Basic Heirloom Stitching Using Your Sewing Machine

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Thursday, 27 April 2017 1:00

Heirloom is one of the oldest styles of specialty sewing. This precise and delicate type of stitching is said to have started in the late 1800s by French nuns who hand-stitched exquisite laces onto delicate fabrics for royal families. Their craftsmanship was so incredible, the resulting gowns and linens were painstakingly preserved and handed down from one generation to the next; hence an heirloom. You’ll see the influence of heirloom stitching in a variety of high-end garments; most notably, special occasion finery, such as wedding dresses, christening gowns, and lingerie, as well as in the finest table linens. Today, with French nuns in short supply, we show you the basics of creating heirloom stitching with your sewing machine.

Heirloom sewing, like anything else that inspires or challenges, can grab you and never let you go. You may just become completely immersed. If that happens, there are oodles of examples, projects, and techniques on websites and blogs dedicated to this specific type of sewing, including the grand dame of the category: Martha Pullen.

For our purposes, we will focus on the machine stitches and techniques that are the easiest to incorporate into your projects, whether home décor or otherwise.

As with other types of specialty sewing, heirloom stitching requires you to be precise, use specific tools for the job, sew slowly for accuracy, and understand your machine and its settings.

What makes a project fall into the heirloom category?

The fabric used, combined with some (or all) of the following details, define a project as heirloom. Most often, the fabric choice is a mid-weight, lightweight or sheer woven, such as batiste, cotton voile or linen.

- Special laces and trims, known as entredeux, lace insertion, beading, lace edging, and fagotting.
- Delicate ribbons, either tied into bows or woven through the lace/fagotting.
- Scalloped edges (sometimes corded)
- Pintucks (also can be corded)
- Hemstitching
- Fagoting
- Baby piping
- Pleats
- Gathers
- Ruffles
- Puffing
- Smocking
- Hand or machine embroidery

Generally, heirloom projects are made with fabrics in white, off-white or very pale pastels, but this doesn't mean you can't make an heirloom-styled project in a bold color. You could create a category all your own!

It's best to add your decorative stitching, pintucks, etc., prior to cutting out the pieces of your project. Some of these stitching techniques can slightly alter the size of the fabric, plus many of the embellishments are meant to be precisely placed within a pattern so the embellished component needs to be completed in order to allow you to fussy cut your parts and pieces.

**Supplies you need (and want)**

Very specific sewing techniques usually mean very specific tools are required. Heirloom sewing uses fine thread and needles. The needles themselves are quite varied. You're likely to find yourself asking your sewing supply retailer for items that sound like tricks off the high dive: twin needles, triple needles, wing needles, and double wing needles.

There are also special tear-away stabilizers, netting, heavy spray starch, and something called a shape board. If you want to add smocking to your heirloom designs, you'll need a pleater. Before you scream, remember you do not need all these items to do many of the basics, but if you catch the heirloom bug, you most likely will need (or want) them all!

Let's look at what to have on hand to get started.

**Knowing your machine**

It's very important to know your sewing machine! In heirloom sewing, you will use stitches, feet, and other features you may not have experimented with before. The brand and model of machine you have will determine exactly what you will need. With Janome as our exclusive machine sponsor, our examples were all done on the wonderful Janome models we have in the S4H studios. Plan a visit your sewing machine retailer for assistance with appropriate feet, needles and thread, as well as help with settings for your machine.

**Needles**

The use of twin and/or triple needles presents its own set of challenges. They can seem intimidating at first sight, but it's simply a matter of setting up the machine a bit differently than for regular sewing.
In order to use more than one thread for the needle, you need to use an extra spool pin (which may have come with your machine) and/or an additional spool stand (which you place next to your machine).

