

Free Information Note No.6

Making A Pricking

Lace Resources International provides this Information Note **free of charge**.

This material is original work, written and illustrated by Judith Markham for Lace Resources International. Similarity to material from any other source is entirely coincidental.

This free Information Note remains the property of Lace Resources International and the information contained in this free Information Note is covered by international copyright conventions.

You may use this free Information Note for your personal use. Distribution of this material for any *for profit or non-profit* activities, including teaching, requires special licensing. Contact Lace Resources International for details:

Via Web page www.laceresources.com.au

Via e-mail judith@laceresources.com.au

Via snail mail Lace Resources International
 PO Box 465
 Moonee Ponds, Victoria 3039
 Australia

Making A Pricking

Discussion

A pricking is a perforated card pattern over which the lace is worked.

In the types of bobbin lace called '*grounded laces*', there are no knots in the working, only at the join. Other than woven areas, almost every stitch requires a pin to support it and every pin needs a pre-made pinhole.

Traditionally, prickings for all the grounded laces were made from firm, robust materials such as parchment (sheep/goat/calf skin). In more recent times, the materials used as direct substitutes for parchment have been made from a compressed card with a glazed finish¹, or many layers of brown paper, glued together to form a robust material.

A pricking is strong and fairly rigid, so it holds the pins firmly while the stitches are being worked and tensioned.

When lacemaking was a cottage industry, a pricking was used over and over again and it had to survive this hard usage. Using a strong material, such as parchment, was essential. Currently, the majority of people making lace are doing so as a hobby and most people use a pattern once only, then move on to another. Because of this, there are people who argue that a pricking is not necessary, substituting a photocopy or printed paper pattern, covered with a transparent, adhesive film. For the experienced and skilled lacemaker, this method is probably quite adequate but, for the less skilled, this method does nothing to help them turn out a well-worked piece of lace. Nor does it help the novice to understand the construction of the pattern or how stitches work together. When lacemakers decide they want to build or design patterns, those who have made and worked with prickings are far ahead in their understanding of construction and stitch spacing, than those who haven't².

I know that, initially, making a pricking is not an easy thing to do but it does become easier as you go along. Gradually, the muscles in your fingers become stronger and, as you become more adept at using the tool that makes the holes in the card, the process takes less time. I expect people to learn to make and use card prickings, at least for the duration of this course. What you choose to do later is up to you.

When people have difficulty making prickings, often it is a lack of understanding about the purpose of the equipment and *the process* of making a pricking that is a major

¹ This card is electrical insulation board, manufactured from 100% wood pulp. Called either Presspahn or Elephantide (correct spelling) it can sometimes be purchased in relatively short lengths from businesses where electrical motors are repaired.

² I feel very strongly about the benefits of card prickings. So much so, that I have experimented with a glazed art card as a possible substitute for when people cannot find pricking card, giving it a wash of cold, diluted instant coffee to stain it lightly. So far, the stain seems to be permanent but more experimentation is needed before I can recommend this process.

cause. To avoid some of the possible problems, various tools and processes are described in the following pages.

Section A.

1. Tools and materials required:

Pricking board³ OR substitute either a soft cork tablemat, old computer mouse mat or a piece of felt. Both the cork and felt should be placed on top of a thick wad of newspaper and laid over a hard surface.

- A small pinvice⁴
- A sewing needle (preferably Sharps) suited to the shank diameter of the pins being used. (See Section B2, below).
- Pricking card or suitable substitute.
- Candle end; a standard diameter household candle, neither decorated nor dyed.
- Thumbtacks
- Drawing pen: permanent ink and with a fine tip: (0.02 inch decimal)/ (0.5mm) or next size down. Inexpensive fiber-tipped drawing pens are readily available in Australia and may be purchased at most Newsagents and art supply shops. I do not know about availability in other countries.
- Scissors and a sturdy craft knife.
- Ruler, preferably metal.
- Pencil with an HB lead: preferably a 'propelling pencil' or similar, fitted with a 0.5mm lead. (0.02inch).
- Plastic eraser, and a pencil sharpener if using a standard lead pencil.

Section B

1. The pricking board should have a solid base with a softer material on top. Whether this is a proper pricking board made from wood and a cork mat (or similar), or a piece of cork or felt that has been placed on top of thick newspaper with a solid surface underneath, is not important. The important part is having a solid, impenetrable surface to the base, so that the point of the needle comes to a stop *at the same depth for every hole*. This is how consistent, evenly sized pinholes are achieved.

2. The 'pricker' is a tool with a handle at one end and a small, three-jawed collet at the other, into which a sewing needle is fitted. The actual tool is called a *pinvice*⁵.

