

# Hand-Sewing 101

Stitches, fabric, and fibers for proper period garb

*Prepared by Emmeline of Ansteorra for the College of St. Monica, Victoria, Australia. Spaces have been left for notetaking on printed documents.*

## Works consulted:

*The Medieval Tailor's Assistant*: Sarah Thursfield, PDF found here:

<http://www.strony.toya.net.pl/~kuswir/MTA.pdf> (MTA)

*Stitches and Seam Techniques Seen on Dark Age/Medieval Garments in Various Museum Collections*: Jennifer Baker (S&ST)

Sarah's Hand Embroidery Tutorials found at <http://www.embroidery.rocksea.org/> (HET)

Rosalie's Medieval Woman, found at <https://rosaliegilbert.com/index.html> (RMW)

Mary Corbet's *Needle 'n Thread*, found at <https://www.needlenthread.com> (NNT)

"Sewing Stitches used in Medieval Europe" : <http://www.personal.utulsa.edu/~marc-carlson/cloth/stitches.htm> To determine if a stitch you want to use is 'period,' ctrl/cmd+f and start typing the name of the stitch.

Vintage Fashion Guild, found at <https://vintagefashionguild.org> (VFG)

Other works consulted are mentioned on their relevant pages.

## DISCLAIMERS:

- Everything stated hereafter as 'rule' can be treated as more of a guideline. The only hard-and-fast rule is there must be evidence for what you're doing. If you can find evidence for something you want to do that contradicts what I say here, GO FOR IT. No, seriously. And let me know!
- While I will always sing the praises of natural fibers, sometimes modern materials are unavoidable. Polyester threads and poly-blend fabrics are often a lot more affordable than pure natural fibers. If you can't afford to do something, either save until you can, or cut a few corners. But for your own sake, avoid pure polyester if at all possible.
- A good-faith attempt is worth a lot more to your experience than being absolutely perfect. And if someone tries to be a jerk about it, don't be afraid to tell them off. The SCA is the Middle Ages *as they should have been*, not *as they are*.



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The stores below range in price (The Embroidery Den, while lovely, is very specialist and pricy as a result, & Eliza Fabrics I find oddly cheap but I'm not complaining) and you can generally find good-quality material at every shop. <http://designerstitch.com.au/fabric-shops-victoria/> has a good, comprehensive list, as does <http://www.elizabethancostume.net/mailorder.html> for online shopping, though not necessarily up-to-date, as some of the shops on that list have closed.

Name	Where?	For what?	Notes
Lincraft, Spotlight	Various locations	Just about everything	Mostly polyester & blends. Not a great selection. Spotlight has hair canvas, though.
Darn Cheap Fabric	Heidelberg, Glen Huntly, Port Melbourne	Silk, cotton, sometimes linen and wool.	Good at labeling fiber content. Shop the remnant bin! Reasonably inexpensive.
Super Cheap Fabrics	Brunswick (19), Fitzroy (86)	Silk, cotton, linen	Not much in the way of content labels. Fitzroy store showed me a burn test!
Anne's Discount Fabrics	Brunswick (19)	Various fabrics	No labels at all. I haven't actually bought anything here b/c of that.
Unique Fabrics	Brunswick (19)	Wool, cotton, suitings	Good selection of worsted wools (mostly suitings), but very few labels.
Kim Anh Fabrics	Oakleigh		I haven't been here, but Kev recommends it.
Eliza Fabrics	Sunshine	Linen, silk, cotton	Shockingly cheap. Good range of trims, buttons, bits & bobs. Closing soon, RIP.
The Embroidery Den	Highett	Embroidery thread, ground fabric, patterns	Specialist embroidery store. Large selection of silk threads in particular.
Buttonmania	Highett	Buttons. All of the buttons.	Wide selection of buttons. Check out the buckles – the simple ones are good.
The Fabric Store	Fitzroy (11), online	Linen, wool	Not cheap, but very good quality, plus a good range of linen.
The Remnant Warehouse	Sydney, online	Silk, wool, linen	No consistent stock of many things, but you can occasionally find something great.
Renaissance Fabrics	Online (USA)	Reproduction patterns	They specialize in reproduction fabric, so a very good site to at least browse. Tends towards later period, especially 17 <sup>th</sup> c. onwards.
Calontir Trim	Online (USA)	Trims, duh.	Not all are period, but generally pretty good.
Dharma Trading	Online (USA)	Dyes & dyeable fabrics	Only white/natural fabric, but great if you want to get into dyeing.
Period Fabric	Online (USA)	Reproduction fabric esp. rare blends (linsey-woolsey &c)	These guys offer linsey-woolsey, which you simply <i>cannot</i> find in a modern fabric shop.
Beautiful Silks	Online (AUS)	Undyed silks, linen, lightweight wool...and PURE SILK VELVET!!	The <i>only</i> place I've <i>ever</i> seen 100% silk velvet, which is priced accordingly. Mostly for dyers. Australian-based.
Dorr Mill Store	Online (USA)	Gorgeous pure woolens	Good, <i>wide</i> woolens, accurate colors, and mostly pure wool fabrics.
Fabric Mart	Online (USA)	Cheap worsteds	Lots of yarn-dyed wools. Not much of anything else for reenactors, though.
Sartor	Online (EU)	Reproduction silk brocades, linen	Reasonably priced for what they offer. Decent selection of well-researched historical brocades. Wide selection of fine linens.
Vavstuga	Online (USA)	Linen thread	Wide variety of color & size Bockens threads.
Etsy	Online (Various)	Everything from fabric to equipment	There's a lot of Etsy shops who specialize in reproductions and historically-accurate fabrics.



## Materials

First and foremost, you need something to sew, and things to sew with. Until you have an idea of what you want to make, it's a great idea to practice on random scraps of fabric. Make sure they're large enough for you to get a decent amount of practice! You don't want to be working on a tiny inch-square piece, but you also don't need a full meter of fabric to practice on. Fat quarters, remnants, and leftover project scraps are all ideal for practice.

**Fabric** can be found at quite a few places. There's a big list on the page before, and a detailed breakdown of types on the pages following. As a general rule, look for woven fabric, preferably in natural fibers. Stick to solids until you have a good idea of what works with your chosen period. Again, *avoid polyester and acrylic* like your life depends on it—because it really does. Synthetics don't breathe (hello, heatstroke), they hold in body odors, and most dangerous of all, they melt when they get too close to high heat.

**Buttons** are generally seen in later-period garments, and almost purely as shank buttons, not the sort of four-hole buttons normally seen on button-down shirts. There are multiple button shops in town, most notably The Button Shop in Malvern and Buttonmania in Highett about a block past The Embroidery Den. Most craft and fabric stores will have a button range as well, but not nearly the variety of a specialty button shop.

For your garb, you'll want metal shank buttons if you're lazy, or you can make your own buttons from leftover garment fabric. Totally period and way cheaper. (Find a tutorial on page 29.)

**Hooks and eyes** are surprisingly enough, period. Use them sparingly and make them invisible.

**Yarn** sourcing is a bit harder in Melbourne compared to fabric sourcing, but you have Morris and Sons in the CBD, Sunspun Yarns near Canterbury station (my favorite), Wondoflex in Malvern along the 72 tram line, Craftee Cottage in Oakleigh, and Yarn and Co along the 86 tram in Fitzroy. Lincraft and Spotlight *do* carry yarn, but it's primarily acrylic and for the variety alone I'd recommend going elsewhere. If you want to make your own trims and facings, Yarn Barn in Coburg has a decent selection of weaving yarns, or you can get DMC cotton spools from Lincraft/Spotlight or The Embroidery Den.

### NOTE:

Most of what you're going to find is modern. That's a fact of life in this day and age. There are some people that do hand-spun, hand-woven, historical weaves, but that's out of most people's price range. The way the modern textile industry does things—as fast and as cheaply as possible—means that they cut corners. You see this in fluffy selvages from air-jet looms, thin fabrics that rip easily, and increasingly large percentages of synthetic fibers. Low prices come with a drop of quality.

Before the Industrial Revolution, clothes were so important that they were specifically willed to people, even if they were patched and worn. Textile production is an intensive process, and the price of fabric reflected that. Keep this in mind while fabric shopping. Quality textiles do not come cheap, but treat them right and they can last you a lifetime.

## Fabric

**Look for woven fabric. Period.** Poplins, twill (not denim), satin, taffeta, suiting, shirting, coating, canvas, and broadcloth are suitable for most personas. Earlier personas and *especially* peasants should avoid satin unless you can find evidence for it. Brocade, damask, and velvet are *strictly* for wealthy personas. They weren't cheap then, and aren't cheap now, even in polyester. A town-dwelling merchant could likely afford a bit of satin ribbon to use as a trim, or even a half-meter of satin fabric to line the visible parts of a garment so they could appear wealthier than they were. "Homespun" style cloth, with a lot of slubs (thicker bits), is actually a fairly modern invention. Medieval textile workers were able to spin very fine and very even threads, and a fine, even thread was a sign of quality craftsmanship.

