



Men of Iron

Faldstool

The Faldstool, or quite literally “Folding Stool” from the Medieval Latin was a stool that was used by clergy when traveling about and away from their normal base of operations.

The Men of Iron Faldstool is a simple folding seat with a soft fabric or leather seat that can be folded up and transported easily by any member.

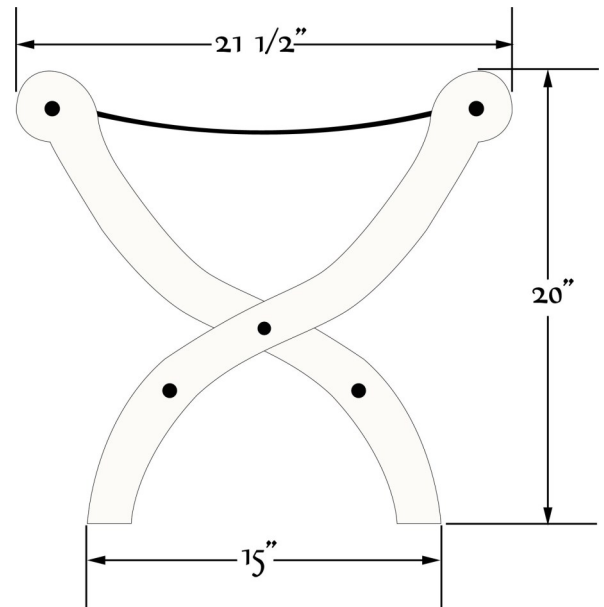
This instructable will provide all of the details for you to build your own.

Materials needed:

- (4) 1”x 6”x 27” boards. Oak, Ash and Maple would be excellent options for this project. If that is not available, Poplar, or Yellow Pine are acceptable.
- (1) 3/4” Dowel 18” long. Oak or Ash are preferable.
- (4) 1/2” Dowels 15” long. Oak or Ash are preferable.
- (1) 24” x 14” length of sturdy fabric or leather. If fabric is used, select a heavy and durable fabric such as heavy canvas.
- Wood Glue
- Finish nails

Equipment needed

- Jig saw or Scroll saw
- Sander with sandpaper
- Hammer and Nailset
- Drill bits
- Drill press or hand drill
- 1/2” Wood Chisel
- Wood Rasp
- Mill File
- Sewing machine



The finished stool should be able to fold up. The finish dimensions are as shown to the right. The inside length of the stool will be 12 inches. The outside length will be 15 inches.

Instructions

Print out the leg pattern on the last three pages of this instructable. Cut out the individual pieces as printed on the page. Using the reference lines on each leg, tape the lines together, A to A, B to B. This will create a perfect template for the layout for the legs and the location of the holes for the dowels. Using the template you just created, trace the design onto the 1” x6” boards. Cut 4 pieces.

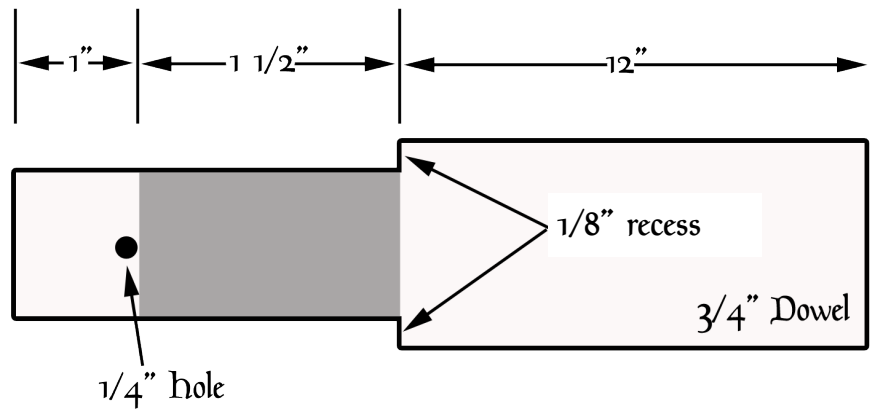
After cutting all legs, clamp all four legs together and sand and finish as one unit. This will ensure that all four legs are identical.

Mark the location of the holes for the dowels. Use a drill press to ensure a straight hole. A hand drill will work if a drill press is not available. Drill all of the holes on the first leg. This will serve as your pattern. Using the first leg, clamp the leg with holes to the second leg that has no holes and drill. The first leg will act as a guide to exactly place the holes. Repeat this for leg three and four. After all the holes are drilled, sand smooth and set aside.

