor are any other examples of bound edges that I am aware of. Bias cutting is extremely wasteful of material, so it is unlikely anyone would have done it.



This is extremely similar to the two running stitches hem, with the first row of stitches used to secure the binding to the garment, and the second used to make it lay flat.

Hand Sewn Seams

When hand sewing seams I strongly recommend basting your seams together before sewing them. It is easy to accidentally pull more on one layer than the other, resulting in getting to the end of your seam and finding that one layer is longer than the other. The seams can be basted with a large running stitch (I recommend a contrasting color so it's easier to remove later), with straight pins or safety pins, or various other basting tools like those used for quilts. I have found that a large basting running stitch, or a combination of straight pins before basting running stitch is usually the fastest and easiest method for me, but use whichever you are most comfortable with.

There are two main ways to approach stitching your garment together. You can join your seams together and then finish off the raw edges of your fabric, or you can finish all edges of your garment pieces before stitching them together. Both are equally correct unless you are seeking to emulate a very particular extant garment, and I believe a matter of personal preference. Try both and see which you prefer.

As I mentioned earlier, these examples are far from exhaustive of all the variations of seam joining and finishing that have been found in extant examples. Included here are basic examples so you can start hand sewing your garments without getting lost in all the options. As you gain experience I highly recommend looking into all the possibilities that are available.

Joining Seams Before Finishing

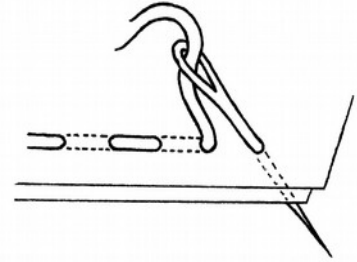
Far and away the most common seam joining stitch is a running stitch, but there are a couple other options.

Seam finishings are all shown with running stitch used for joining the seam, but all the seam finishings can be used regardless of how you join your seam.

Running Stitch Seam

Stitch up and down along the fabric in a line, keeping even spacing between the stitches.

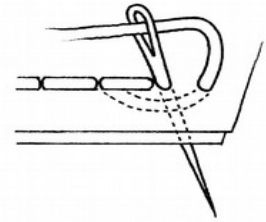
The closer you make your stitches, the stronger and more stable your seams will be. Extant medieval garments usually have between eight and twelve stitches per inch.



Back Stitched Seam

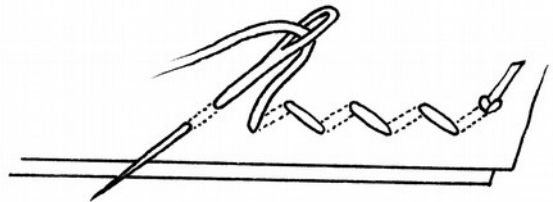
This is used when you want to make sure you have a very strong seam that is extremely stable, like when the seam runs horizontal across the body and will be holding a great deal of weight. The disadvantage is that it takes significantly more time to sew than a running stitch, and in most cases the added strength and stability is not needed.

Stitch forward two stitch lengths, and back one stitch length.



Whip Stitched Seam

This is most often used when joining two bias-cut fabric edges, to preserve the bias stretch. It has an effect nearly identical to using the zig-zag stitch on your sewing machine, and is used in very similar situations.



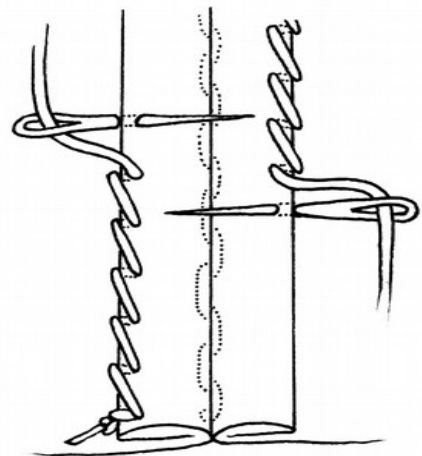
Stitch in a diagonal direction, creating a zig-zag pattern centered on the desired seam line.

The closer you make your stitches, the stronger and more stable your seams will be.

Whip Stitched Seam Finish

This creates a seam area that is flat and smooth.

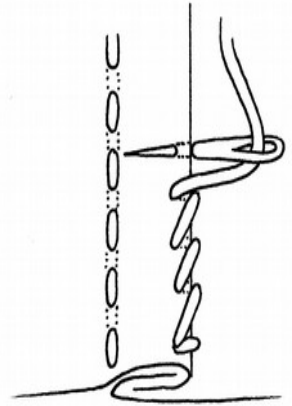
Fold the seam allowance onto itself and stitch it down to the body fabric with a whip stitch. As with a whip stitched hem, only four to eight stitches per inch are needed.



Flat Felled Seam Finish

This creates a seam area that is flat and smooth.

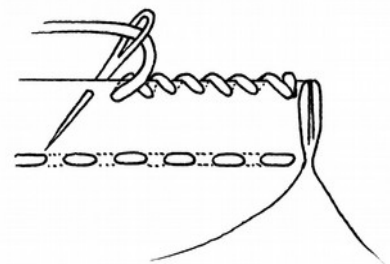
Either join your seam with one layer of the fabric having half the seam allowance of the other, or trim one layer of the seam allowance to half length. Fold the longer seam allowance over the shorter and hide the edge under the fold. Stitch down the folded seam allowances using a whip stitch (or running stitch if you prefer). Only four to eight stitches per inch are usually needed to secure the seam allowance.



French Seamed Finish

This results in a seam that is very similar to a french seam on a sewing machine.

Fold the edges of the seam allowance in towards each other and the joining seam. Whip stitch along the top of the folds to hold them closed (or running stitch if you prefer). Usually only four to eight stitches per inch are needed to secure the seam allowance.



Finishing Before Joining Seams

There are several reasons you might want to finish your garment pieces before sewing them together. It is an easy way to smoothly add lining or layers to only part of the garment. If your garment has a great deal of bulk to it, this can make it easier to work with the various parts of the garment without the entire mass of it in your lap until it is almost finished. If you are adding decorations, it can help prevent seam edges from completely unraveling while working, or prevent overhandling of the decorated pieces while assembling the bulk of the garment. You may also simply find that you prefer to work in this way.

Unless you are using a fancy decorative seam stitch, seams are always joined with a whip stitch when the garment pieces are finished first. Use a very tiny, close stitch, and it will be difficult to see on the finished garment. I would use no fewer than eight stitches per inch, and more likely twelve or more.

I chose whip stitch for the illustration, but any hem finish may be used on the garment pieces. What you use will likely depend upon what stitches you like and how you want the stitches to appear on your finished garment.