Other words used to describe fabric are *hand* and *drape* – these both refer to how stiff the fabric is on its own. Taffeta and organza have a fairly stiff hand and both will hold a shape well, whereas chiffon and poplin have a much looser hand and will drape very well. All of these fabrics are plain weaves, so don't rely on the weave type to tell you how stiff the fabric is! Some websites will list the hand of the fabric, but not all.

Fabric has a 'grain' – think of this as the direction the weave goes in. Woven fabric has *weft* and *warp*. The *warp* threads are the long, stretched threads on a loom, and the *weft* is the crossing threads that are being woven. A warp- or weft-faced fabric means that either the warp or the weft is all you can see. Inkle loom weaving and other tablet weaving is generally warp-faced.

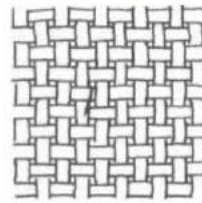
There are multiple weave types you will be able to find. Spend an afternoon at your local fabric store, maybe with a magnifying glass, and examine the various fabrics closely.

If the threads alternate up/down, that's **plain** or **tabby** weave. Voile, lawn, poplin, and calico (in order of increasing weight) are all plain weave, as are quilting cottons.

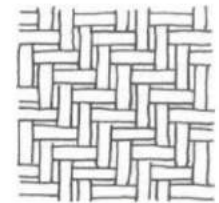
**2/2 twill** might be a bit harder to find, but every thread goes over two threads before going under two threads. **3/1 twill** is the same, but the weft goes over 3 threads and under 1. Denim and drill are both twill weaves. Medieval twills are usually **diamond** or **herringbone**. Great way to have texture without an unbalanced fabric or something distinctly modern.

**Satin** weaves involve very long "floats" of thread intermittently held together by a cross thread. It might be difficult to identify a satin weave if you just look at the weave structure, but satins are *very* easy to find in a craft store.

### 1. Weave structures



a. Tabby or plain weave



b. 2/2 twill



c. 3/1 twill



d. Satin



## Period fabrics

**Damask** and **brocade** are both *figure woven* fabrics, which have patterns woven into the fabric itself. Damask is reversible; brocade is not. Period brocades are very difficult to find.

**Velvet** is what's called a *pile woven* fabric – these are created by pulling up loops of thread while weaving, and cutting them afterwards to make that lovely fluffy fabric. Velvet is *very* expensive (compared to tabby weaves) as it takes up a lot of thread. Your bath towels are also pile-woven, but the loops aren't cut like they are with velvet. **Velveteen** is a cotton or cotton-blend velvet with a very short pile and a lot more body, and is thought to be similar to medieval velvets.



*Modern linen and cotton damask fabric. Note that the design is entirely formed by the threads, not printed on the fabric.*

**Shot or changeable silk** is a specific type of silk fabric, usually taffeta, where the warp and weft are two different colors. You'll generally find it labeled "*warp color* shot (with) *weft color*." If shopping online, the product photo should show the color shift of the fabric, although do keep in mind that different screens will display colors differently and some shifts are very subtle.

**Chambray** is similar to shot silk in that its weft and warps are different colors, but it's not strictly limited to silk, and the weft is always white.

**Crepe** is made with a highly twisted yarn, and has a characteristic wrinkly surface.

Some fabrics, like **linsey-woolsey** or **bombazine** are not defined by their weave type, but rather their fiber content. Linsey-woolsey is made with a linen warp and woolen weft, where bombazine is silk warp and worsted wool weft. Linsey-woolsey is period (but very hard to find), and bombazine is not (but equally difficult to find). **Calico** specifically is a closely-woven unbleached cotton. In the 18<sup>th</sup> and 19<sup>th</sup> centuries it came to be known as a cotton fabric with a printed pattern, so you may see prints referred to as calico. Americans might call it **muslin**, which is actually a fairly sheer and light fabric. **Hair canvas** is made with horsehair, and is used as an interlining fabric.

**Melton** is a specific type of woolen fabric similar to **doeskin**. Both are gorgeously soft, with doeskin being a bit less dense than melton. **Plaid** and **tartan** are two words for the same thing; the only difference is a tartan is registered by the Scottish Register of Tartans. All tartans are plaid, not all plaids are tartan.

**Chiffon** and **georgette** are both sheer silk crepe fabrics with a very light hand and beautiful drape. Georgette is slightly heavier, and the threads have alternating twists. **Organza** is also a sheer silk, but with a much stiffer hand that comes from sericin left on the silk threads. **Organdie/Organdy** is a cotton organza. **Dupion(i)** and **taffeta** are both crisp-handed silks. Dupioni is woven with silk spun from a double silkworm cocoon, hence the name, and has characteristic slubs. Try to avoid it if possible—medieval silks were as smooth as possible to show off the wearer's wealth and the weaver's skill.

### Not *quite* period

**Tulle** is fairly modern – avoid it unless you’re making 19<sup>th</sup>-century or later garments. **Flannel** is a brushed twill fabric you’ll find a lot of (or more specifically, flannelette, which is a cotton plain-weave imitation of proper flannel), and is generally dated to around the 16<sup>th</sup> century. **Gabardine** dates to the 19<sup>th</sup> century, but it’s an easy-to-find twill, so that’s nice.

**Gingham** is a white-and-color check pattern woven in a lightweight cotton. **Seersucker** is a striped cotton fabric with a puckered texture made by varying warp tension. Both are quite common in Civil War era reenacting, but are quite out of period for medieval.

**Lace** is found exclusively in late-period garments, starting from about 1500 on. If you’re playing as a Renaissance or Tudor persona, feel free to go crazy with the lace, but be careful with what types you use. Bobbin lace is period, as is cutwork. Needle lace is just barely too late. Bobbin lace is difficult to find and even harder to make, so if you find a lacemaker expect to pay a premium for their work.

**Knits** are considered to be *very* out of period unless you’re working after the 15<sup>th</sup> century, and even then a modern jersey or sweatshirt fabric is still very much out of period. Until you’re more familiar with late-period garb, it’s best to entirely avoid knits.

That said, if you simply *must* have a knit item, plan a late-period costume and commission the item from a knitter (expect to pay a hefty price or trade something equally labor-intensive you’ve made for it) or make it yourself. I apologize in advance if this recommendation results in you picking up a new hobby, which is inevitably more expensive than you expect it to be. Knits are pretty much entirely after 1450, and generally smaller objects like hats, mittens, scarves, shawls, and socks. There’s evidence of entire doublets knit (in silk, no less – the name of King Charles Brocade comes from the doublet he wore when his head got chopped off) but it’s neither cheap nor quick to make a knit doublet.

**For fibers, look for natural if possible.** There are three major types of fiber: staple (wool, cotton), bast (linen, ramie) and filament (silk, rayon). Avoid pure polyester and acrylic at all costs: while it's cheap and widely available, it gets very hot and sweaty inside a 100% polyester medieval-style gown. Polyester velvet, damask and brocades may be unavoidable for wealthy personas unless you have a ton of money to drop on pure silk (and I mean a *ton*: I've seen pure silk brocade for upwards of \$100/m!) Cotton-poly blends are OK if the poly content is under 50%, but do try to get pure cotton when you can. Semi-synthetic cellulose fibers (you'll see them labelled as rayon, bamboo, Tencel/lyocell, Modal, Cupro, or viscose) will also be a lot nicer to wear than polyester or acrylic, and are made from plant material rather than plastics, so they're more eco-friendly too! Ramie is another natural cellulose fiber, but somewhat difficult to find, and normally seen in blends.

Note – there are two types of wool thread: worsted and woolen. Worsted is a smoother and stronger thread, with all its fibers laying in the same direction and spun from combed wool, and woolen is a softer thread with its fibers not necessarily all in the same direction. You may see 'worsted' in a product description, and that just means it's a smoother fabric.

**The big 4 natural fibers are cotton, linen, wool, and silk. All of these can be found both pure and blended, whether with each other or with polyester/acrylic.**

**Cotton** (A\$5-10/m, or more for heavy-weight fabric) is what you're most likely to find, and most likely to use. While it isn't strictly period, it's a lot cheaper and more accessible than linen and linen blends, especially on a student budget. It can also have a fairly similar appearance to linens. Cotton will also keep you cool in summer, but you'll want something warmer for winter. Cotton poplin or voile will make a lovely undergarment or veil, whereas canvas and broadcloths will do very well for an underlayer for your armor. Cotton has an annoying tendency to shrink, so always wash it before sewing with it, unless you're just doing something where fit doesn't matter. Do be careful to ensure 100% cotton—it's commonly blended with synthetics.

**Linen** (A\$20+/m on the cheaper end, A\$40+ on the high end) is a bit harder to find in its pure form, and also hard to find in an even weave. Most modern linens are in a fairly coarse weave and (from what I've seen at least) have slubs, or unevenly spun threads. As stated above, medieval spinners were more than capable of making smooth, fine threads. Look for finely-spun linen, and expect to pay more than cotton but less than wool. European-woven linen will be of higher quality than Chinese-woven, but is much harder to find, and more than double the price. You'll want a very fine fabric if you're planning on wearing it next to your skin, but the further 'out' you go layer-wise, the coarser your fabric can get. Heavier-weight linens can also be used as an interlining – the medieval version of interfacing. Good linen should not shrink in the wash, but if you're still worried, pre-wash your fabric before sewing it.