³ See Free Information Sheet No.5 "***Making a pricking board***"

⁴ See examples back page.

Selecting an appropriate size of needle to use for making a pricking depends on two things:

1. The shank diameter of the pins being used
2. The depth of the soft material on the pricking board

A needle is inserted, eye end first, between the jaws of the pinvice. When the exposed length of needle has been adjusted to the appropriate length the collet is tightened, locking the jaws around the needle. If you use a sharps needle the size is constant for most of its length, whereas a crewel needle tapers from point to eye. With a sharps needle, you only have to find the correct size to match the pin diameter and there is no need to worry too much about the length of exposed needle. If you use a crewel needle though, the shorter the exposed length of needle, the smaller the hole, the longer the exposed length, the bigger the hole.

For example:

If a thin material is used as the pricking surface, the needle will penetrate only a short distance before hitting the board. You will need to select a needle that is fat at that short distance from the point. The shorter the distance travelled by the needle, the thicker/larger a crewel needle must be to begin with.

If you have a thick material on the board, the crewel needle will penetrate a long distance. You will need to select a needle that is an appropriate thickness at that long distance from the point.

To test the hole size made by the needle:

- Lock the jaws of the pinvice at a position assumed to be the appropriate distance from the point of the needle.
- Lay a small piece of scrap card on the pricking board, then prick a few holes.
- Lift the card off the board, lay the card over a lace pillow and push a pin through one of the pricked holes. If you are uncertain as to whether or not the pinhole is the correct size, push pins into the other holes as well. While doing so, think about how much pressure you have to apply to push the pin through the hole.

The fit of the pin, as it passes through the pinhole, *should be firm* but not so tight that you have to *force* the pin through the pinhole and into the pillow, nor so loose that the pin glides through. A too large pinhole is easy to judge, a too tight pinhole is less easy. A very rough rule of thumb to use in gauging a too tight pinhole, is whether or not the head of the pin leaves an impression on your finger as you push the pin through the hole. If this happens, then the pinhole is definitely too small for the pin

⁵ The pricker is sometimes confused with a needlepin, which is a tool for 'taking sewings' when working Honiton and 'braid' laces. With a pinvice, the needle can be changed as needed and can be positioned to any length, whereas, with a needlepin, the eye end of the needle is glued into a handle and you cannot change either size or length.

size. Increase the needle size, or the exposed area of needle (a fraction) and repeat the testing.

Next it is necessary to adjust the length of exposed needle between the point and the jaws. When you are actually pricking holes, a certain amount of pressure is required to force the needle through the card and a short length of needle allows a more effective use of pressure than a long length. Also, a long length of needle is liable to bend and break.

The exposed needle length should be a touch longer than the combined depth of the pricking card and pricking surface of the board. If, after pricking a hole, there is any impression of the pin vice on the card, the needle length should be increased.

A final point that must be made with regard to the pinvice is that they can be difficult to use at first and familiarity with how to use them also plays a part:

- To slide a needle in, pick up the pinvice and hold it in a horizontal position. Slide the needle between the jaws and tighten the collet sufficiently for the jaws to grip the needle. Hold the pinvice by the handle with the needle pointing upward and tighten the collet as firmly as you can manage. New pin vices are a bit stiff and, in order to adequately tighten the collet, you may have to grip and twist quite hard at first. You have to develop a knack for tightening them. With time, tightening the pinvice becomes easier. Also, after a little use, the new needle will develop a slight groove where the jaws clamp, and tightening becomes much easier after that.
- A common difficulty with using a pinvice is that sometimes a needle will slip backwards as you apply pressure to prick a hole. Unscrew the collet again, just sufficiently to release the needle. Tip the pin vice forward, reposition the needle to the required length then tighten the jaws more firmly than the first time.

As a rough guide for pin to needle size on a medium depth pricking surface -

A size 5 sharps needle will match a pin diameter of 0.75mm/0.030 decimal inch

A size 6 sharps needle will match a pin diameter of 0.6mm/0.024 decimal inch

A size 8 sharps needle will match a pin diameter of 0.50mm/0.20 decimal inch

A size 9 sharps needle will match a 0.53mm pin (decimal inch size unknown).

3. The candle end is used as a lubricant. Before making the pricking, the card pattern shape and the paper pattern are fastened together onto the pricking board. The candle end is rubbed over the entire surface of the *paper* pattern. The wax allows the needle point to more easily penetrate the card. Waxing the paper makes a noticeable difference to the process of pricking the holes.

4. Pricking the holes in the card requires careful positioning of the needle prior to making a hole, and you must be able to clearly see what you are doing.

