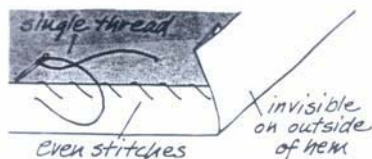


Hand Stitches

Hand stitches have many uses. Before the sewing machine, garment-making was done exclusively by hand. However, in today's home sewing world of sophisticated sewing machines and sergers, few garments are made entirely by hand. But, many home-sewn and custom-made garments continue to have some type of hand stitching used primarily as finishing techniques (hemming, securing fasteners, etc.). Thus, knowing and understanding the proper stitch to use is important to the item's appearance as well as its function and longevity.

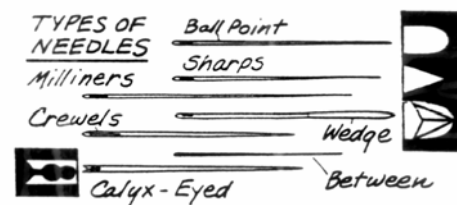
Depending on the stitch and its use, some techniques require double thread (sewing on a button, or securing hooks/eyes and snaps), but most are worked with single thread. A relatively short length of thread is strongly recommended. Thread that is too long can become tangled easily and will tend to fray and break. Many sewing experts recommend using thread no longer than 18 to 24 inches.

It is always important to select the appropriate thread and needle for the fabric and the task.



- Use extra-fine thread for basting stitches--it is a very fine thread that does not show press marks.
- Use topstitching or buttonhole thread for making hand buttonholes and for sewing on buttons or other fasteners. You can also use button or carpet thread for sewing on buttons. When heavier thread is used, a single strand rather than double is sufficient.

- Use a color similar to the garment for basting, since some colors (especially dark colors) rub off or transfer.
- Hand needles come in a variety of sizes and types. For finer fabrics, use a smaller needle.
- Use a finer needle when short, single stitches are required such as pad stitching. Longer needles are preferred when multiple stitches are to be stitched at one time, such as basting.



Standards

A *well-made hand stitch* will:

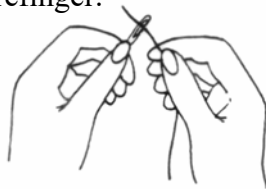
- be secured at beginning and ending with no loose threads.
- have a uniform length.
- be invisible on the outside of the garment.
- be neat on the inside.
- have knots or thread ends between the fabric layers or hidden within construction details.
- consist of an appropriate thread type for the stitch, fabric, and task.
- be smooth and not create puckers on the right or wrong sides of the fabric.

How to Thread a Needle

- Cut a length of thread about 18 inches long. (Breaking the thread leaves fuzzy ends and may damage the thread. Broken threads do not go through the needle eye easily.)



- Cut the thread on a slant for easier threading.
- Grasp the needle between your thumb and forefinger.



- Hold the thread in the other hand and guide to the needle hole.
- Push the thread through the hole.

Securing Thread

Thread “ends” and “beginnings” should always be *firmly secured* and *inconspicuous*. This can be achieved in a number of ways. As you begin a hand stitch, the thread “beginning” should be secured by one of these three methods:

1. tying a knot
2. taking a couple of very small stitches in the same location
3. taking a stitch and locking it by looping the thread around the needle and pulling it secure.

How to Tie a Knot

When a knot is tied to begin a line of stitching, it should be very small, secure, and neat. To do this:

1. Moisten forefinger and grasp the thread near the end.

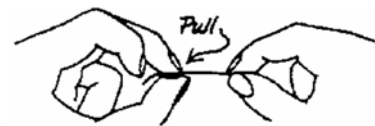
2. Wrap one end of the thread around the forefinger.



3. Allow about ¼-inch lap-over of thread.
4. With the thumb and forefinger, “roll” these threads together and off the finger.



5. With loop between thumb and forefinger, pull knot to the end of the thread to tighten.

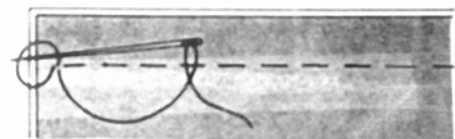


Fasten Ends of Hand Stitching

To end the stitching, threads are usually secured by:

1. taking a couple of very small stitches in the same location
2. taking a stitch and locking it by looping the thread around the needle This technique is done by:

- taking a very small stitch and inserting your needle through the loop. Pull securely.



