Basic Blocking Techniques & Brim Edges - Wayne Wichern

Basic Tools Discussion

Table, Stool, Bench for blocking
Safety Concerns: Dangers of working with steam
Steam – steamers, steam irons & generators, steam pot & burner
Gloves – lightweight rubber electrical, gardening or dishwashing gloves
Water Spray Bottle
Covering and protecting your blocks and felt/straw materials during blocking
Blocking Spindles
Pressing Cloth
Blocking Tacks
Blocking Cords
Cord pusher or cord runner tool
Pliers
Wide bias strips of muslin 2, 4, 6-inch width by 1-yard long
Compress/Tipper Tool – If your block has a recess do you have the tipper or compress tool?
(If not make one with Instamorph http://www.instamorph.com/ or search online for sellers.
Weights – to press the tipper or crease tools into the felt of straw crown while drying.

Basic Block Types

Crowns
Brim blocks
Inverted blocks

Blocking

Basic blocking techniques for crowns and crowns with small, medium and large brims
Blocking techniques for inverted brims small, medium and large
Blocking for devised and invented shapes
Blocking cord knots and other tie down techniques
View, discuss and work with professionally made or invented hand tools
Keep blocking area free of felt lint and stains. Lint from felts can easily stain lighter felt and straw.

Materials

Felt is a multi-directional stretch or malleable material. Felt is not a woven material.
Straw is a woven material and will stretch on the bias but will not stretch on the straight of grain.
Best uses of different felt and straw products – wool, fur felt, velour felt, suede finish, long hair or "beaver finish", printed or embroidered or decorative stitching
Parisisal, sisal, panama, toyo, seagrass, balibuntal, paribuntal, etc.

Stiffening or sizing felts and straws

To stiffen or not? When is it needed and when to apply?
Different types and what is best to use on felt or straw?

Basic felt blocking:

Good steam and strong physical blocking skills will make a world of difference in your finished hat work.
Position yourself and learn to work up and over your blocks using your upper body weight to hold the block in place.

1. **A hat with a medium to large brim and crown.** What is the size of crown shape compared to the dimension of the felt cartwheel or hood? If your intended crown is considerably wider or taller than the felt crown portion, consider enlarging or lengthening that portion of the felt in advance of blocking. Dampen and steam only the crown and close in area of the brim and block down over a taller crown of similar proportions. You will be taking some of the brim area and tapering it back into the crown area, then when you re-steam and block your crown area you will have more "crown felt" to work with. Alternatively, if the crown block is smaller, will there be too much felt to pull away without distortion? If so, then consider adding a lift or plate of ½, 1, 1½, 2 or more inches as necessary to the bottom of the crown to help "absorb" the felt even if you intend a shorter crown for your finished hat. This extra height in the crown block uses up the felt crown portion and makes for an easier blocking. When the hat is dry and off the block cut the felt at ½ inch up the crown side and reset the crown on the brim to the desired height. This is seemingly an extra step, but you will have much better control of the blocking process.

2. **Dampen the felt with a little water with your spray bottle.**
   If wool felt or fur felt (matte finish) you can dampen either side or both. Keep an even spray. For velour or fancier finishes spray only inside of the felt or at least not the finished or "fashion" side. The velvety velour finish can be easily crushed if wet and it will be hard to get the luxurious finish back. The moisture you are adding helps maintain the steam heat longer while you work the felt.

3. **Cover block with plastic or surface protection.**
   Use lightweight plastic bag dry cleaning or the like to protect your blocks and materials. Cover smoothly as possible and be sure to reverse any printed plastic materials so the printing will not adhere to your felt or straw.

4. **Lay out your blocking cords, tacks, blocking tools.**
   Once you start the steaming you do not want to have to stop and hunt up your tools. The hot felt will not hold the heat long, so be ready to go with all your tools, strings, tacks, etc. before you start steaming.

5. **Do you need gloves to protect from the steam?**
   The more steam the better so if you are sensitive to the steam and heat then wear protection on the initial blocking. After the initial steaming you may not need the gloves. They may limit your "feel" of the felt.