**Wool** (usually A\$30-50/m, can easily be found for more) is lovely to use, but very expensive. Watch for sales online to get it as cheap as possible. It's difficult to find pure wool, so if you're getting a blend try to get as much of a wool content as you can, again for your comfort. Wool will almost certainly be too warm for a summer garment in Australia unless you have a very fine fabric, so save it for winter garments. Look for plain weaves, twills, Melton, faced cloth, suiting, coating, or broadcloth. You'll see a lot of gabardine too, which I'm not sure about, but it should be fine. Western-made wools will be beautiful, but expect to pay a premium price for them. Pretty much anything can be made in wool, but if you're working in wool for the first time, make a cloak to keep you warm while you work on the next garment. Wool should *never* be washed in a machine, only by hand, even if it's labelled as washing-machine-safe.

**Silk** (A\$15+ for georgette, organza, habo/utai, china silk, A\$25+ for satin and dupion, A\$40+ for taffeta, A\$90+ for brocades, and *exorbitant* prices for pure silk velvet if you're able to find it) is also very lovely, and also very expensive. It's fairly easy to find pure silk in comparison to wool and linen, but not all silk weaves are necessarily suitable: dupion was relatively common in medieval times, but modern dupions are slubbed. While it's a beautiful look in modern garments, no self-respecting medieval noblewoman would have dared to wear "imperfect" silk. If she's going to show off her wealth, she'll do it with the finest fabrics her family's money could buy. Use satins for visible linings, and facings, transparent weaves for veils, and taffetas for larger garments.

On velvet: Pure silk velvet is insanely expensive. I've seen exactly one supplier of pure silk velvet, which is undyed and goes for A\$110/m. You'll probably only find blends, which make it loads more affordable. But again – only the richest of the rich in medieval times could even think about buying velvet, because they didn't have the blends we do today. Velvet fabric takes a *ton* of thread to create the pile, so a square inch of pure silk velvet takes a LOT of silk to make. Cotton velveteen is actually thought to be closer to medieval velvet than a modern silk/viscose velvet. Avoid crushed/panne velvet and anything with a knit ground.

**Colors and Patterns:** Choose solid colors, or *yarn-dyed* stripes, checks, or tartan. Shot silk, where the warp and weft are different colors, is also a viable choice. Do *not* get printed fabric unless you know for a fact that your print is period. Most modern prints, while pretty, are very much not. Avoid painfully-bright colors – they're really only possible with modern dyes.

Expensive: Black and strong colors, especially reds and purples. Pure white linen—it required bleaching, and thus more time. Time is money, after all. This isn't to say someone less wealthy wouldn't have white linens—theirs would just have been slowly bleached by the sun over time.

Middling: Blues, greens, medium-strong reds and purples.

Inexpensive: Most yellows, oranges, browns—those dyestuffs are widely available and most plants produce something along that spectrum. Pale blue, green, red, purple.

Dirt cheap (relatively speaking): Pale yellow/orange/brown, undyed fabric.

Note: If you're aiming for later period (after about 1200 or so), and you have a general idea of where your persona is from and what their station in life is, you may also want to research local sumptuary laws to see what someone of your persona's station is allowed to wear.

**TL;DR:** Look for smooth, woven fabric in primarily natural fibers and err on the side of muted colors. Remember: they weren't dyeing bleach-white fabric, and they didn't have modern dyes. Avoid black, red, and bright colors, especially bright pinks. No prints without evidence. Keep finer weaves closer to your skin, and leave coarser weaves for outer garments.

## Tools

### Needles

Try to match needle size to the size of the space between the fabric threads. If you're sewing a very fine cloth, you want a very fine needle. This is so you're not making massive holes as you push threads aside with a too-big needle. How can you tell if your needle is too big? You're going to have a harder time pulling it through. The needle will leave a hole behind. It might make weird noises as you pull the needle through the fabric. (You'll know what a 'normal' sewing noise is with time and practice – it should really only be a faint swoosh of thread rubbing on thread and a satisfying 'thunk' as a needle passes through fabric under tension, rather than a squeak of metal on fabric.)

Mary Corbet's *Needle 'n Thread* has an entire tag dedicated to needles:

<https://www.needlenthread.com/tag/needles>

...and a really nice, in-depth description of various embroidery needles here:

<https://www.needlenthread.com/2014/11/hand-embroidery-needles-how-to-choose-them-use-them.html>

John James Needles also has a guide to needles, somewhat more comprehensive as it's not just embroidery: <https://www.jjneedles.com/needles-guide>

As a rule, **small numbers mean larger needles**. There are some exceptions, but for the most part you can rely on that.

Curved needles will prove useful when sewing in an awkward area, or when you can't hold the fabric properly for whatever reason.

For most sewing in the SCA you'll want **sharps**. You can get a multipack of needles from Spotlight or Lincraft and that should serve you well. At some point you may want to go further down the rabbit-hole of sewing, and a general knowledge of the more specialized needles will serve you well then.

### Thimbles

If you plan on doing a lot of hand sewing you will want a thimble. This will prevent the back end of your needle from injuring the finger you use to push it through your fabric.

Medieval thimbles are a bit of a mystery. There's evidence of thimble rings but not much else. A leather thimble should suit you fine, as it fits better to your finger than a metal one. I never felt quite right with a metal or silicone thimble, and cheap metal thimbles can rust and make your fingers smell weird.

Wear your thimble on the middle finger of your stitching hand, or whichever finger you use to push your needle through your fabric. You can make your own or buy one – Clover makes a good leather thimble in a few different sizes for a relatively low price. Personally, I wear a medium, and I find I forget I'm wearing it with embarrassing frequency.

### Awls and Buttonhole Cutters

The proper way to make holes. Awls push the threads aside rather than cutting them, leaving you with a much stronger eyelet. Buttonhole cutters look like a little chisel that you tap into the fabric to make a buttonhole. Not necessary, but useful if you want one.

## Thread

**Cotton** quilting thread is fairly strong, and is good for general use. Gutermann can be found at any halfway-decent craft store (seriously, just go to Lincraft or Spotlight). For areas that will see a lot of wear (buttonholes and eyelets specifically) a heavy-duty thread is a must.

**Linen** threads are a bit harder to source but very period and honestly I prefer it to cotton. You **MUST** wax linen thread before sewing with it. Teffania loathes Londonderry linen thread (I've never used it) and introduced me to Bocken's, which is lovely and strong and I've had no problems with it.

**Polyester** threads are fine to use for buttonholes and places where the stitching won't be seen. Rayon is particularly difficult to work with, according to Mary Corbet's *Needle 'n Thread*.

**Silk** threads are gorgeous but expensive, and mostly used for embroidery. Silk sewing thread (Gutermann, Daruma) is good for general-purpose stuff, if a bit overkill. Reeled silk in particular is *very* difficult to work with, though the final result is absolutely worth the effort. Stranded silk will be your best option if you want to sew with silk, and The Embroidery Den sells a fairly wide variety of *Soie d'Algiers* stranded silk threads. Silk is made of very, very, very, *very* long fibers in comparison to everything else mentioned here, so will be much less likely to break or shed, although it's not unheard of, especially if you pull too hard.

Regardless of what thread you are working with, always pick a **solid color**. Match your fabric color if at all possible. Sometimes, with wool fabrics especially, you can tease a thread loose from the edge of the fabric. If you do this, be sure to test its strength!

**Yarn will mostly be used for decoration**, but for very thick fabrics you may prefer it over cotton threads.

Thread and yarns have 'plies', which is a quick way to say how many strands make up the thread or yarn itself. (Australia and Britain for some reason like to refer to yarn weights by ply, which makes no sense because you can have a 12-ply yarn that is actually made of a single ply, or a four-ply yarn made of eight.) Plies have *twist*, which is what holds the fibers together and makes them strong. You can have a loose twist (generally found in larger yarns or reeled silk threads, which may have no twist at all), which tends to be weaker, and in woolen and cotton threads especially will lead to a lot of breakage. A 'high twist' thread will normally be labeled as such, and is great for areas that will receive a lot of wear and need the extra strength.

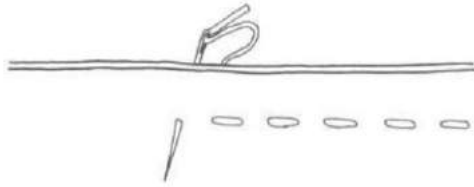
Many times in period, threads were teased from the warp or weft of the fabric, but I find these threads are a bit weak, likely owing to modern production methods.

## Regarding leather:

You will need a heavier-duty needle than you think. There are specialized leather needles (also called glover's needles), which you will want to search out. You'll also need an awl to punch the holes you'll be sewing through, and waxed thread as it's stronger than unwaxed. More specific information can be found with a quick Google, these are just some general guidelines.