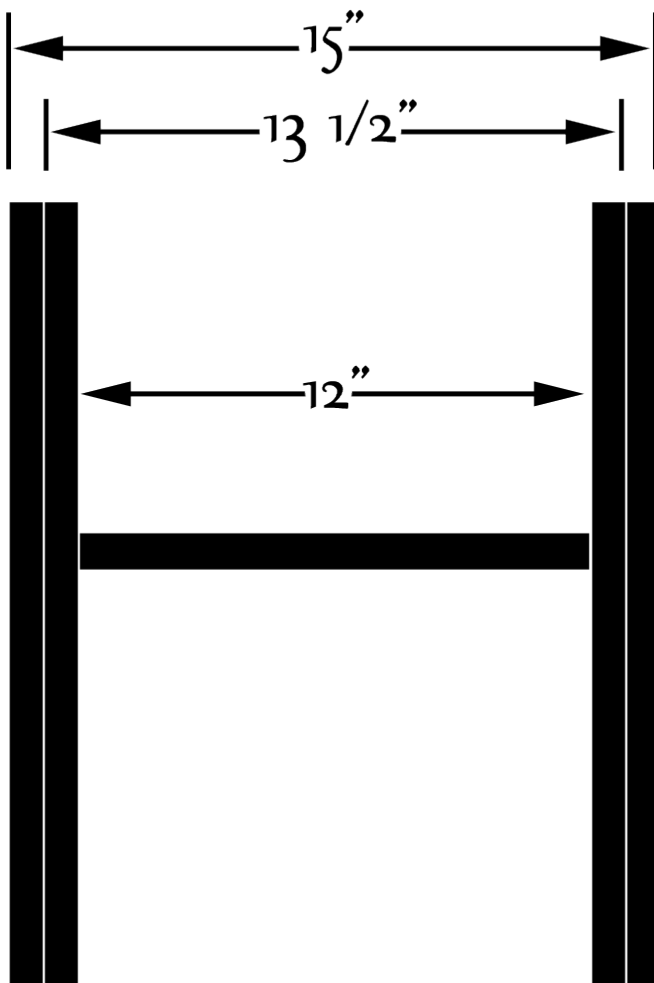
Preparing the Center Dowel

Take the $\frac{3}{4}$ " dowel and measure the lengths as shown on the diagram below. On one end mark 1", then 1 $\frac{1}{2}$ " (or the thickness of two legs) then make your line. This will be the line that is recessed $\frac{1}{8}$ ". Using a handsaw, mark a $\frac{1}{8}$ " line on the blade up from the teeth and cut around the dowel. This could also be done by setting the fence on a table saw to the length of the end (2 $\frac{1}{2}$ ") and setting the saw blade at a height of $\frac{1}{8}$ ". Set the dowel on the saw and rotate the dowel until it is cut all the way around. Measure 12 inches from that line and repeat on the opposite end.

Next, use a sharp wood chisel or a wood rasp to remove the excess stock from each end and fit the dowel to the holes. Take your time and round this out as best as you can. The more round the shape, the better the fit. A mill file will help give the final fit a smooth finish.



After the fit test, mark for the $\frac{1}{4}$ " hole. This will receive a small pin that will secure the center dowel to the stool. Drill this hole on both ends with a drill press and set aside.



The seat support and lower leg support dowels can now be cut and fit. Cut two of the $\frac{1}{2}$ " dowels at 15" and two at 13 $\frac{1}{2}$ ". These will be the length of the outside of the leg as shown in the diagram. The center support dowel should measure 12" on the interior. If your leg stock is more than $\frac{3}{4}$ " thick, you will need to adjust the lengths of the dowel to accommodate the thickness of the stock.

After all of the supports are cut and dry fit, finish sand the entire stool. After finish sanding all parts, it is ready for stain or paint.

If you paint the stool or use a stain/polyurethane finish on the wood, be sure not to get the finish in any of your drilled holes. If you do simply wipe them clean. You will have a more difficult time assembling the stool if the finish is in these areas.

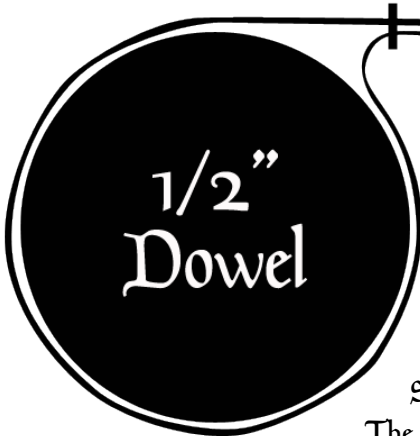
The next step is to create the seat.