6. **Start the steaming and blocking.**
   If you are blocking a hood over a break apart, crown block or crown block and smallish brim then heat the entire hood throughout and move quickly to the block and plunge the hood down over the block. Quickly smooth and pull a string at the bottom most area of the block. Don't worry about whether it is in the correct string line for now, you are most concerned that you get a good stretch and trap the bulk below. Do not take the felt off the block once you have started the pull unless something really went wrong with your initial pull. Taking the felt on and off the block is not recommended. Now take your press cloth cover the felt and steam at least one quarter of the felt area from center of the top of the crown down over the side to the bottom edge of the hood. Pull and reset your pins or string. Cross to the opposite area and do the same task. Continue all around the block shape settling the felt into place. If you have blocking cord locations in other areas of the hat, address those now from the top to the bottom. You may need to release some tension on your bottom string to allow for the felt to ease back and accommodate the detail lines, recesses or creases that exist in the block (if you intend to show those details in the final hat design). You do not need to use all the existing details in a hat block – this is a personal design decision.

   The pressing cloth is a must have, thin old dish towels and the like will serve very well to protect the felt from the edges of your steam iron or other equipment. The cloth lets you get as close as possible without pressing the felt to really get the steam heat down into the felt.

7. **On to the larger brim and crown blocking technique**.
   Establish your crown. Dampen your felt and steam the crown portion of the cartwheel. You will not be able to keep the entire felt brim area hot enough or work quickly enough to worry about getting the entire felt hot. Just concentrate on the crown portion. Plunge the hot crown down over the block crown taking care to not pull from the brim edges.

   ---Scoop up the brim and bring your hands in close to the crown to pull down from the base of the crown felt. If you pull from the brim edge you will stretch the crown felt area away from the crown block and you will have to work much harder to get the felt to shape back into the crown area. ---

   Block the crown down quickly and then grab the opposite two sides and pull down and hold for a few seconds. Get a blocking cord on the crown and as far down the crown as you intend to pull the shape to. If you don't get the crown evenly blocked down worry for now, just get the blocking cord in place and pull tight.

8. **Continue blocking the brim.**
   Now you will begin to work on the brim in sections. Using your press cloth on the felt and block steam at least one quarter of the shape from top of the crown to the edge of the brim, more heat/steam is better than too little. You want the felt to be as malleable as possible. Pull smoothly over the edge of the brim block and keeping the felt taut with one hand secure the pull with one or two blocking tacks below your blocking cord line. Pull again in a slightly different area that has been steamed. Remember to work over the block using your body to hold the block in place. Now turn the block to the opposite side and perform the same task (press cloth, steam, pull and tack) and again on each of the remaining quarters. Then to any areas that need attention. Your goal is to have the entire brim felt smooth, taut and the crown smooth. Fit a blocking cord around the brim line groove and pull tight. Then using a blocking cord pushing tool push the crown blocking cord to the desired depth as it will likely have shifted, being very careful not to slip off the cord and damage your felt.

9. **Final steaming and cleanup.**
   Cover entire block with pressing cloth and steam heavily over and around the entire shape with special attention to the brim edge and the seat of the crown. Pull off the pressing cloth and carefully brush the felt to reestablish the finish if it is a velour or fancy finish. You can polish wool and fur felt with a cloth to remove loose fibers and smooth the felt. Don't polish velour felt as it will distort or mar the velvety finish. If you have a recessed crown place your recess tool in the appropriate location with a piece of muslin or paper towel if needed and place sufficient weight on the tipper to hold the recess in place until dry.




Considerations for blocking straws:

1. Millinery straws come in a large variety of materials and fibers the most common being sisal fibers.
2. Straw is a woven material and therefore stretches on the bias of the weave. This is important to consider and think of it this way - straw doesn't stretch it conforms to the block, unlike felts which stretch.
3. Woven straw cartwheels and hoods are hand-woven; each straw will be slightly different than the next and each type of straw has its own characteristics.
4. Straws are not as friendly to all block shapes due to the weave, weave pattern or the geometry of the block.
5. Is there excess bulk in the crown portion of the hood or cartwheel that will present issues during blocking?
6. Pre-stiffened or stiffening after blocking or after removing from the block?