As you sew, you will get two (or three) even rows of stitching on the right side of the fabric, with a zig zag underneath (because there's only one bobbin thread). When using these types of needles, the most important thing is not to damage the machine. Make sure the needle will clear both the foot and the needle plate, especially when using a decorative stitch that swings from left to right. You control the swing by adjusting the stitch width. Also, depending on the sewing machine, twin needles are sold for center and left needle position, as well as in different sizes (a variety of widths between the needles). Remember, when using a larger twin needle (on which the two needles are farther apart), you have to pay particularly close attention to the needle swing. We also did an overview article on decorative twin needle stitching, which has additional information and photos.

Then, there's the wing needle to consider! This type of needle has what looks like wings on either side of the shank of the needle (it is the needle to the extreme right of the grouping in the photo above). When you use a wing needle with a light woven fabric, it will create a "hole" with each stitch. This hole is actually what you want with this type of sewing. When combined with a specific type of stitching, it will create what is referred to as a "hemstitch."

We're lucky to have Janome as one of our sponsors; the models they've provided us have a twin needle setting, which prevents a user from selecting a stitch that could damage the machine when a twin needle is inserted. Our Janomes also have speed control, which helps us to slow down – very important in executing the precise stitching needed. Plus, these machines have stitches specifically designed for the various techniques we'll be showing, such as hemstitching, fagotting, and common heirloom decorative stitches. When we select these stitches, the machine tells us the appropriate foot to use, and adjusts the tension too!

**Thread**

Cotton covered polyester is recommended for construction, and it can also be used for decorative stitching, depending on fabric weight. However, most heirloom sewers choose to use one type of thread to construct the project and finer threads for embellishing and finishing. Finer threads include: polyester, rayon, silk, metallic, or mercerized cotton thread in a 50wt. or 60wt. Which thread you use is a personal decision. In our examples, we used a cotton covered polyester and a polyester embroidery thread for the decorative applications. Of course, if you're using a twin or triple needle, you will need more than one spool!

**Sewing Machine Feet**
As we mentioned above, since Janome is our exclusive sewing machine sponsor, they've provided us with the full range of sewing machine feet. The photo above shows the feet predominantly used in heirloom sewing. There are more, and your machine manufacturer may have variations on the ones we are showing, but this is a standard group.

A. **Cording foot** - the type of cording this foot is designed for is embroidery floss or topstitching thread

B. and C. **Pintuck foot** (5-groove and 7-groove) - You need to use a twin needle with this foot, which raises the fabric into the grooves to create tiny pleats.

D. **Pintuck Cord Guides** - holds cording in place while it's sewn into the pintucks, creating what's known as a corded pintuck.

E. **Ribbon/Sequin foot** - holds tiny ribbons in place as you sew.

F. **Straight Stitch foot** - used on super lightweight fabrics to keep the fabric from being pulled down into the needle plate. The top of the foot is flat with just a single hole for the needle drop.

G. **Piping foot** - used to sew small piping.

H. **Satin Stitch foot** - a clear foot for sewing decorative stitches as well as many other applications.

I. **Open-Toe Satin Stitch foot** - similar to the Satin Stitch foot, but the front of the foot is completely open so you can better see exactly where you're sewing.

J. **Gathering foot** - gathers one layer of fabric while keeping the other layer flat.

K. **Rolled Hem foot** - used to create small rolled hem finishes on lightweight fabrics.

L. **Blind Hem foot** (not pictured) - used in conjunction with a blind hem stitch to finish a raw edge.

In our examples, we used a medium weight linen with colorful thread so you can clearly see the stitching. In your project, you can use thread that matches or contrasts, however, the majority of heirloom sewing is done in tone-on-tone combinations.

Since our linen is a mid-weight, we used a little spray starch on the fabric for certain stitches and tear-away stabilizer for others. Depending on the fabric you select, you will need to do the same or both. If you decide to learn more about heirloom sewing, you will become more familiar with ways to support lightweight fabric in order to sew and embellish it.