- sliding the needle between the layers of fabric (or behind a seam)

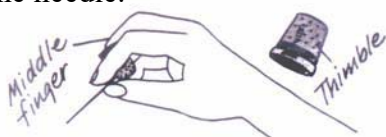
allowance) approximately ½-inch to hide the thread end. Bring the needle out to the surface of the fabric and snip thread close to the surface.

Knots and thread ends at the beginning or at the end of hand stitching are always hidden between layers of fabric, such as behind a seam allowance or hem allowance.

Using A Thimble

A thimble is used to protect the finger while pushing the needle through the various layers of fabric. Select a thimble to fit the size of the end of the middle finger of the hand used when hand sewing.

- Place the thimble on the middle finger of the hand that holds the needle.



- Hold the needle between the thumb and the forefinger.
- Insert the needle into the fabric and push it through using the side or end of the thimble.

Stitch Types

There are many types and names of hand stitches. The hand stitches discussed here are a few of the more common ones used in home sewing. For a more comprehensive glossary, refer to the one of the books in the list at the end.

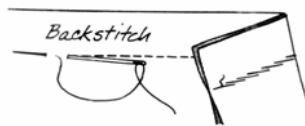
Some hand stitches such as the prick stitch and backstitch should be pulled tight. The tailor's hem, however, should have some "give." Most stitches used for hemming should be *secure but never so tight that they pull on the fabric, causing it to pucker.*

Backstitch (Prick stitch) -- a very strong, secure stitch. Sometimes a distinction is made between the *backstitch* and *prick stitch*. Some authorities consider the prick stitch to be the shorter, finer

stitch. Stitches are even and evenly spaced on the top side of the fabric. On the back or underside, the stitches overlap slightly. The stitch is used:

- to hold fabric pieces together firmly—sew or repair seams.
- in place of machine stitching in handmade garments.
- as under-stitching for delicate garments or a difficult-to-reach location.
- to put a zipper in by hand.

To do the *backstitch*, begin by securing the thread on the underneath side or between the fabric layers. Bring the needle through to the right side of the fabric.



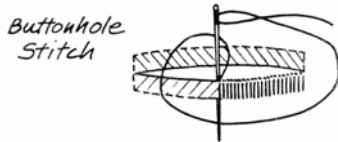
Insert the needle approximately 1/16 to 1/8-inch to the back of where the thread came out of the fabric. Pass the needle under all layers of the fabric and forward twice the length of the stitch (approximately 1/8 to 1/4-inch). Bring the needle back to the top or surface of the fabric pulling the thread snug. Stitches will have a chain-like look on the underneath side.

Buttonhole --a very strong stitch. It is worked from right to left with the point of the needle toward you and the raw edge of the fabric (edge of the fastener you are covering) away from you. The stitch is used to:

- make hand worked buttonholes.
- sew on fasteners (snaps, hooks, and eyes).
- finish the edge of an appliqué
- cover hooks and eyes.

To do the buttonhole stitch, secure thread end and bring thread to the outside edge. When working a buttonhole, insert the needle to the backside between the lips, bringing the point of the needle to the surface approximately a

1/8-inch below the lip.



Wrap the thread under the needle from left to right. Pull the needle through allowing the loop to slide to the edge of the lip forming a knot as the thread is pulled very secure.

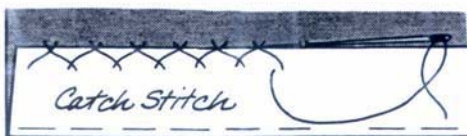
When covering hooks and eyes, bring the needle to the surface. Sew around the fastener looping the thread behind the needle to form tight knots along one side. Stitches should be very close together and very secure.



Catch stitch -- worked from left to right from one edge of the fabric to another creating an X-like formation. The X-like formation provides some elasticity or “give” in the stitch, which is ideal in some situations (working with knit fabric, tacking facings, etc.). It is used:

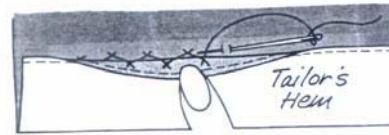
- for hemming.
- for tacking a facing at a seam edge.
- to hold interfacing pieces together.