Creating the Faldstool Seat

The seat for the faldstool can be made from a heavy canvas or from a piece of cowhide. Either one is perfectly fine.

For the fabric seat:

Using the 24" x 14" fabric, hem the 24" length on both sides using a 1/2" rolled hem. This seat can be no more than 12" wide. Hem the first side, then mark 12" across the seat to what will become the edge of the hem. You may need to trim the edge to make the 1/2" hem.



After the length is hemmed, you will need to make the sleeve for the dowel that the seat is secured by.

Wrap the end of the fabric as per the diagram and mark. You will need to make sure that you leave at least 3/4" to finish the edge on the second pass. Be sure to allow a little wiggle room in the fit.

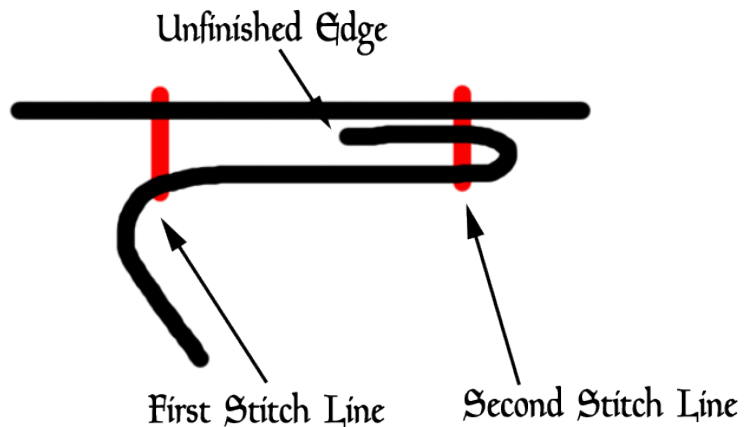
After making the mark measure the inset and make additional marks as necessary. Stitch along this line. You should now have a sleeve the dowel fits into.

The next step is to secure the raw edge. Fold the unfinished edge against the line you just stitched, pin and stitch the second line.

This should be done on both ends.

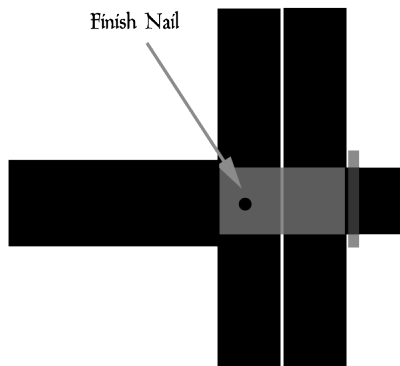
When completed, your seat should be 12" wide by approximately 19 1/2" long. This will vary slightly.

If you are using leather, you will not need to hem the length of the material. Simply create the sleeves to hang the seat from the dowels. Because leather could be hard to sew, this might need to be done by hand.



Assembling the Faldstool

After the seat is ready and the finish is dry, it is time to assemble the faldstool.

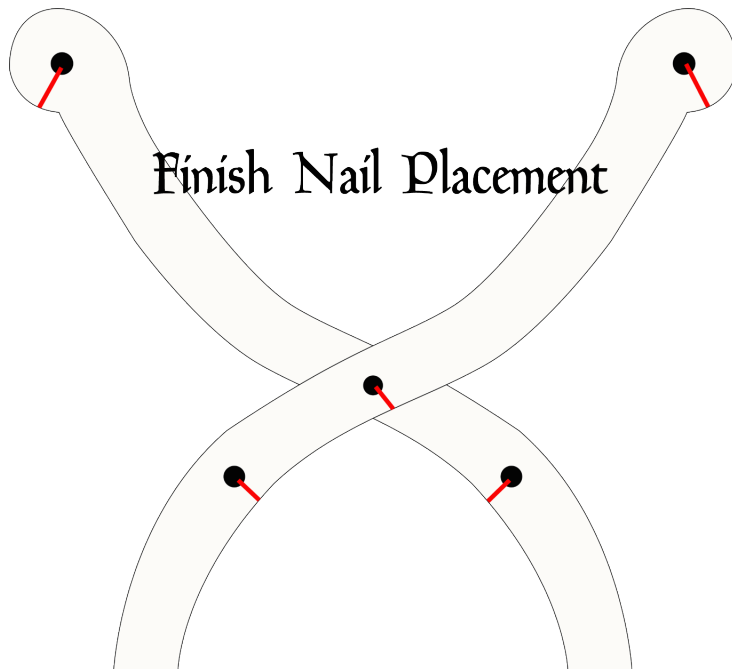
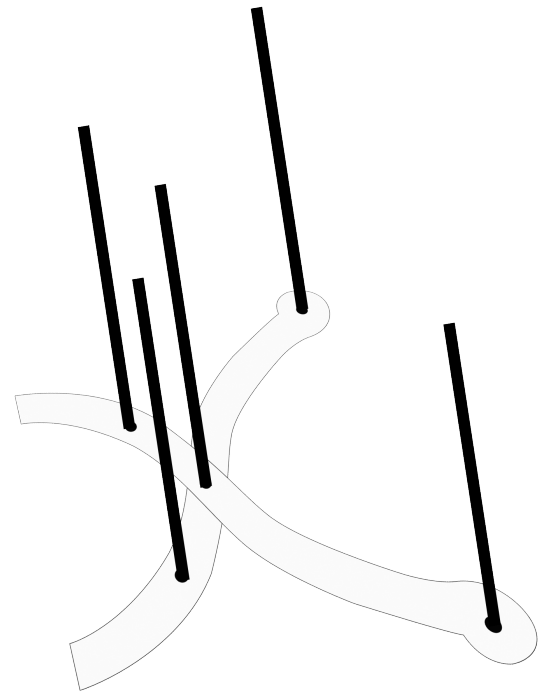