# Stitches for Construction

## Stab Stitch



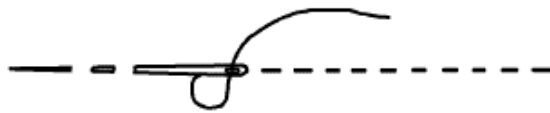
(MTA)

The basic-est of basic stitches. “Work at right angles to the material and pull the thread through after each insertion, making one stitch at a time.”

(MTA) Each stitch is ‘stabbed’ individually. The

*Medieval Tailor’s Assistant* recommends using this stitch for holding together multiple layers, like folded edges on lined garments. It looks like running stitch but can be a bit stronger, as you are completely passing the needle through each layer of fabric rather than possibly only picking up half a thread on the backside.

## Running Stitch (Stab Stitch’s lazy twin)



(S&ST)

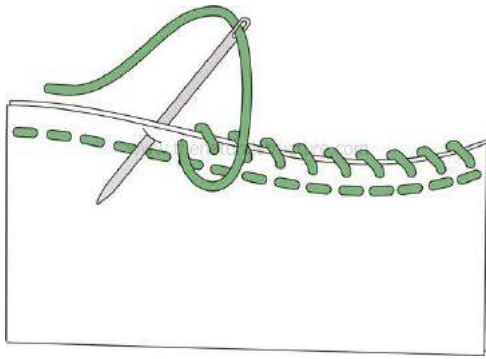
This is the one where you can put your needle through the fabric multiple times. It’s not as strong as other stitches, but it IS fast. The

*Medieval Tailor’s Assistant* recommends a backstitch every few stitches or so to make it stronger. You should use a wide running stitch (3/8” or about half a centimeter) to tack or baste pieces together if you don’t have pins, and a smaller running stitch (a few threads long) with backstitches every few stitches (ideally no more than 10 between backstitches) for a similar purpose, but with a bit more strength. Running stitch is also used in a few seam treatments, most commonly as the “running backstitch” described earlier.



(HET) Double running stitch or Holbein stitch is a variant primarily seen in blackwork embroidery and involves doing running stitch one way, then returning with running stitch through the same holes. This is a way to make your stitches look machine-sewn and is a bit stronger than regular running stitch.

## Overcast Stitch/Oversewing



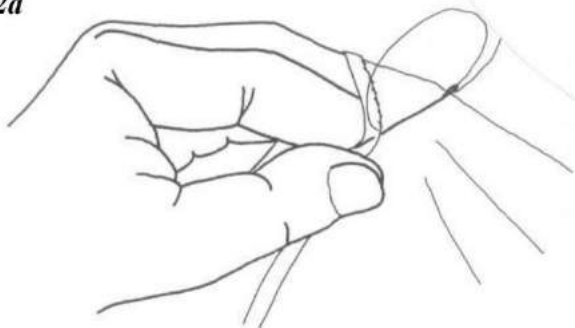
(S&ST)

Think of this one like you're sewing the spiral of a notebook. In one side, bring it over the top, back in on the same side. Overcast stitch is worked wider and looser than oversewing, and works well to keep raw edges from fraying.

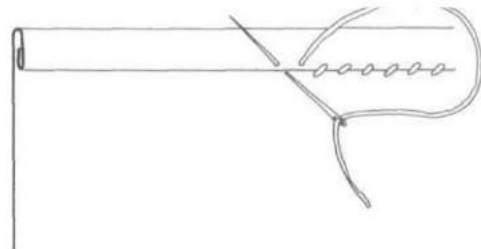
*MTA:* "For joining selvages or folded edges on all kinds of material. If worked neatly and near the edge it will open out flat without the need for pressing. For each stitch, push the needle through only one or two threads away from the edge. Keep the stitches close together. When the seam is complete, flatten the stitches with your thumb or index finger nail. Oversewing should not be confused with overcasting, which is worked wide and loose over a raw edge to prevent it fraying."

## Felling (Oversewing's cousin)

2a



2b



(MTA)

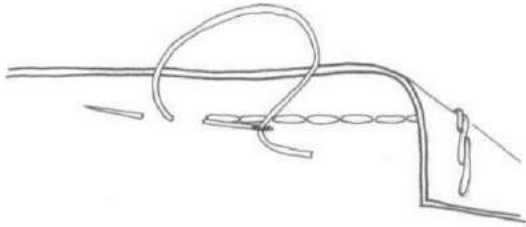
2A demonstrates how you hold down a folded edge (use your non-dominant hand) to fell it. Pick up one or two threads along the fold, then one or two threads from the main body of your fabric. If you're doing this in a straight line, try to keep it along the same few threads. If you're doing this along a curved line (no matter how slightly it's curved), try to keep the folded section about the same width. You can use this to finish a hem or to finish raw edges before oversewing the pieces together.



## Backstitch, Stem Stitch, Split Stitch, and Pick Stitch

(MTA, HET, HET, Threads Magazine)

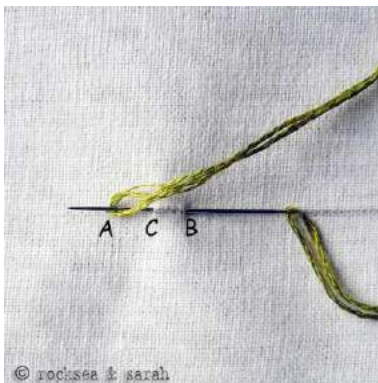
I've lumped these in together even though three of them are decorative because they're all quite similar.



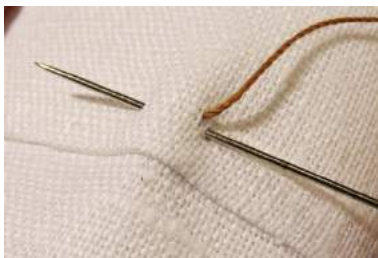
A backstitch is pretty much what it says on the tin: a stitch where you're going "backwards" along your seam. Backstitches are a lot stronger than running stitches, but they are way more time-consuming. Come up a little further away from the end of your last stitch and putting your needle through as close to the end of your last stitch as you can.



Stem stitch is generally considered a decorative stitch, and is named such because someone, somewhere thought it looked somewhat like a flower stem, and indeed it does. It looks really nice on curves, especially when you're very careful about keeping all the stitches overlapping the same way. Come up about midway along stitch 1 (location C above), and down a bit further away (D). Then, come back up at or near (B), and down along your line past (D). Try to keep C on the same side of the line at all times – if you come up above your previous stitch, make sure you continue doing that.

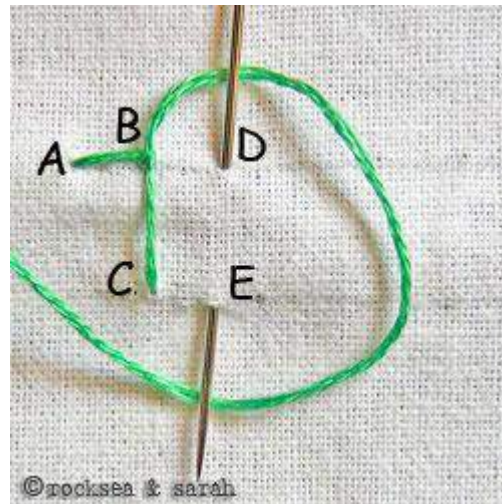
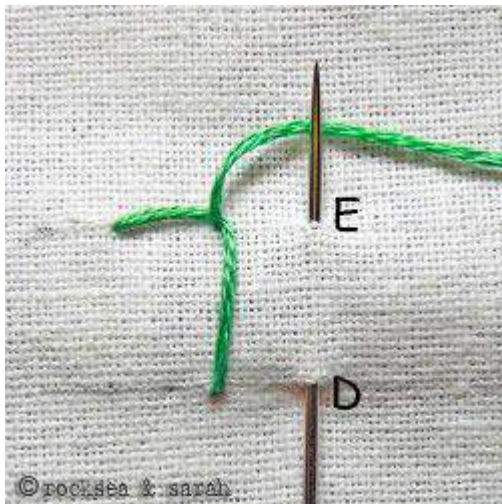


Split stitch is *very* common in medieval embroidery, specifically *Opus Anglicanum*. Medieval embroiderers would use the direction of stitches to suggest motion and subtle shaping, especially on faces. Make a stab stitch, then come up and split the thread with your needle. You can also do it as backstitches, by splitting your previous stitch as you



Pick (or prick) stitch is a very tiny (over 1-2 threads on the right side of the fabric) backstitch every cm or so made along a seam to hold the seam allowance open or to firm an edge. It's generally a good way to identify high-quality modern garments, as it must be hand-sewn.