The catch stitch can be worked from edge-to-edge across a fabric edge. This is sometimes called a **flat catch stitch**. A small stitch is taken 1/4-inch down from the hem edge. Another small stitch is taken in the garment at the hem edge. Notice the needle is pointing left as the stitching moves from left to right creating the X-stitch formation.



Flat catch stitch

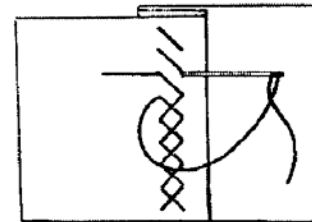
A **blind catch stitch** is worked with the hem edge turned back approximately 1/2-inch. The stitch catches the backside of the hem to the back side of the garment. The stitches do not show from the right or wrong side when completed. The blind catch stitch is used to create a *tailor's hem*.



Blind catch stitch

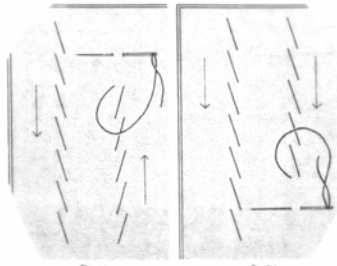
With thread end properly secured, take a very small stitch (a couple of threads) of the garment. Take the next stitch approximately 1/4-inch to the right in the backside of the hem. Alternate between the hem and the garment moving from left to right. This technique is generally preferred as the hemming stitch for most knits.

Cross-stitch tack -- a decorative as well as a functional stitch. The stitch provides a degree of flexibility yet security to an area. It is often used when tailoring a jacket or coat lining to secure the center back ease pleat and any dart tucks.



A series of diagonal stitches are taken 1/4 to 1/2-inch apart through all layers of fabric, to form a series of “X’s” or crosses. Either single or double thread can be used.

Diagonal basting -- a custom tailoring term for a longer form of the pad stitch. It is used to hold the interfacing to the facing. The stitch can be a permanent or temporary stitch. If it is to be permanent, it must not show through on right side of the fabric. The following diagram illustrates how changing the direction of stitching affects the look of the finished stitches - chevron or parallel lines.



Chevron

Parallel

Featherstitch (Briar) --primarily a decorative hand stitch that can be used on the inside or outside of a garment. The stitch can be functional as well as decorative. It is often used:

- when tailoring a lining to secure the center back ease pleat and dart/tucks.
- to secure appliqué to a desired area.
- as an embroidery stitch.

A series of very small stitches are taken on alternate sides of a given line, pleat, or tuck area. The thread can be single or double, decorative or plain.



To do the *featherstitch*, begin by securing or hiding the thread end.

Bring thread to the surface in the center or on the "given line." Take a small diagonal stitch, approximately 1/8-inch to the right of the center. Angle the needle to come out on the centerline approximately 1/8 to 1/4-inch below the thread/stitch above. Position the thread so that it crosses the centerline and is underneath the needle at all times.



The next stitch is taken diagonally from the left of the center line, pointing toward and coming out at the center line. These formations are repeated for the desired length needed.

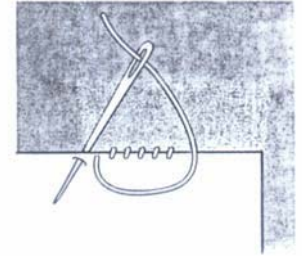


Felling -- a slant stitch formation used to:

- attach or secure edges of fabric such as the undercollar to the neck edge facing of the garment when custom tailoring.
- close seams from the right side.
- attach appliqués.

Using single thread, secure thread in an inconspicuous location between layers of fabric. Hold the needle diagonal to the folded edge and pick up a very small stitch (a couple of threads) in the fabric opposite the thread.

Slip the point of the needle through the edge of the fold and approximately 1/4-inch to the right, picking up a few threads of the other side or garment piece.



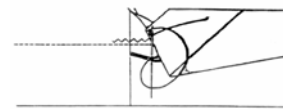
Pull the needle and thread through. Stitches should be close together and pulled very secure.

Repeat stitch formation.