Basic straw blocking:

1. **Dampen the straw with a little water with your spray bottle.**
   If a stiffened straw, you can dampen either side or both. Keep an even spray. For faster moisture take up use steam as well.

2. **Cover block with plastic or surface protection.**
   Use lightweight plastic bag dry cleaning or the like to protect your blocks and materials. Cover smoothly as possible and be sure to reverse any printed plastic materials so the printing will not adhere to your felt or straw.

3. **Lay out your blocking cords, tacks, blocking tools.**
   Once you start the steaming you do not want to have to stop and hunt up your tools.

4. **Start the blocking.**
   If you are blocking a hood over a break apart, crown block or crown block and smallish brim then center your hood or cartwheel. Smooth down the sides of the crown or break-apart block and pull a string at the bottom most area of the crown of base of break-apart block. Don't worry about whether it is in the correct string line for now. You are most concerned that you get an even shaping and trap the bulk below. Do not take the straw off the block once you have started. Pull, smooth and adjust the straw and reset your pins or strings as needed. Cross to the opposite area and do the same task. Continue all around the block shape settling the straw into place. If you have blocking cord locations in other areas of the hat, address those now from the top to the bottom. You may need to release some tension on your bottom string to allow for the straw to ease back and accommodate the detail lines, recesses or creases that exist in the block (if you intend to show those details in the final hat design). You do not need to use all the existing details in a hat block – this is a personal design decision.

5. **Considerations for blocking a hat with a medium to large brim and crown.**
   What is size of crown shape compared to the dimension of the straw hood or cartwheel? If your intended crown is considerably wider or taller than the crown portion you may need to use more than one straw piece. Alternatively, if the crown block is smaller, will there be too much straw to smooth away without distortion? If so, then consider adding a lift or plate of ½, 1, 1½, 2 or more inches as necessary to the bottom of the crown to help "absorb" the straw even if you intend a shorter crown for your finished hat. This extra height in the crown block uses up the straw crown portion and makes for an easier blocking. When the hat is dry and off the block cut the straw at ½ inch up the crown and reset the crown to the desired height. This is seemingly an extra step, but you will have much better control of the blocking process.

6. **On to the larger brim and crown blocking technique**.
   Establish your crown. Dampen your straw ease over the crown and brim taking care to not pull from just the brim edges.

   --- ***Scoop up the brim and bring your hand close to the crown to pull down from the base of the crown straw. If you pull from the brim edge you will tend to distort the crown area away from the block and will have to work much harder to get the straw to shape back into the crown area.*** ---

Block the crown down then move to the opposite two sides and pull down. Get a blocking cord on the crown and as far down the crown as you intend to pull the shape to. If you don't get the crown evenly blocked down worry for now, just get the blocking cord in place and pull tight.

7. **Continue blocking the brim.** Now you will begin to work on the brim in sections. Pull smoothly over the edge of the brim block and keeping the straw taut with one hand secure the pull with one or two blocking tacks below your blocking cord line. Pull again in a slightly different area that has been steamed. Remember to work over the block using your body to hold the block in place. Now turn the block to the opposite side and perform the same task smooth, pull and tack and again on each of the remaining quarters. Then to any areas that need extra attention. Your goal is to have the entire brim smooth, taut and the crown smooth. Fit a blocking cord around the brim line groove and pull tight. Then using a blocking cord pushing tool push the crown blocking cord to the desired depth as it will likely have shifted, being very careful not to slip off the cord and damage your straw.

8. **Final cleanup.** Clean up the straw if littered with debris. If you have a recessed crown place your recess tool in the appropriate location with a piece of muslin or paper towel if needed and place sufficient weight on the tipper to hold the recess in place until dry.