## Blanket and Buttonhole Stitches



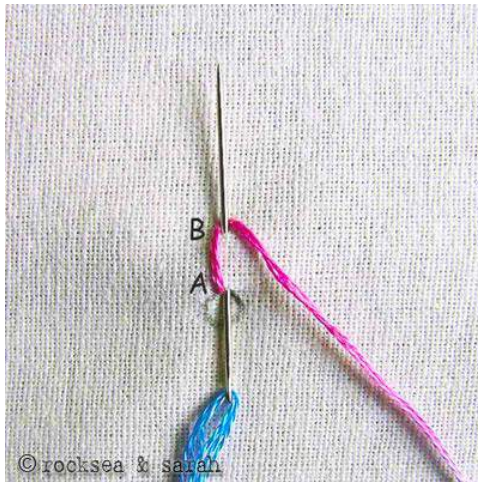
(HET)

Two names for (practically) the same stitch! This is a great way to finish raw edges of fabrics that don't need much finishing at all, like woolsens. There are minute differences between the two, as shown above (blanket on the left, buttonhole on the right), but for the most part you don't need to worry about the differences. One is worked with the needle going up, the other is worked with the needle going down. Work whichever is easiest for you.

It's also a really nice decorative stitch, and can be varied in leg-length to look really neat. Some people say to do eyelets in blanket/buttonhole stitch, but really you don't need to.

# Decorative Stitches

## Chain Stitch



(HET: note the multicolored thread))

Chain stitch is a really neat way to make the edges of your garments look nice. As you might expect, it looks like a chain, and is “chained” together. You’ll make a loop, going back down through the same hole you came up, but before you pull your thread all the way through, you bring it up a little way away from where your loop is coming out of the fabric. Catch the loop with your needle, and *then* you can pull. Don’t pull your thread too tight, however, or you’ll have less of a chain and more of a double-thread-width stitch that looks like a split stitch.

## Couching



(HET)

Couching is a technique used primarily with goldwork or large cords that are impractical to sew with. It is perfect for the delicate threads used in goldwork, as bringing those threads through fabric multiple times may result in their destruction.

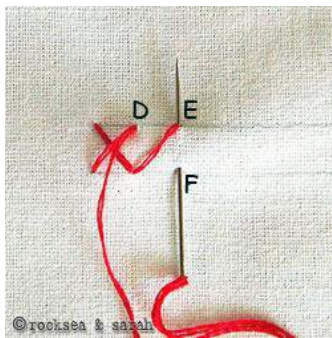
To couch a thread or cord, you need to know where the couched cord will sit on the fabric. From there, you can take a similarly-colored embroidery thread (or contrast if you want it to stand out) and bring it up on one side of the cord, then down on the other side, locking it onto the fabric. When you’ve finished attaching the cord to the

fabric, “plunge” the ends of it through your fabric so they can’t be seen from the right side. Couching may be thought of as the embroidery version of stapling!

Mary Corbet’s *Needle ‘n Thread* has an awesome post on variations of couching: <https://www.needlenthread.com/2012/04/stitch-play-couching-beyond-the-straight-stitch.html>



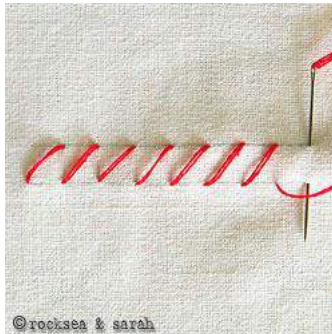
## Cross-stitch



(HET)

Cross-stitch can be done a few different ways. Each cross can be done individually, like in the first picture, or you can work a line of cross stitches all at once, like in the last two pictures. Cross stitch is worked between two parallel lines, which you can draw in with erasable marker or chalk.

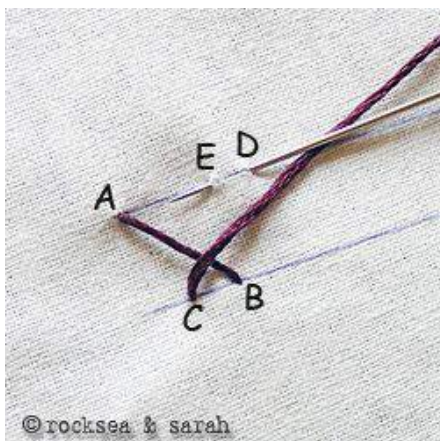
In order to do a single cross-stitch, you will first make a diagonal stitch between the parallel lines, then come up at D – the same place your first



diagonal stitch started, but on the opposite line. Put your needle back down through the fabric at F.

There is a much more efficient method for creating long rows of cross-stitch: make all of your diagonal stitches one way, then make a return trip crossing each stitch.

## Herringbone Stitch



(HET)

Herringbone stitch is one of those you might see everywhere in the SCA, though the historicity of the common uses of it in the SCA are debatable. The guide photo shows two parallel lines drawn on fabric; make sure if you create guidelines that they are in chalk or air- or water-erasable marker so you don't have them drawn on after you're done stitching.

To do herringbone stitch, make a diagonal stitch between the lines (A-B), come up on the same line as B but in the direction of A (at point C), then make another diagonal stitch to D and come up at E. Herringbone stitch is very similar to cross-stitch,

but instead of crossing legs in the middle, the crossing stitch goes across about 2/3 of the way down from the previous stitch's beginning. Try to keep your long diagonal stitches parallel to make this stitch look its best.

## Satin Stitch



(NNT)

Satin stitch is a common “fill stitch” mostly seen in modern embroidery and which forms the basis for a few period embroidery techniques. It can be couched down separately as Bayeux stitch (lower left), or self-couched on the return as Klosterstitch (lower right). Proper satin stitch goes across your whole design on both the front and back of your work. Mock satin, generally used to save thread, does not.

## Bayeux Stitch



(NNT)

Bayeux stitch involves mock-satin-stitching across an area, then returning with a separate thread to couch down the satin stitching at regular intervals. Goes *very* quickly.

## Klosterstitch



(Racaire)

Klosterstitch begins as a satin stitch across your whole design, then you come up a thread away to begin the self-couching process. Your return stitches will spiral around your satin stitch and hold it in place. The couching will almost disappear when worked along the twist of the thread. Be careful with your couching stitch length: Too short will look like knots. Too long will not fade into the texture.



## Other Techniques

### Basting

Basting uses very long running stitches in place of pins to hold bits of fabric together. Place your fabrics together as you would pin them (heck, you can even pin them together while you baste), and using cheap thread (you want something you don't care about breaking/wasting) make very long stitches while keeping the fabrics as flat as possible. You can baste only along the seam or over the entire piece of fabric, depending on what you're doing. For lining or interlining, I recommend basting the whole thing (you'll remove it later), but if you're just doing a seam, you don't really need to do that. For machine basting, use the longest straight stitch your machine has.

Why baste when you have pins? Because it's a hell of a lot harder to stab yourself while sewing or when your project is stored away and you're moving it or something, or catch a pin under your thumbnail with sewing thread. Seriously. Basting means you're not sewing an angry porcupine. (Can you tell I'm speaking from experience? I really need to follow my own advice here.)

You can baste by machine (so quick!) or by hand (fewer stitches, easier to remove). I like to run my seams up on a machine before sewing them by hand, but I also just like sewing by hand in general.



(Photos & descriptions from "The Daily Sew")

#### Even Basting Stitch

This is the basting stitch you want to use for basting seams together to check the fit of a garment before sewing it with more permanent stitches. The even basting stitch is very similar to the running stitch but the stitches are longer. Simply weave the needle in and out of your fabric at evenly spaced intervals (about 1/4").



#### The Uneven Basting Stitch

The uneven basting stitch is used for holding underling to the garment fabric. It's also used to mark style lines in the garment. It differs from the even basting stitch in that it is a short stitch across the back of the fabric and a long stitch across the front.



#### The Tailor Basting Stitch

The tailor basting stitch is used by tailors to hold all the layers of a coat together (the fabric, the interfacing, the padding, the lining) for a fitting on a client. They use this stitch because it does such a great job of keeping all the layers in place and yet it's easy to remove.



## Lining & Interlining

I'm going to be a bit lazy and directly insert most of page 50 of *The Medieval Tailor's Assistant* below. Under **11. Interlining**, note the direction that interlining should be permanently attached by regular rows of stitches: for this, refer to the next page on pad stitching. Snipping the edges on curves is done to reduce fabric bulk where the curve is tacked down and to allow the folded over fabric to curve without deforming. If you'd like to see what happens, try to fell along a curved seam without nipping the edges. Then, attempt the same thing *with* snipping the edges.

### Interlining flat pieces, Fig 13

Parts of dress such as cuffs, collars, some headwear and accessories are often interlined to stiffen them and also lined. Depending on its purpose, the interlining can be anything from linen canvas to heavy buckram: if it is too heavy to tack through easily, hold the covering materials in place with clothes pegs or spring clips. If the outer material is to be decorated with embroidery or braiding, work this before you make up the shape, if necessary through the interlining.

#### 13. Interlining, lining and joining flat pieces

Cut three layers: the outer material, with seam allowances; the stiff interlining of buckram or canvas, without seam allowances or very slightly undersized; and a lightweight lining, again with seam allowances.

**a. Interlining a (curved) shape.** Tack the interlining to the outer material as shown. Turn the seam allowances over the interlining, snipping or gathering the edges as needed. Tack again through the seam allowances to secure them, then pin the lining in place.