The pricking board should be placed on a table or workbench. You should sit in an upright, kitchen/dining room type chair, of a height that will allow you to place your arms comfortably on the work surface. Working in a good light is absolutely essential too.

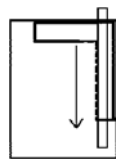
Working in natural light is best but, whether natural or artificial, the light should be facing toward you not shining behind you. If it is shining behind you, it will throw a shadow over the work area and this will cause unnecessary difficulty in seeing what you are doing.

Section C

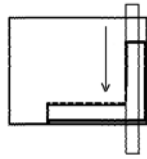
1. Preparing the piece of card

- If the pattern you are using is a *Torchon Basics coursework* pattern, cut along the solid black lines, around the perimeter of the pattern. Otherwise:
- Cut the paper pattern from the printed sheet, leaving a good 1/2inch/12mm margin at the headside and footside edges and more at the top and bottom.
- Lay the paper pattern over the pricking card, close to an edge, and trace around all sides using a ruler and lead pencil.
- Lay the card over very thick newspaper or something similar, on a hard surface. With the craft knife, and using the edge for the ruler as a guide for the blade, cut along the pencil lines on the card. See diagrams below.
- When cutting the card with the craft knife, you must be very careful. To prevent the card from shifting, hold down the ruler firmly. Start the cut by digging the point of the knife into the card, then draw the blade toward you slowly, applying an even pressure for the length of the cut.

Left-handed cutting

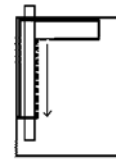


Ruler on right
of cutting line

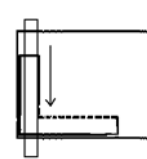


Ruler on right
of cutting line

Right-handed cutting



Ruler on left
of cutting line



Ruler on left
of cutting line

After cutting, if you find the blade has not cut all the way through the card, just use scissors to cut along the groove left by the knife blade. If you try to cut through with the knife blade a second time, it might skip sideways, either cutting into the card at an angle *or cutting into your hand*. Much safer to use the scissors.

Section D

1. Pricking the pattern into the card

- Position the card on top of the pricking board/substitute board, close to one edge (you want to avoid having to reach too far). If you are using just a cork mat, or only a piece of felt, then place it on top of thick newspaper or a piece of thick cardboard. Lay that on top of a hard surface that will act as a barrier between the needle point and the table top. The hard surface should be a board or old

tray of some sort; otherwise the needle point may penetrate through the newspaper and into the surface beneath. You do not want holes in a good table.

- Align the corner points and side edges then, using the thumbtacks, fasten them both together at the corners by pushing the thumbtacks very firmly through the card and into the pricking board.
- Rub the base of the wax candle over the entire surface of the paper pattern then work as follows:

Hold the pricker in your hand in a similar manner to holding a pencil. Position your fingers to grasp the pricker by the top of the collet/shaped area at the base of the handle. (This section differs in shape from brand to brand). To facilitate the pushing action you will have to adjust your grip as needed. Your grip should be *firm but relaxed*, otherwise your finger muscles or hand may cramp.

Whether you are left-handed or right-handed, the process of positioning the needle point is the same:

- Rest the hand holding the pricker on top of the paper pattern and partially over the top row of pinholes.
- Rest your other hand on the side of the pricking board to steady it. Place this hand besides the pricking, with your forefinger near the dots to be pricked. Steady the board as the hole is pricked and hold the pattern and card down as you pull the needle out of the hole.
- Commence with the top, outside pinhole of the corner opposite the hand holding the pricker. Start with the pricker held at an angle of less than 45 degrees to the board, and position the tip of the needle in the centre of the ink dot on the paper pattern.
- Roll your hand inward so that the handle of the pricker is brought into an upright position, then push the pricker downward to force the needle into the card and through to the board.
- With your finger pressing down firmly on the pattern, pull the needle out of the hole. Slide your hand to the side to more easily reach the next dot, and repeat steps 3 and 4.
- Continue until all the dots appear to have been pricked.♣

♣To minimize the accidental skipping of dots, you should prick the holes row by row, down the diagonal from top to side; left-handed working will be top to footside and right-handed working will be top to headside. Prick one complete row of holes at a time.

When all the pinholes have been pricked, or you believe they have, work as follows:

If you have to leave the pricking board part way through the making of a pricking, push the needle back into the last hole that was pricked and leave the pricker standing upright as a marker for when you return.