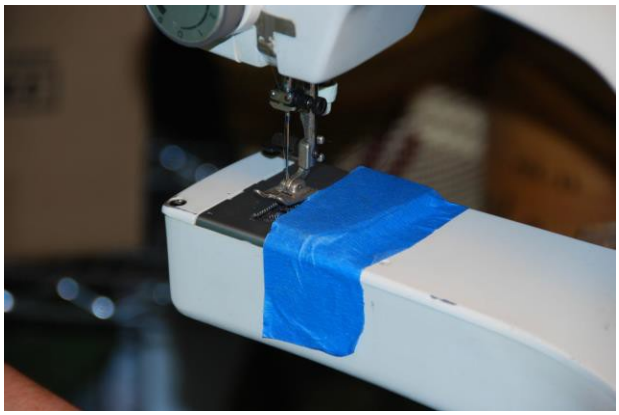
Considerations for Brim Edges:

1. Determine appropriate edge treatments for style and price point.
2. Hand sewn brim edge or machined edges? Why the difference.
3. Traditional welt folded edge sewn with machine or by hand
4. Rolled edge – depending on style and brim shape
5. Ribbon or bias fabric bound edge
   - Machine stitched
   - Hand stitched
6. Using bias tape folders and sewing machine binders and folders
7. Techniques to manage a sewing machine to gain better control of precision stitching lines
8. Sewing machine (without base plate to cantilever over the edge of a table) (best domestic machines would be Pfaff 1222 or 1229)

Brim Edges:

Create a seam guide for your machine to assist in a straight hem for your straw or felt edges.

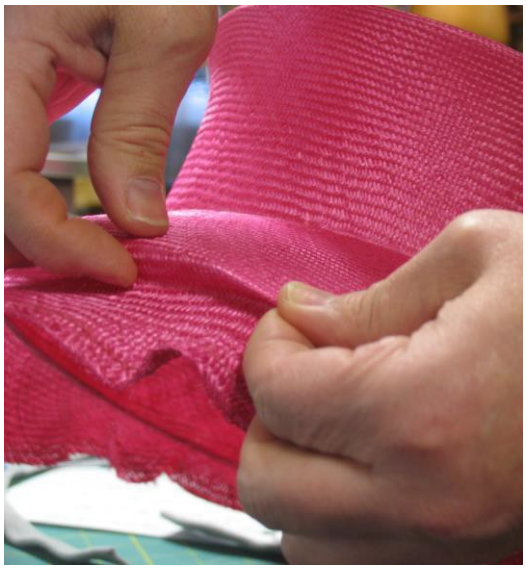
Create a gauge (block/bumper/barrier) tool for your machine for sewing brim edges. Find a piece of cork, plastic or wood that is at least an 1/8 or ¼ inch high to tape right up against your machine presser foot. This will help to keep your felt or straw edge seam allowance easily consistent. If necessary, make your seam allowance adjustments with the machine needle position selector (left-right-center) if your machine has this option. Make sure your seam allowance is narrow enough to catch your hem on the bottom side. Now your job is to sew the hem, keep your wire in the proper place and make a nice straight even hem. Or purchase an L or T Gauge for your machine shown below.

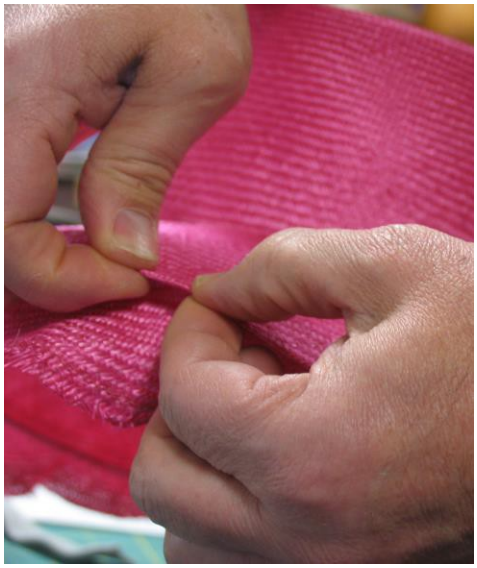


NOTE: It is recommended to sew with the top (fashion side) of the brim upright whenever possible. This may seem counterintuitive, but you will get best results if you sew with the brim hem down.

Steps for clean crisp sewn straw brim edge:

1. **Pinch brim edge flat**: Once the straw hat is removed from the brim carefully pinch the brim edge flat. This helps keep the sewing machine presser foot from making the pinch and flattening which can distort the edge of the brim. Remove straw bulk remainder if needed before pinching the welt edge to get clean access to the punch area.