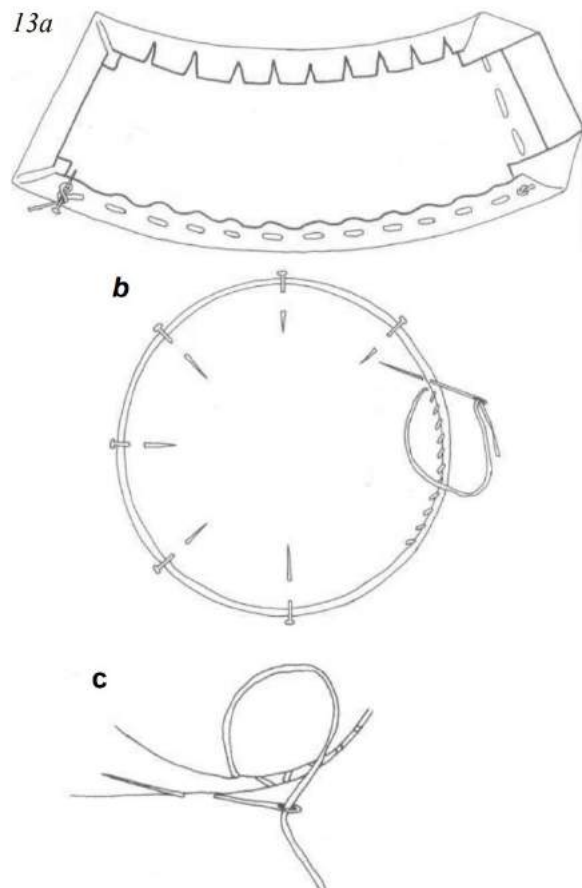
#### **b. Lining a (round) shape, already interlined.**

Smooth out the lining so that all three layers lie flat on the same grain. Start by pinning the halves and quarters along the straight grain, then place further pins between them. Hem the lining onto the seam allowances of the outer fabric, just inside the folded edge.

**c. Joining completed parts.** If they are too stiff to pin, use bulldog clips or clothes pegs to hold the parts in position. Use slip stitch to draw them together as shown.

#### 11. Interlining

For large pattern pieces the interlining should be permanently attached by regular rows of stitches so the two layers of material will work as one. Use tiny stitches, which will not show on the right side.





## Pad Stitching (Medieval Interfacing)

Despite its name, pad stitching describes the usage of the stitch rather than the stitch itself. Pad stitches are the original form of interfacing, used to stiffen fabric and attach multiple pieces together. Pad stitches will be used when you want to create a firm collar or cuff.

As you might expect from the above description, pad stitching requires multiple layers of fabric. Your outer fabric, an interlining, and a lining are generally a good place to start. Hair canvas (get some at Spotlight) is what tailors use for interlining; you can use a bit of coarser linen cloth or canvas.



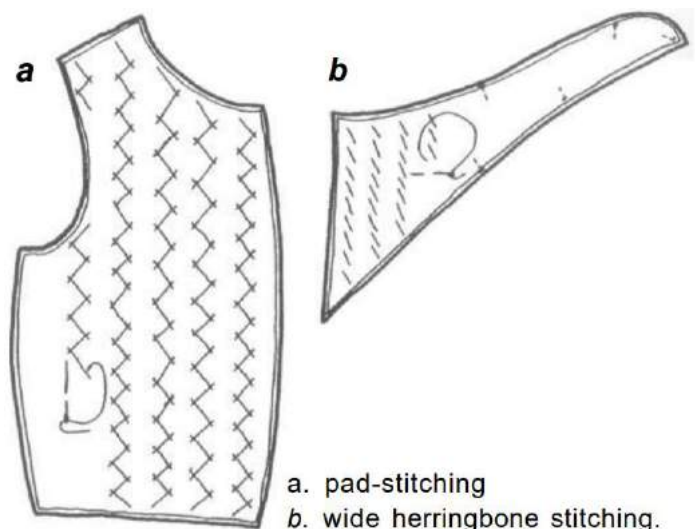
To create this firmer section of your garment, first define the area you want to stiffen. In this photo, the area being stiffened is between the two white facings. You'll be doing relatively long, straight diagonal stitches, which go through all of your layers but just barely catch the outermost layer. If you're not sure how much your needle is picking up, flip your fabric over and check. If you can actually see shiny silver, you've picked up too much of the outer fabric. Pad stitching should be invisible from the right side. This also means don't aim for perfection in your stitch size and angle, as that will be visible from the right side. The photo above also shows pad stitches that change direction, which you may wish to do.

*When you are putting in pad stitches somewhere where the garment is meant to curl (like this collar), keep the fabrics curled over your finger as you pad stitch. It will work... Actually, I think it's a tension thing. Whatever the reason, I know it works, and you can't beat it for control of a curve. Fusibles will not do this for you, my friends. You must pad stitch.*

That's a direct quote from the blog post I'm referencing! She also recommends using multiple stitch sizes to control any curves you want, using larger stitches on looser areas and smaller stitches for firmer areas.

This second image (MTA) shows two more ways of pad stitching (mislabeled, unfortunately) – one with herringbone stitch, and the other is straight diagonal pad stitches with no change in direction.

Reference and first image:  
<http://www.sempstress.org/skill/pad-stitching/>



a. pad-stitching  
b. wide herringbone stitching.

## Pleating

Pleating is generally seen in later period garments, but is a beautiful way to add decoration to your garb. You'll need at least twice as much fabric as you would for a non-pleated garment, usually closer to three or four times as much.

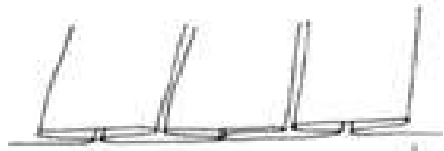
Great source for period pleating methods (and where the knife and box pleat images came from):

<http://www.elizabethancostume.net/pleats/>

**Knife pleats** (right) are what you are most likely to find. The general rule of thumb for knife pleats is 3 inches of fabric per 1 inch of pleat. It was definitely used in the 16<sup>th</sup> century but also likely used earlier. Use it to add extra fabric in underclothes (and thus removing the need for gores), not just in your skirts.



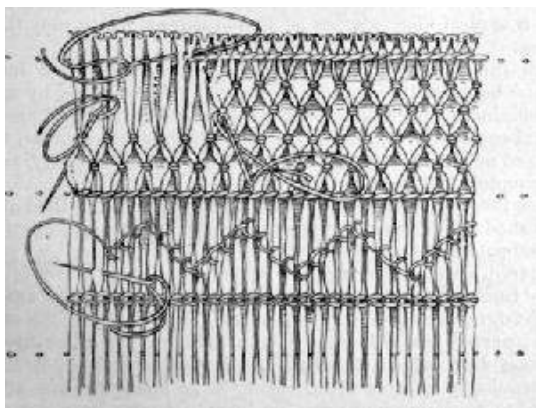
**Box pleats** are two knife pleats in opposite directions. Since they're essentially the same technique, just with every other knife pleat flipped back-to-front, the same fabric ratio applies: 3 inches fabric per 1 inch pleat. These are generally found in skirts, but anytime you want to pleat heavy fabric, box pleats are best. You can 'cheat' by not making your pleats go all the way to the middle. They won't be as full, but they use less fabric, and when you're working with something expensive, every millimeter counts.



**Cartridge pleats** are the base for smocking. To make cartridge pleats, you need a lot of exactly-the-same-length running stitches. To do this, mark every half-inch or so along the wrong side of your fabric, then copy those half-inch marks down another half-inch, until you have at least two rows for ordinary pleats and at least six for smocking (make sure it's an even number!). You should end up with what looks like a piece of dot-grid paper. Some people recommend sewing all your gathering threads at once. Knot the ends of them together (this makes it easier to gather at the end). When you sew, put your needle in the fabric just before the mark you made and bring it up just after. Do that going all the way across your fabric, times as many rows of marks you made. Once *all* of your gathering threads are in place, then you can start doing the gathers. Pull the fabric so it folds into an accordion (see above right), poking the areas that want to fold the wrong way.

## Smocking

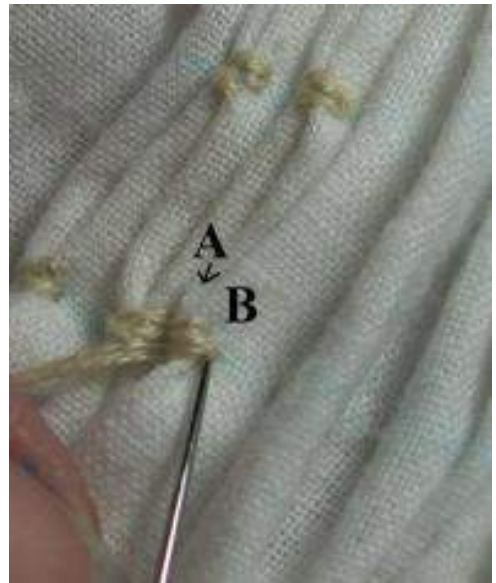
You can find multiple **smocking** patterns online, but the basic 'honeycomb' smocking that you'll see most frequently is done by tacking together two pleats, alternating back and forth along each line. Sew two rows at once, starting at the bottom left on the right side of the fabric. Tack together folds 1 and 2, whipping them together twice. Then, go up to the next row and tack together folds 2 and 3. Go back and forth like that until you reach the end of the smocking folds. Then, go back to the left side of the fabric, and start the next two rows, working in exactly the same manner.