French tack --a thread connection securing separate garment segments to one another--i.e. a free-hanging lining or a floating snap. The connection is usually 1/4 to 3/8-inch in length. It can be formed one of two ways:

Thread Bridge & Buttonhole Stitch - Using matching double thread, connect the parts/pieces with a bridge of double threads, approximately 1/4 to 3/8-inch in length. The bridge should consist of at least two sets of double threads. Starting at one end of the bridge, work a close, tight buttonhole stitch across/around the thread bridge. Refer to information above on buttonhole stitch.

Stitches should be *very tight* and *very close together*. At the end of the thread bridge, lock, secure, and hide thread end.

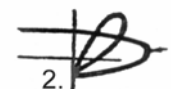


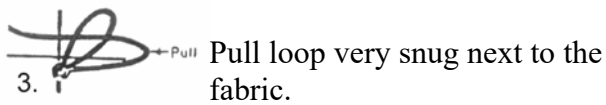
Crochet Stitch/Loop -

Using matching double thread firmly secure thread. Take a very small stitch, leaving a loop in the thread. Release the needle.

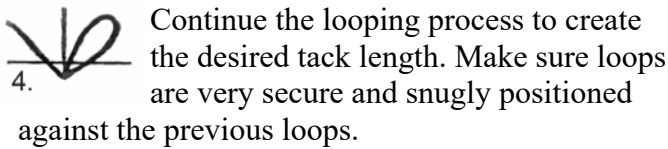


Using your fingers, loop the thread

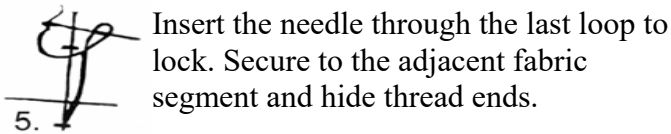




3. Pull loop very snug next to the fabric.

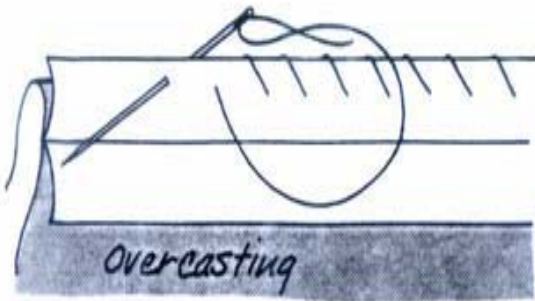


4. Continue the looping process to create the desired tack length. Make sure loops are very secure and snugly positioned against the previous loops.



5. Insert the needle through the last loop to lock. Secure to the adjacent fabric segment and hide thread ends.

Overcast – is used primarily as a seam or edge finish to prevent raveling. It is made by stitching over the fabric edge and can be worked from either direction. A single thread is used.



Secure thread. Beginning with the thread on the top side of the fabric edge and to the side of the needle, move the needle forward approximately 1/4-inch. Insert the needle from the back side bringing it to the right side.

Repeat for the length needed. Thread will wrap the raw edge of the area (seam, facing, hem).

Secure the thread at the end of the line of stitching and hide thread end.

Pad stitch--a custom tailoring stitch. Stitches can form a chevron or “V”-like formation, or be more parallel depending on the direction of each row of stitching—see **diagonal basting stitch**. The stitch is worked using single thread. The pad stitch is used to:

- give firmness to a garment area.
- attach the interfacing permanently to the garment piece.

When the stitches are short and close together, they provide more control and firmness. This is especially needed in a jacket/coat lapel area, or in the stand of a collar.

Secure thread and bring it to the surface of the fabric. Working from

top to bottom or bottom to top, take a 1/8 to 1/4- inch stitch pointing the needle perpendicular to the direction you are stitching.



Pull thread secure, but not tight.

Depending on the control or firmness needed, move the needle up or down the fabric 1/4 to 1/2- inch and take another 1/8 to 1/4-inch stitch.

Continue by repeating these stitches.

Running -- an in-and-out even stitch. It is very closely related to an even basting stitch, but stitches are smaller and usually permanent. Use single thread. The **running stitch** is used for: easing

- very fine gathering.
- hand darning.
- very delicate sewing such as fine seaming and tucking



Secure thread and bring the needle to the fabric surface. Insert the needle into the fabric; taking three or four small, even, forward stitches, approximately 1/4-inch apart. Pull the needle through the fabric. Repeat.