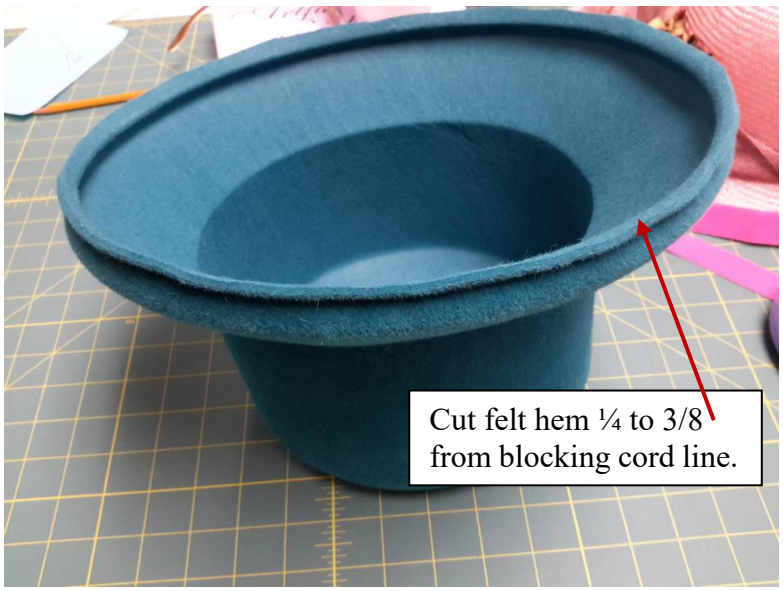
2. **Determine your minimum / maximum welt seam allowance:** Look carefully around the brim welt crease and see what the average seam allowance will need to be. Blocking cord grooves are hand cut and not always consistent depth around the brim edge. Determine what your cut line will be to capture 3/8 for your welt fold hem. Cut with your scissors held parallel and vertical to the plane of the hat as much as possible. Use only the front ½ to ¾ inch of your scissor tips and it is best not to cut entirely through the cut every stroke (this short cut controlled cutting will keep jagged cut lines from forming on your hem). You are working to cut your finished edge and will next sew the hem on the machine. It is extremely difficult to cut the straw hem after sewing the straw hem.

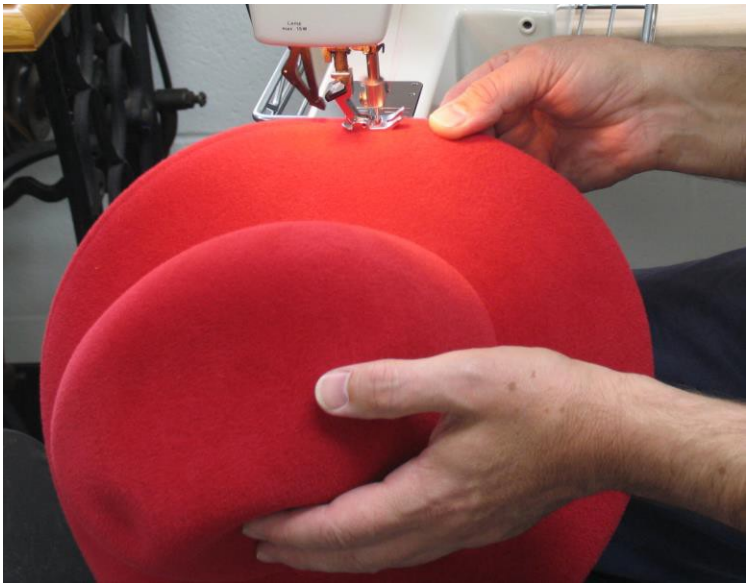
3. **Determine wire size and sew:** Fit your wire size and clamp the ends with a joiner. Consider cutting several inches too much wire and sew the wire in at your desired seam allowance, typically ¼-3/8 inch, leaving the back 4-5 inches open. Take the hat out of the machine and adjust the wire to the appropriate dimension and then clamp and sew the remaining hem. Most people either insert too much wire in the brim fold or not enough and this will create significant distortion.