The second image on the left uses honeycomb stitch at the top, and has a few different decorative stitches beneath it, including gathering the pleats with chain stitches. Play around with different stitches and see what you like. You also don't have to work smocking in straight lines: you can stitch diagonal lines to make it interesting.

Full smocking tutorial here: <https://maniacalmedievalist.wordpress.com/2012/11/24/pleated-embroidered-smocked-apron-mock-up-1/> (I also took the first two photos on this page from there)

More on smocking here: <http://www.medievalsilkswork.com/2010/06/smocked-apron-tutorials.html>



Once you're done with all the smocking, you can take out the gathering threads and spread the fabric out a bit. It should look something like the image on the left, if you've done it correctly.

Where should you use smocking? Anywhere you want a bit of stretch. Usually you can find it along necklines and on cuffs. There's evidence for smocking dating back to the 1300s, so feel free to use it on later period garments. Smocked aprons can be found in the Luttrell Psalter, and making one would be a good introduction to the technique. You don't have to just use honeycomb stitch. There's a handful of images floating around that have different patterns to try.



## Eyelets and Lacing

How did medieval people live without buttons? Eyelets and laces.

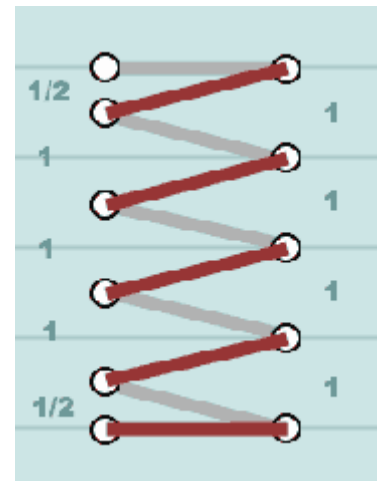
To make an eyelet you will first need an awl, or something else with a pointy end to poke holes with. Some people cut their eyelets. This is a Very Bad Idea. Cut threads are weak points in fabric, and you absolutely do NOT want weakness when you're tugging at lacing to make it tighter. Awls push threads aside to form a hole with no broken threads. Robin Netherton recommends snipping ONE thread on the left and right, two max, and using a basting thread along the line where your eyelets will run to ensure they align.

*The reason you clip a thread or two on the sides is to keep the fabric from puckering between the eyelets. This applies only to a series of eyelets in a row along the fabric grain. You see, you're mostly just pushing the threads apart to create the hole, not cutting or punching a hole. The unbroken threads keep the hole very strong and stable and means you don't get threads pulling away from the hole (a real problem with modern grommet-setting, which involves punching a hole and cutting threads). However, if you do this a lot in a row, the vertical threads that would have run right through the middle of those holes, down the whole row, have to "detour" around each one, and end up pulling tight and puckering along the line of the eyelets. Clipping those particular threads prevents that problem. Don't clip the threads that go perpendicular to the row of eyelets.*

First, decide your eyelet spacing and mark it. Medieval lacing was normally done as a spiral lace, so your eyelets will be offset. Criss-cross lacing (think shoelaces) is very much not period. Your top pair and bottom pair of eyelets should line up, but everything after that should be staggered. Lady Lianor dos Cavelos recommends 2-3cm between holes—the width of a finger is just about right. They should also be about 1-2cm in from the edge of your fabric. Too far from the edge and too far apart means your eyelets will gape.

First, poke your hole with your awl. Using a buttonhole twist thread or a normal sewing thread held double, secure it to the fabric close to the eyelet, where it will be hidden by your stitching. Make a small running stitch circle around the hole—this will be the outer edge of your stitching. Cover the edge of the hole with overcast stitch. Use the awl every so often to reopen the hole, as it shrinks while you're stitching.

Make a fine finger-loop braid to use for your lace.



<http://www.festiveattire.com/p/the-zen-of-spiral-lacing.html>



## Buttons and Buttonholes

Fabric ball buttons are the most economical way to make buttons to show off how fancy you are. You can make them in just about anything, really, but you might need a few layers if your fabric is really fine. Buttons really shouldn't be larger than 2cm, and usually they'll be a lot smaller.

Cut 2"/5cm squares of fabric, and draw a circle around 1.5"/3½cm across. This will be your stitching line. Don't trim your corners—they make for great button-stuffing. Running stitch around the circle, and pull the thread to gather it. Poke the fabric outside your running stitches into the 'pouch' formed. Gently tug the thread to continue tightening the gather, and secure it with a few stitches. Keep doing this until your button is mostly spherical. Leave the thread long so you can sew it onto your garment. It'll take practice before your button is perfect, so don't worry about getting it Right on the first go.

Medieval buttons are usually sewn onto the edge of your fabric, rather than in the middle of a button placket as in modern days. Metal buttons may be inserted into an eyelet 1cm in from the edge (you don't have to sew it properly, don't worry) with a thick cord or ribbon running through the shank on the wrong side of the fabric. Fold over the seam allowance so your buttons are now the edge of your fabric, and whip stitch in place.

Buttonholes are a tricky beast when compared to eyelets. Medieval tailors and dressmakers cut their buttonholes before binding the raw edge, and modern dressmakers sew the binding before cutting. Use a scrap of fabric to determine how wide your buttonholes need to be before marking them along your garment. Sew on a facing, and mark your buttonholes on that before cutting and binding with buttonhole stitch. The late medieval aesthetic is buttons, and lots of them, as close together as possible.



<http://www.personal.utulsa.edu/~Marc-Carlson/jennifer/buttons/Basicfabricbuttons.htm>

<https://handcraftedhistory.blog/2018/10/19/how-i-attach-buttons-on-a-sleeve/>



## Seaming

### Run-And-Fell Seam

N.B. Below, under **Seam-And-Fell Seam**, is the relevant part of *The Medieval Tailor's Assistant*. Refer to the figures there for diagrams and another way of explaining.

Run-and-fell seams are worked on the wrong side of the fabric. Running-stitch the pieces of fabric together, then trim one of the seam allowances and fold and sew the other seam allowance down over it. Make sure that you don't trim too close to the running stitch!

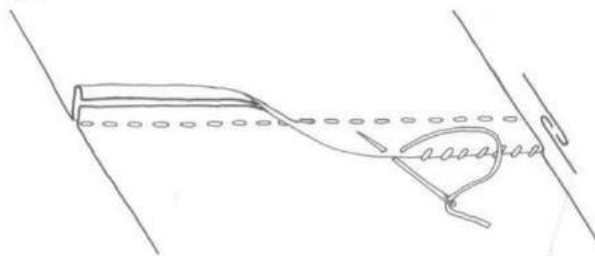
### Seam-And-Fell Seam

This is a bit harder and a bit slower, but it is much stronger and ideal for linen and cotton fabrics. The two pieces of fabric are locked together and sewn shut to keep the edges from fraying. Ideally, you should see what looks like an S split in half and with the bottom tail of the top half underneath the top end of the bottom half, or a knife pleat with two layers of fabric as the middle rather than one. To get this, lay one piece of fabric on top of the other, right sides together and just below the top edge. Fold the top edge of the bottom piece of fabric over, and crease it so it stays. Then, fold the top piece of fabric up to cover the raw edge. Oversew or fell the seam along the fold, then flip the fabric over and do the same along the fold on the wrong side.

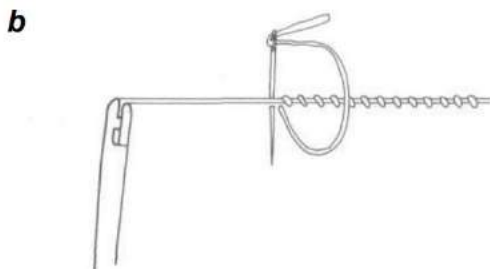
#### 6. Two-stage seams

These give a flat, fully-enclosed finish for linens and lightweight wools. They are worked in two stages.

6a



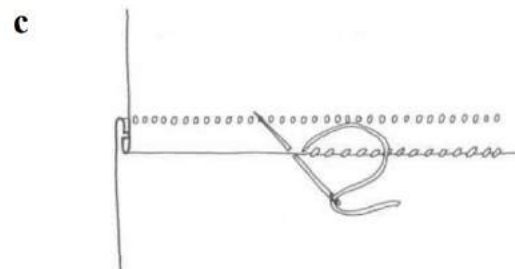
b



**a. Run-and-fell seam**, worked on the wrong side of the garment. Work machine stitching or running stitch along the fitting line. Trim one seam allowance as shown, fold the other one over it and hem it down.