2. Checking the pattern paper and card for unpricked dots

- First, search the paper pattern visually, looking for dots that have not been pricked. Use your fingertips also, to feel for smooth areas where there should be holes.
- Next, the thumbtacks securing the paper and card to the surface of the board need to be eased a little way out of the board. Carefully slide a ruler or other flat object under the edge of card, between the back of the pricking card and the pricking surface. Lift the ruler to prize up the tacks.
- With the thumbtacks *still holding the paper pattern and card together* use both hands to lift the pricking card and pattern off the board. Keep the thumbtacks in place throughout. The pricking process forces the paper into the holes and this locks the two together fairly firmly. So long as you handle them carefully and keep the thumbtacks in the corner holes throughout the checking process, you should not have any alignment problems.
- With the paper pattern facing you, lift the pricking up above your head and turn it toward a light source so that the light shows through the pinholes. As the light shows through the holes, the sections without holes show up as blank spots. What you are searching for is a break in the continuity of light points.
- Once you have found a blank spot with an unpricked dot, move a finger (of the hand not needed for pricking) across to mark the position. Keep marking the position as you lower the card and lay it back onto the pricking board.
- Release the card. Using your pricking hand, gently push the thumbtacks into the soft surface of the pricking board. Pick up the pricker and prick the missing hole.
- Repeat the checking process, pricking a hole as soon as each blank spot is found, until you think you have found all the blanks. Then you should study the back of the pricking as a final check.
- With the thumbtacks still in the corner holes, turn the pricking over and lay the paper pattern face down onto the pricking surface. Check the back of the pricking for gaps in the rows of pinholes. If you find a blank spot, turn the pricking to the front and check whether or not a pinhole should be pricked in that space. Prick a pinhole if required.

Rules for making a pricking

- Always work in natural daylight or under a strong 'white' light.
- Work without any shadow over the work area.
- Sit at a desk or table, on an upright chair.
- Hold the pin vice by the collet/shaped area at the base of the handle.
- Position the needle tip at the centre of each dot.
- Move the pricker to an upright position before pricking a hole.
- Prick the pinholes in diagonal rows

Never remove the thumbtacks until you have checked the pricking for missing pinholes, and checked again.

If all the pinholes have been accurately pricked, remove the thumbtacks and separate the card and paper. The next step is to mark in the direction lines for working the woven pattern areas, and markings for the headside and footside.

If there are inaccuracies in the pricking they must be dealt with now, before proceeding further.

3. Dealing with an inaccurately pricked hole or twice pricked hole

You have missed the centre of the ink dot by miles and the pinhole is well and truly out of alignment with its neighbors, what do you do?

1. Turn the pricking over and locate the back of the offending hole.
2. Using the top end of the pinvice handle, flatten the raised card around the perimeter of the offending pinhole.
3. Turn the pricking to the front and check it to make sure you have blocked the correct hole.
4. Assuming you have, turn the pricking over to the back again. Cut a tiny corner of invisible, adhesive tape (Magic tape or a clear packaging tape) and place it over the flattened section of card.
5. Mark the pinhole position on the front of the paper pattern. Fasten the paper pattern and the card together again by aligning the edges and fitting the thumbtacks back into their corner holes.
6. Secure the card to the pricking board. Position the needle point, correctly this time, and prick a new hole.

You have pricked the same hole twice and now have two holes in the pricking card, what do you do?

Correcting this problem is more hit-and-miss than the first because the paper pattern also has two pinholes now. Refer to the instructions above and work according to Steps 1, 2 and 4, then as follows:

- Turn the pricking over to the front again. Cut another small piece of tape and place it over the front of the offending pinholes.
- Return the pricking to the pricking board. There is no need to pin it down.
- Freehand prick a new pinhole, very carefully, in the position it should have been originally. Use the surrounding pinholes as a guide to aligning it.

Section F

1. Drawing the pattern markings onto the card

The pattern markings are your guide to working the woven areas of the lace, they must be drawn in accurately and precisely.

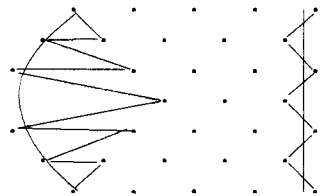
Drawing the pattern marking onto the card serves two minor functions as well:

1. You rapidly discover any blanks where pinholes should be
2. You familiarise yourself with the flow of the pattern elements.

Lacemakers with years of pattern making experience are able to draw ink lines directly onto the card, in all the necessary parts, without making errors. Novice lacemakers, however, should begin with pencil lines so that errors can be erased. When the pattern markings have been accurately drawn in pencil, the pen is used to draw ink lines over the top and then the pencil lines are erased. This is double effort of course, but well worth the time. The pencil lines must be thoroughly erased or the lace will become dirty.