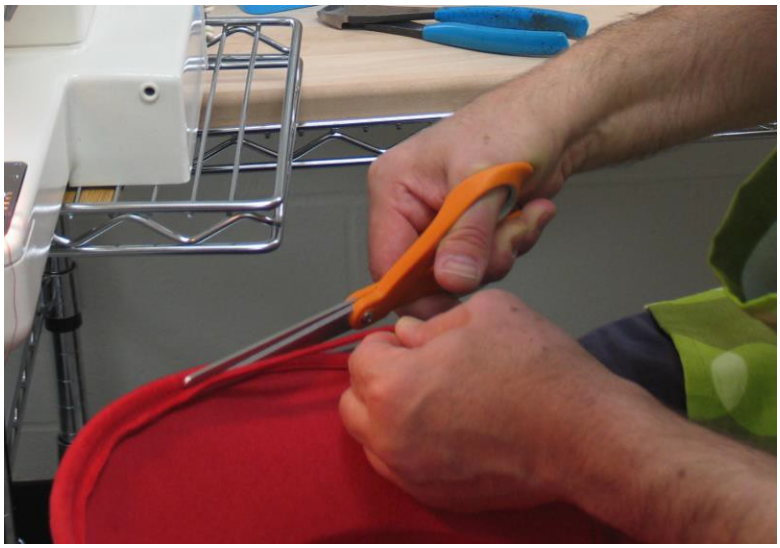
However, there can be useful design advantages to intentional wire distortion so don't rule it out when appropriate. Your brim hem is sewn and you shouldn't have to recut.

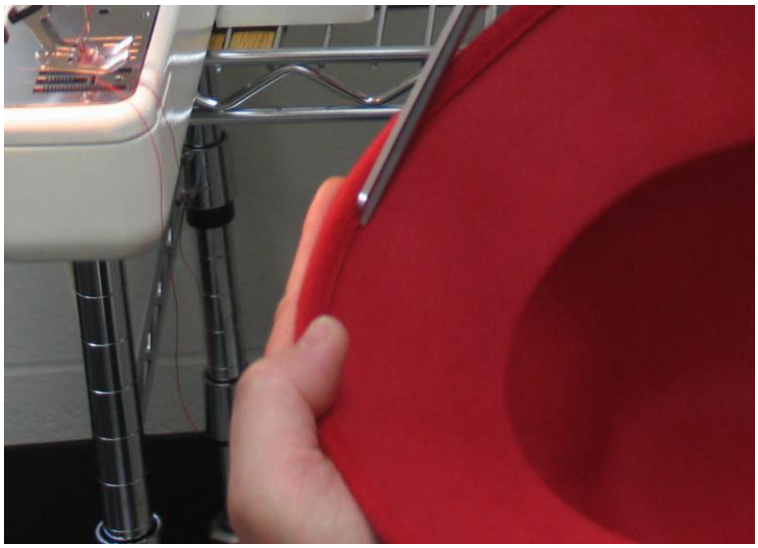
Steps for clean crisp sewn felt brim edge:

1. Once the felt hat is removed from the block cut the remainder off the brim to get it out of the way. Cut at ¼ to 3/8 away from the blocking cord line. Blocking cord grooves are hand cut and therefore not usually consistent around the brim edge. When preparing to finish the straw I suggested pinching the edge of the brim, this is not necessary on a felt as it will not make any difference.
2. Determine your wire length if appropriate and join the ends. Sew brim hem with hem side down at seam allowance of ¼ or 3/8.
3. Now with the hat upside down in your lap carefully trim the hem to 1/8th from your seam stitching. This takes good scissors, practice and precision. Do not follow the blocking cord line as they are not usually consistent. Cut with your scissors held parallel and vertical to the plane of the hat as much as possible. Use only the front ½ to ¾ of your scissor tips and it is best not to cut entirely through the cut every stroke as this short distance controlled cutting will keep jagged cut lines from forming on your hem edge.
4. You can use your fingernail to drag along your cut edge to soften the cut line if needed.