Saddle -- a long running stitch evenly spaced. It is used primarily for hand topstitching.

Buttonhole twist, embroidery thread, yarn, or multiple strands of regular sewing thread can be used.



Stitches are approximately 1/4 to 3/8-inch in length. Secure thread and bring the needle to the surface of the fabric. Stitches can be worked from right to left or left to right. Beginning from the right, take a stitch (1/4 to 3/8-inch), bringing needle back to the surface. Thread should be pulled securely, but not tight. Continue the desired length, taking care that stitches are evenly spaced and an even distance from the edge.

Slip (Blind) stitch-- an invisible yet secure stitch. Some experts makes a distinction between the *slip stitch* (stitches further apart) and the *blind stitch* (stitches very close together). The stitch is characteristically used when there is a folded edge that needs to be secured in a neat manner. Stitch length can range between 1/8 to 3/8-inch, depending on the construction area. Use single thread. The slip stitch is used:

- to attach one edge to another, such as a tailored pocket to a jacket.
- when an invisible, firm stitch is needed.
- applying a lining.
- to secure hems, waistbands, etc.
- joining two folded edges together.
- closing two folded edges from the right side.

Begin by securing thread. When hemming, take a small stitch (a couple of threads) in the garment, then slip the needle through the folded edge approximately 3/8-inch.



Pull needle and thread through, making stitch

secure but not tight. Repeat the length of the area.

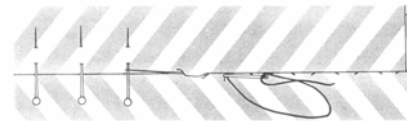
When joining two edges, secure thread between fabric layers. Bring needle and thread out along one folded edge.



Slip needle through the opposite fold, sliding it 1/8 to 1/4-inch and pull thread through. Repeat.

Stitches are pulled very snug so that edges meet. *Stitches do not show*. The picture above is designed to show the stitch process, not the actual end results.

Slip basting --is used when matching plaids, stripes, or fabric edges that must not slip when permanent sewing or fitting takes place(setting in a tailored sleeve). The stitch is temporary.



Seam allowances should be marked on both pieces being matched. Fold one seam allowance under on the seam line. With right sides up, match folded seam allowance to the piece to be joined. Using single thread, working from either direction, begin at the folded seam allowance edge. Slide needle approximately 1/4-inch and bring it out along the folded edge. Carefully take a stitch through the other piece, directly on the seam line. Bring the needle back to the folded piece and repeat. Continue the length of the seam, securing threads at the end.

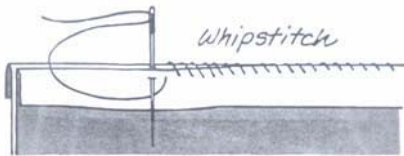
Stab stitch – a permanent stitch that holds fabric parts together. Used most often in tailoring. The stitch is invisible from the right

side of the fabric/garment. The stab stitch is used to:

- secure layers of batting, interfacing, or muslin when making a shoulder pad.
- hold seams together and prevents shifting—i.e., gorge line, collar, and neck edge, etc.

Whipstitch (Overhand) -- stitch formation is very similar to *slant hemming*. A single thread is used. The needle is positioned and inserted into the fabric straight, resulting in slanted stitches. The whipstitch is used to:

- hold two fabric edges together.
- secure a hem that has seam tape/lace on the edge to prevent raveling.



When joining two edges, secure thread between layers of fabric. Bring needle out along one edge. Take a small stitch in the opposite folded edge. Repeat. Pull stitches tight.

When hemming, secure the thread in an inconspicuous area behind the seam tape. Bring the needle to the surface through the tape. Take a small stitch (a couple of threads) in the garment, bringing the needle back down and through the tape. Pull thread secure, but not tight. Stitches should not show on the right side of the fabric.

Prepared by Nadine Hackler, Associate Professor Extension Clothing Specialist.

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Other recommended references:

Reader's Digest *Complete Guide to Sewing*, Reader's Digest Association.
Reader's Digest *Complete Guide to Needlework*, Reader's Digest Association.