Take the two legs that will make up the back of the stool. Insert the center dowel in to the legs. Glue the first piece in place. Next, drill a small pilot hole for a small finish nail and set the nail. This will secure the center support to the inside leg. Attach the second opposing leg and using a pin fashioned from scrap, pin the opposite side of the second leg. **DO NOT GLUE.** The outside legs will need to be free to pivot.

The wooden peg will secure the leg in place.

Attach the dowels to the appropriate holes. The 15" dowels will attach to the outside legs, the 13 1/2" dowels to the inside legs. These will be nailed in the same fashion as the center support and will also be glued using wood glue.

After all of the dowels have been secured, slide the seat in place.

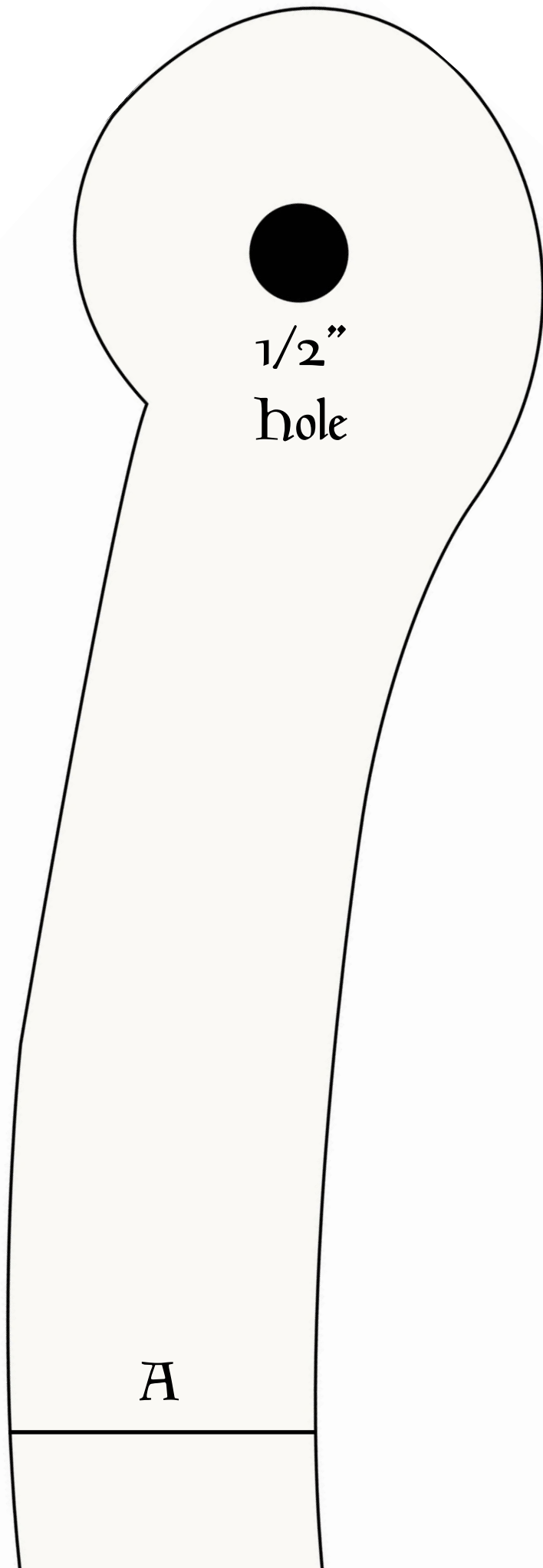


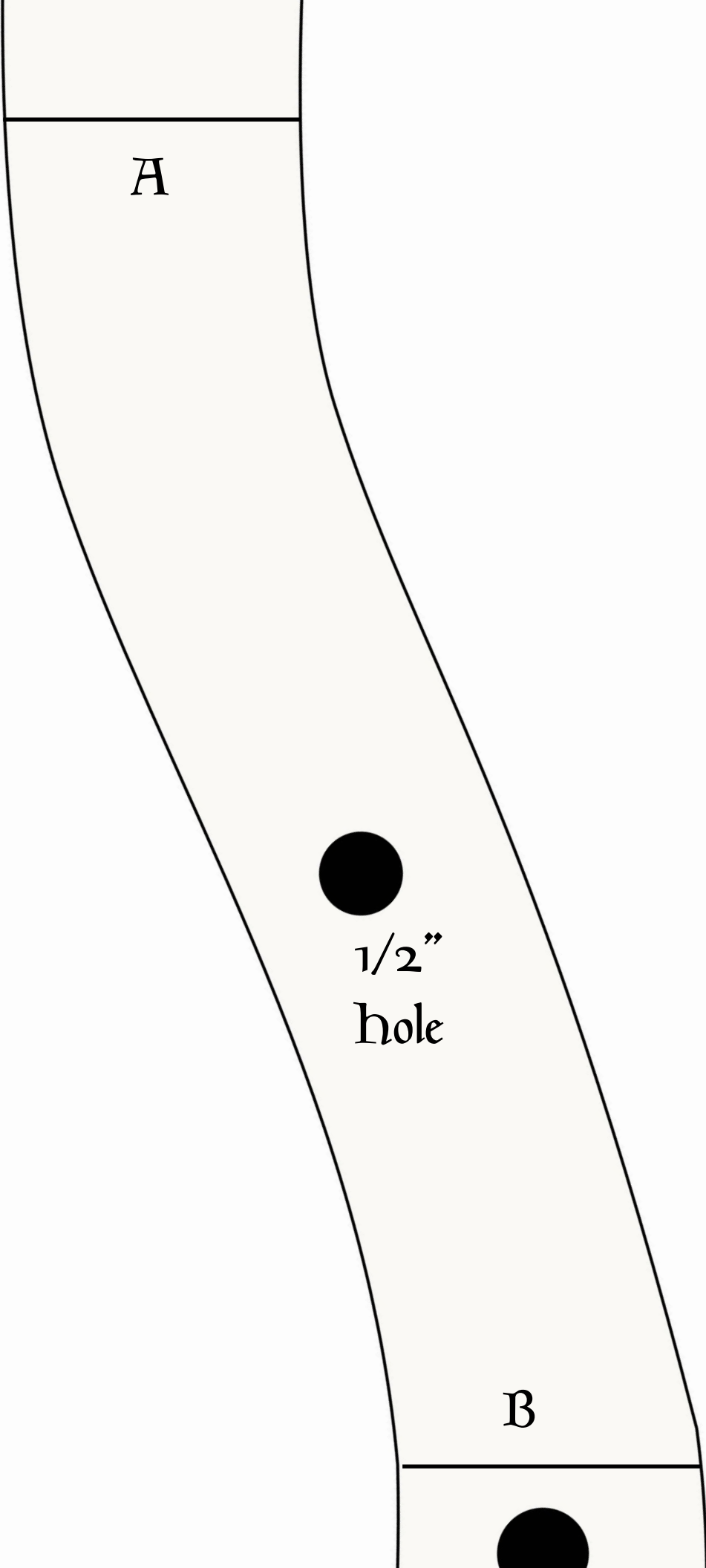
After the seat is placed, the second set of legs should be set. The legs should be mirrored to its opposite. So in other words, if the inside leg has its foot to the left and the top to the right, the opposite (third leg) should match. Here you will glue the third leg but not nail just yet. Place the fourth leg on the end and set the stool so the feet are all level and touching evenly. All of the other dowels should be glued at this time. While it is sitting, drill a pilot hole and set the finish nail the center support on the third leg. This will ensure the stool sits level. After securing the third leg, drill and set nails on the remaining dowels. All finish nails should be placed so as to hide the nail as much as possible. Use the diagram provided here to guide your placement.

If everything was cut properly, there will be only one place it can go. Clean up any glue and let it dry.

Once the glue is dry, then it is time for the moment of truth! Set your faldstool down and take a load off.

If it holds your weight and you don't fall to the ground, congratulations on a job well done!





A



1/2"
hole

B





B



1/2"
hole