Always mark your first line of stitching exactly where you want it. After than, use the edge of the foot or another positioning mark on your selected foot as a guide for any subsequent lines of stitching. Because the fabric used is often very light in color, it's nice to be able to avoid having to mark with a traditional fabric pen or pencil. True, many of these tools are designed to wipe or wash away, but the delicate nature of the fabric makes that a less desirable method. There are marking options that vanish with exposure to the air or the heat of an iron, but in general, try to keep marking to a minimum where possible.

Sew slowly with any of the techniques outlined below. This will help you be more precise and achieve optimal results.
Sewing with a multiple needle

Once your machine is set up to sew with a double or triple needle, you can create a number of variations by changing the foot, the stitch and/or adding cording into the mix. Below we show you examples of each. Twin needle is the predominately choice in heirloom sewing for attaching the various laces and trims to fabric. It’s also used to create shadow effects on a folded hem.

Basic twin needle sewing

1. Insert the twin needle into your machine.
2. Insert the additional spool pin in the appropriate location on your machine, or set up a spool stand next to your machine.
3. Place a spool of thread on each spool pin.
4. Thread the needles and insert a bobbin as normal. We recommend threading the right needle first, then the left. This will keep your threads from becoming twisted at the needle.
   NOTE: If your machine has a built-in needle threader, it won’t work with a multiple needle. We recommend a hand-held needle threader. Also, make sure the pressure foot lift is in the up position. This opens the tensions discs so the thread more easily feeds through. Some machines allow you to separate the threads at the tension discs--check your machine’s manual.
5. Select a straight stitch.
6. With the right side of your fabric facing up, sew a row of twin needle straight stitches. In our example below, we sewed parallel lines of twin needle stitching. You can do the same, or you can use your imagination. These look great sewn in a checkerboard or diamond pattern.
7. Here’s what twin needle stitching looks like from both the front and the back. Remember, you only have one thread on the bottom.
Pintucks

1. The machine set up is the same as for basic twin needle sewing. Attach a pintuck foot. Again, sew with the right side of your fabric facing up and watch the magic happen.

2. Since we're using a mid-weight linen, our pintucks are only slightly raised. On a lighter weight, the pintucks would be more pronounced.

Corded Pintucks

1. Set up the machine as above for pintucks.
2. The difference here is that you want to hold the cording in perfect line with the twin needle so that as you sew, you are sewing along either side of the cording underneath. Janome has Pintuck Cord Guides (see above) that attach to the machine for this purpose. Remember, when we say 'cording,' we're actually talking about a very thick thread, like embroidery floss.
3. Sew with the right side up and the cording underneath, using a straight stitch in the same manner as a basic pintuck. Here is the corded pintuck from the rightsise.
4. And, here is what it looks like from the wrong side.

5. You can also add more cording to create more definition. And, if you are using a sheer fabric, you can use a colored cord to make a shadow effect.

**Other stitches with a twin needle**

1. You can use a twin needle with many stitches on your machine. Below, we tried a zig zag stitch and a feather stitch. Imagine this kind of combination around the border of a napkin, placemat or tablecloth!
2. You machine may have a variety of satin stitches. If so, these are lovely with a twin needle. Below, we selected a decorative scallop stitch. Again, take a look at our Twin Needle Stitching tutorial for more examples.

Adding ribbon with twin needle stitching

1. You should be feeling pretty comfortable now with your twin needle. So, let's get more creative. A very common heirloom accent is to use a twin needle, a basic or decorative stitch, and narrow ribbon to embellish a border or the edge of a hem.
2. Set up your machine for twin needle sewing.
3. Attach a Ribbon/Sequin foot (or another foot that will hold narrow ribbon in place as you sew.)
4. Select a stitch that will look nice along either side of the ribbon. We used a stretch stitch that is normally used to sew knits.
5. Place the ribbon in the foot.
6. Place the fabric right side up under the foot.
7. Sew as before, making sure to evenly guide the ribbon through the foot.
**Triple needle**