**b. & c. Seam-and-fell seam**, worked on the right and the wrong side. This classic linen seam is slower to work, but stronger than run-and-fell. For **b**, fold the seam allowances as shown and oversew the folded edges on the right side. For **c**, open out the fabric and flatten the oversewing. Turn over the fabric and hem down the other folded seam allowance on the wrong side.

c



## Four Methods of Mending Holes

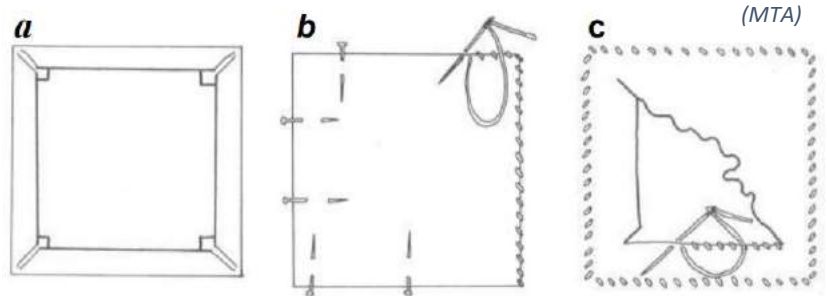
Knowing how to patch is a *must* for any re-enactor. Your garments will wear out, they will get holes, and you will be loath to throw away even an undershirt that you made. So was everyone else before mass production of clothing became a Thing. Thus, they patched and patched until the garment itself was no longer useful (or it was outgrown in the case of children), in which case it might have been made smaller for a hand-me-down, or perhaps the nicer parts of fabric were turned into patches themselves, and if it was truly un-reusable as a garment, it was turned into rags.

### Patching

In order to patch your garments, you must first have a patch. (It is possible to create your own patches from nothing but yarn, but it's generally easier to have a fabric patch ready to sew on.) Heavy fabrics don't require seam allowances, but lighter fabrics *definitely* do. It is best if your patch is made from the same fabric as your garment (I always recommend leaving ridiculously large allowances on hems – so you always have patch fabric ready to go) but so long as they are the same color most people won't notice. You can trim the hole before or after sewing the patch on, but doing so beforehand ensures you're able to trim away any worn areas, not just the raggedy bits.

Turn in any seam allowances (A) before pinning the patch over the hole on the right side of the fabric (B, left side), making sure the grain of the patch fabric matches the grain of the garment fabric. Then, sew the patch down around its edges with neat and tiny stitches. (B, right side) Turn the fabric over

to the wrong side, trim the raggedy edges of the hole, and using those same neat and tiny stitches, sew the edges down on the patch. (C) This diagram also shows nipping the corners, which you would do on a lighter fabric so you can turn each individual edge in and fell it down. For best results, match your fabric exactly, and for good results at least match the thread color to your patch.





## Re-Weaving

If done correctly, re-weaving can be completely invisible. It's rather labor-intensive compared to patching, but it really is the best way to mend a hole in something fancier where you don't really want a patch. Liz Haywood of *The Craft of Clothes* neatly sums up an entire book on how to do it in her post "[The Secret Science of Invisible Mending.](#)"

- *To mend the hole, warp and weft threads are harvested from the inside of the garment to weave back in.*
- *The weft (horizontal) threads are woven in first, then the warp threads.*
- *The reweaving is started at the top edge of the hole rather than weaving the first thread through the center, to make sure the threads meet up correctly either side of the hole.*
- *The threads are woven in for a little way either side of the hole, and staggered to hide the bulk of the extra threads.*
- *The ends of the threads are snipped off when the weaving is finished.*
- *Use a long, fine needle. The needle is woven into the fabric before it's threaded. (I found that it was easier to thread the needle first, and I used an ordinary needle.)*
- *If the weave is fancy, for example twill weave, the mended area has to match.*

Someone recently (May 2019) posted in the SCA Garb How-To group on Facebook about a hole in a piece of fabric. Here's her re-weaving before and after trimming:

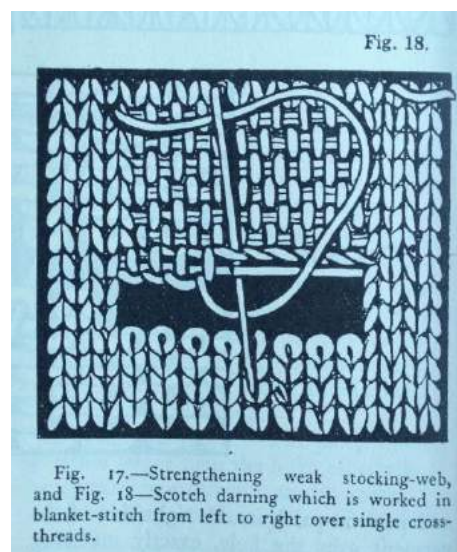


## Scotch Darning

In order to create a patch from nothing with yarn, I like to use a technique known as “scotch darning.” Visible? Yes. Strong? Heck yes. Medieval? Highly unlikely. But it’s great for fixing toes and heels on knit socks, and I want this info somewhere easy to remember and access, so that’s why it’s in here.

It uses blanket stitches to create a very strong almost woven looking patch. First, sew a cross-thread at the edge of the hole, weaving it through the fabric for about a half-inch either side of the hole. Then, take your yarn and begin to make blanket stitches, picking up a thread from the original fabric and blanket-stitching it to the cross-thread you originally sewed. Make a whole line of these stitches, before turning your work and sewing a second cross-thread. Now, you’ll blanket stitch around the tops of the last row of blanket stitches and your second cross-thread. The diagram here shows it done on a hole in a knit fabric; it should also work well on a woven fabric. Use an embroidery hoop to keep your fabric taut.

(Photo is the last one from this blog post: <https://tomofholland.com/2013/05/06/to-darn-at-hope-elvis/>)



## What to do when a seam breaks?

First, examine the edge of the fabric.

Is it frayed beyond redemption? If so, you will need to move your seam slightly or put a patch over the hole as detailed earlier. (Note: this is a really good reason to fell all your seams! It makes them stronger & less likely to break.)

If the thread is what failed, re-sew the seam *by hand* (especially if the original was machine-sewn!) with frequent back-stitches, then fell your seam allowance down to add even more strength.

To prevent this happening, reinforce common problem areas (the crotch of pants, the tops of gores and godets, and any other parts where the seams are under heavy strain) while you’re making your garment initially. If you’re sewing by machine, run a few lines of stitches about a millimeter apart, or go over it by hand with a running backstitch. Fell your seam allowances down.

## Great references to check out:

*The Medieval Tailor's Assistant*, second edition: a great all-round medieval costuming reference.

*The Modern Maker*: specifically for tailoring

*The Tudor Tailor*: specifically for the Tudor era

Janet Arnold's *Patterns of Fashion* series: extensive research on late-period and post-period garments of all sorts. The fifth in the series recently came out.

If you're interested in post-SCA-period historical costuming, from around the nineteenth century onwards there are quite a few dressmaking and tailoring manuals out there on archive.org. Even if you're not interested in post-SCA costuming, they may still be worth investigating for techniques.

*Encyclopaedia of Medieval Dress and Textiles*: anything and everything about medieval dress & textiles and even things you didn't know you wanted to know.

In the same vein, *The Cambridge History of Western Textiles* is a two-volume series filled to the brim with all sorts of interesting information.

*Medieval Garments Reconstructed*: Medieval Norse more your thing? This is for you.

*Fabric for Fashion: the Swatch Book* is more modern than anything else on this list, but if you want a guide to textiles where you can actually fondle the fabrics rather than just reading a description, see if you can find this in a local library – any school with a fashion department should have it.

*Textiles and Clothing, c.1150-c.1450* and its companion *Dress Accessories, c.1150-c.1450* are invaluable resources if you like this period. These are extensive catalogues of archaeological finds, plus commentary from expert scholars in the field.

Pretty much anything that Gail R. Owen-Crocker has had her hands on is wonderful.

*Encountering Medieval Dress and Textiles* was my gateway into the world of costume research and I think it's a must-read for anyone interested in costume and dress history.

*Dress in the Middle Ages* is another classic that is frequently referenced in costume history articles.

There's a lot of good blogs out there, including *Medieval Silkwork*, *Neulakko*, *katafalk*, *Pallia*, and *Morgan Donner's Sewing Party*. I think most of those are written by Laurels, so you're in good hands there.

Museum & archival websites (Bibliothèque National de France ([gallica.bnf.fr](http://gallica.bnf.fr)), the British Library, and the Morgan collection for manuscripts, [http://mis.historiska.se/mis/sok/birka.asp?sm=10\\_7](http://mis.historiska.se/mis/sok/birka.asp?sm=10_7) for Birka finds, the V&A has a lot of awesome things...) are your friend. Don't be afraid to message the collection owners asking questions. You may have to pay for high-res photos.

N.B. There are a LOT more sources that I'm leaving off this list, mostly because I'm not aware of them. If you know of a book that *needs* to be on this list, please let me know!