When drawing lines onto the card, you will or should have, a paper pattern from which to copy. You must note exactly which pinhole the line commences at, as well as which pinhole it travels to. When actually drawing a line, there should always be a small space between the pinhole and the beginning/ending of the line. If you draw over the pinholes, you make life difficult for yourself when you come to work the lace because you cannot immediately see where to place the pin.

Draw the lines freehand. I do not recommend using a ruler for marking in the lines because you cannot see exactly where you are going and it is too easy to draw a line to the wrong pinhole.



The process:

- Lay the pricking card, back side down, on a clean flat surface. The headside (shaped edge) should be on your left (English working) and the footside on your right. Most people are more adept at drawing lines horizontally than vertically, so why make life any more difficult than it need be!
- Lay the paper pattern beside the card, on the side away from your drawing hand.

- Commence by marking in the footside edge. Look carefully at the paper pattern to see whether the top line begins from an inside pinhole or an outside pinhole. Draw a commensurate line on the card, fitting the line between the two pinholes.
- Draw in the marking lines for the length of the pricking, down to the corner if there is one. Carefully study the marking at the corner turn. Copy the marking exactly, turning the card as you need to. Continue the marking after the corner until the footside edge has been fully marked.
- Return to the top of the pricking. If the pattern includes blocks or other pattern elements, these should be marked in next. Study the pattern blocks on the paper pattern. Mark in the pattern blocks on the pricking card, one block at a time. Be very careful here; you should stop at the end of each marked block and check that the next block is marked in the same way. Direction lines do not always travel in the same direction for every block.
- Mark in the headside edge next, down to the corner, faithfully copying every marking. Be very careful as you mark in the corner turn, turning the pricking card as needed.
- If there are special markings for the ground stitches, mark them as the final step. I suggest leaving complex ground markings until last, so that all major areas are there to be used as reference points.

When you are certain that the markings on your pricking exactly replicate the markings on the paper pattern, trace over them using a fine tipped, permanent ink, pen. These pens are available in a range of price brackets, depending on whether they are mass-produced fiber-tipped pens or the specialist drawing pens used by designers.

Never, Never, use **biro** pens, also known as ballpoint pens. A biro is not a drawing pen, it is a writing pen and the ink will permanently stain any lace that is worked over it.

When the ink lines have been drawn in, use a good quality plastic eraser to thoroughly erase all traces of the pencil lines.

2. Dealing with incorrectly drawn marking lines

You have drawn the ink marking incorrectly, what do you do?

- Use whiting-out, or correction fluid to eliminate the incorrect lines - not too thick a layer! You can use a colour to match the card if you can find one. If you are using brown card and hate the look of the whiting out fluid on the brown, then buy a bronze coloured metallic marker and use that.
- Leave the correction fluid to dry thoroughly (for up to ten minutes). Draw the markings again, correctly this time.

The attempt at correcting the error is a mess, what can you do?

- If there is a thick layer of correction fluid on the pricking, use a blunt knife and gently scrape away as much of it as possible.
- Lay the pricking back on the pricking board. Take a piece of brown paper and place it under the pricking card. Fasten the pricking and brown paper together.
- Prick the outline of the *exact shape* that needs fixing, making sure that you position the needle precisely in the existing holes in the pricking. Do not alter the size or position of the holes in any way.
- Separate the paper from the pricking. Mark the direction lines on the brown paper, stopping short of the pricked pinholes.
- Using a pair of sharp scissors cut out the brown paper shape, cutting *through the middle of the pinholes*. What you now have is a shape with a finely scalloped edge. This piece of paper must be fastened over the messy section of pricking.
- Use tiny pieces of double-sided sticky tape or smear some adhesive paste/glue over the messy pattern block on the pricking card, *keeping inside the pinholes*.
- Push the point of the pricker into the brown paper shape, somewhere about the middle. Carefully position the skewered paper shape over the pattern block, matching the edges of the pinholes.
- Using a pencil end or similar, gently push the paper down the needle to check the alignment of pinholes. Do not push the paper right down though. If the position *is incorrect*, lift the paper off again by turning the pricker to the side and lifting it up with the paper still skewered by the point. Try again.
- When the paper is in the correct position, push it flat against the tape/glue surface and hold it in place with a pencil while you remove the needle. Press down on the paper carefully so it does not slide, and smooth it so there are no wrinkles. Leave the glue to dry completely.

Instruction for making a pricking and dealing with problems is now complete. The process is far simpler than it appears from reading the instruction, so do not be deterred by the seeming complexity.

Below are some versions of the small pinvices available. I do not know the brand names for the bottom two but the example should be sufficient for you to recognise them when you see these or similar tools. In an attempt to achieve more definition with the image, the Eclipse pinvice is shown here about 25% larger than life.