1. Using a triple needle in your sewing machine is not much different than a twin needle. All the same rules apply. Of course, you need to add another spool of thread. Most sewing machines have space for two threads, but not three. A free standing spool holder that you place next to your machine would work great. We’ve also heard of folks who place a small coffee cup next to their machine to hold the third spool.
2. Insert the triple needle.
3. Attach a clear foot for easy viewing. We opted to use our Open Toe foot.
4. Thread the machine with three threads. Remember to thread from right to left so your threads do not get tangled together. Here’s another area where you can be creative: use one, two, or three different thread colors! We used a hot pink color in the left and right needles with green in the middle needle. This is not necessarily a traditional heirloom color combo, but even in the subtle tones of heirloom, you could use an ivory with pale pastels for a beautiful accent.
5. Select a straight stitch or simple decorative stitch, such as a zig zag. As mentioned above, be very careful to test the needle drop by rotating the hand wheel manually to test that the swing of the needles won’t hit the machine’s plate.
6. Place your fabric right side up and away you go.

**Wing needle (for hemstitching)**

In heirloom sewing, hemstitching is one of the most popular techniques. This stitch, like all of heirloom sewing, used to be done by hand. Threads were removed from the fabric to purposely create holes that were then sewn over by hand with decorative stitching. Today, you can use your sewing machine and a wing needle to create the same look.

Similar to using a twin or triple needle, you need to take a little extra precaution when using a wing needle. If your sewing
machine has a built-in needle threader, you will not be able to use it. You also need to be careful about the width of the stitch you select so the wings do not hit the foot or needle plate. Depending on the type of sewing machine you have, you may have pre-set stitches for hemstitching. Otherwise, you need to use a stitch that is repetitive in the way it's formed, meaning it needs to go in and out of the same hole a few times in order for the wings on the needle to help create a hemstitch finish.

NOTE: Earlier we mentioned something called a double wing needle. These are also used to create hemstitching, usually in combination with sewing lace to fabric.

Using a zig zag

1. You can use a zig zag stitch and a wing needle to make hemstitching. In order to achieve the look, you have to be precise with your stitching.
2. Insert the wing needle.
3. Thread your machine as you would for regular sewing.
4. Attach a satin stitch foot. We used the open toe version here again, so you could see clearly.
5. Select a zig zag stitch.
6. Sew one line of stitching.
7. At the end, stop and turn the fabric 180°. Put the needle down in the last hole made in the previous line of stitching.
8. Sew a second line of stitching, making sure the needle is going into the large holes of the previous stitching.

Using a built-in hemstitch

1. Many of the high-end Janome machines offer built-in hemstitches. You will know a stitch is a built-in hemstitch either because of its name on your sewing machine or how it is described in your manual. You can also determine if it's
appropriate by the needle motion. It needs a forward and backward and/or side-to-side motion, or both; in other words, the needle needs to go in and out of the same hole several times as the stitch is formed.

2. Below are some examples of built-in hemstitching with a wing needle on our Janome Horizon Memory Craft 15000. You can see the holes created by the wing needle. The set up of the machine is the same as above.

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**Fagoting**

1. The technique of fagoting is used to join two folded edges of fabric to one another with a decorative stitch in the middle. The decorative stitch acts as a bridge between the two edges. In heirloom sewing, you will see this technique used to join folded fabric edges, lace to fabric, and lace to lace. Again, this was once done only by hand. Today, using a machine provides you with a number of stitch options to produce the same effect faster and much more easily.

2. The challenge of fagoting is keeping the two folded edges even as you sew. As with the other techniques we've discussed here, you need to sew slowly and use a marking on your needle plate or your selected foot as a guide.

3. For fagoting, set up your machine as you would for regular sewing.

4. We prefer to use our regular presser foot. It has small markings on the front of the foot that are perfect guides for feeding the folded edges evenly.

5. Insert a universal needle that is the appropriate size for your fabric type.

6. Thread the needle and bobbin with the thread of your choice.

7. Select a stitch that is formed by the needle moving left to right. This could be as basic as a zigzag, or you may have built-in fagoting specialty stitches on your machine.