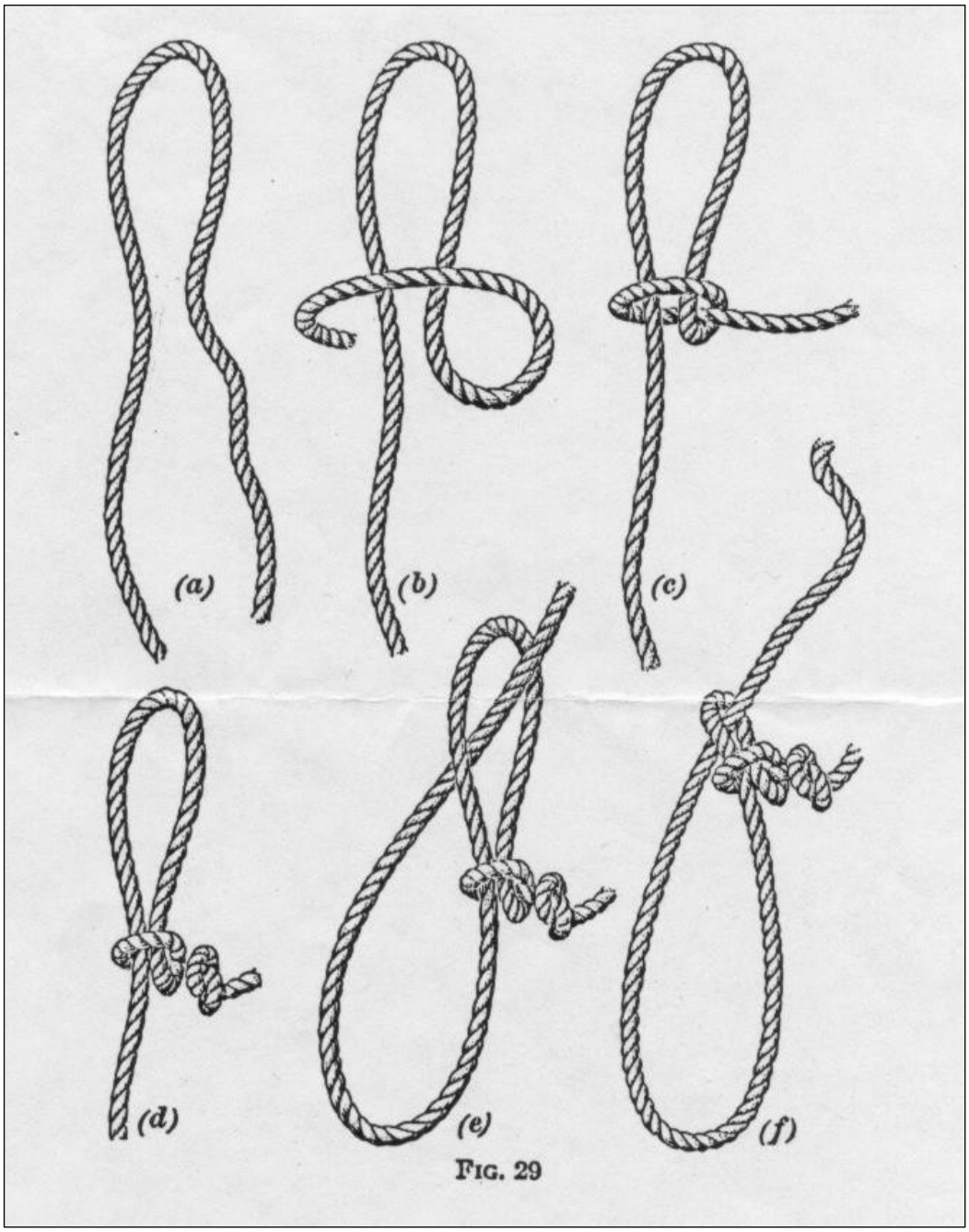


FIG. 29

Here are some questions we will consider to help you with the challenges of blocking.

1. Where are your doing your blocking work - kitchen table, kitchen counter, washer or dryer, stool, bench, work table?

2. What are you using for your steam?

3. How do you currently physically manage the felt and straw materials to get the appropriate stretch and tension for a good blocking?

4. When is it best to use a hood or a body/cartwheel for a particular shape?