8. Fold over the raw edges of the fabric pieces to be joined and finish the raw edges. Your folded "hem" should be approximately 1" to 1½".

   **NOTE:** Finish the raw edges **prior** to fagoting. You can zig zag, overcast or serge the edges. You can also use a rolled hem. **It all depends on fabric type and your desired finish.**

9. Place folded fabrics edges on either side of the needle and begin to sew. As you sew, the swing of the needle should be catching both folded edges. Test on scraps first to confirm the width of the swing so you know how far apart to keep your folded edges.
10. Here is our finished example using a zigzag stitch.

11. Here is an example of fagotting using a built-in fagoting stitch on our Janome machine.

**Turning corners**

You may be inspired by our examples to embellish your next placemat, napkin, curtain or pillow project. Before you run over to your sewing machine, we want to talk a little bit about turning corners.
Each of the techniques we used are great border ideas, but if you plan on going around a square or rectangular shaped project, you need to think about how you’re going to pivot at the corners. Of course, it all depends on which stitch you select and what type of needle you’re using. We always recommend you test everything on scraps first, and this is no different.

**Twin or Triple needle**

1. These techniques are often best completed before you sew your pieces together. This means you have to think about your seam allowance. Using a fabric marking pen or pencil to mark the stitching line will definitely help you see where to stop in the exact spot. You can also just mark the corners.
2. The next thing to think about is how you want your stitches to look. You can angle the stitching at the corner on the diagonal, or you can create a right angle at the corner. The key with either method is thinking ahead of yourself.
3. For the angled look, plan to stop with the needle in the down position with just enough space to sew the diagonal before you go beyond your next seam allowance.

![Image of twin needle stitching](image1)

4. Angle the fabric at 45°, sew a stitch or two, stop precisely at your seam allowance marking with your needle down, and pivot again.

![Image of triple needle stitching](image2)

5. Your stitching will look similar to this.
6. If you want a crisp 90° angle, you need to be more calculated in your movements.
7. Sew to the point where you want to turn the corner.
8. Stop with the needle in the UP position.
9. Raise the presser foot, but hold your fabric. You want it to stay in the exact position it was with the needle and foot down.
10. Turn the hand wheel on your machine manually one rotation to bring the needle down. At the same time, guide the left twin needle back into the previous stitch, slightly rotating the fabric to create a stitch with the right twin needle.
11. Repeat this manual process again to completely turn the corner.
12. Carefully put the presser foot down and continue sewing.

Wing Needle

1. With a wing needle, the approach to turning the corners is basically the same. The only difference is you do not have to worry about dealing with multiple needles. Instead you need to concentrate on how the stitch you selected is formed. The preprogrammed hemstitches go back and forth and side to side. Once you know the sequence of stitches the machine takes to form the completed stitch, you can determine where you need to stop to turn the corner. You always want to complete the stitch before turning a corner.
2. Here again, you can angle across the corner in the same manner as we did above.
3. Or, you can raise the pressure foot to put the needle down in the last stitch sewn to begin the sequence again.

But wait.... there's more

We have only scratched the surface of heirloom sewing with this tutorial. If you're excited by what you've learned here, we encourage you to seek more information. There are are books and blogs, as well as specially trained instructors who teach the art of heirloom in classes at fabric stores and sewing machine retailers around the country and the world.

Here are just a few extended resources to investigate:

**Fine Machine Sewing by Carol Laflin Ahles** is a wonderful book, covering the proper tools as well as the many heirloom stitching techniques.

As we mentioned above, **Martha Pullen** is a leading expert in the area of heirloom sewing. She offers supplies, books, DVDs, patterns, and more on her website.

If you own an embroidery machine, there are many sources for heirloom embroidery designs. Three companies with selections dedicated to heirloom are **Zundt Designs, Criswell Embroidery & Design** and **Jenny Haskins**.

Today's heirloom items are made with the purpose of being passed on to future generations just as they were so many years ago. Enjoy experimenting with these basics; who knows where you'll go from there!

**Contributors**

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