WOODWORKER'S JOURNAL

Weaving a Splint Seat for the Delaware Chair

May/June 2018



Woodworker's Journal June 2018

Copyright 2018 Rockler Press, Inc.

nce you've finished building the frame of the Delaware Chair from our May/June 2018 issue, you'll need to fashion a seat for it. Read on for author Kerry Pierce's instructions on how to create the traditional splint seat. - WJ Editor

You begin the seat weaving process for the Delaware Chair after you've put in hours of hand sanding on the chair frame and applied the first couple of coats of finish. The best place to start the weaving process is in the house, rather than in the shop, because the loose coils of wet splint will pick up every bit of dust from your shop floor.

The material I selected for this chair seat was an old friend: 1/2" rattan splint, a material I've used to seat hundreds of chairs. Rattan splint comes from the same plant that produces caning material. The cane is the hard outer surface of the rattan vines; the splint is the woody material inside that vine. It can be purchased from a number of suppliers. Recently, I've been buying my splint from The Country Seat (phone 610-756-6124; online at <u>www.countryseat.com</u>).

Shown in Photo 1 are the tools you will need to weave the seat: stapler, pliers, scissors, butter knife, needlenose pliers, rule, masking tape.



Photo 1

Prepare the splint for weaving by opening the rolls of rattan splint and soaking it for an hour in a bathtub of warm water to make it pliable. Each strand of splint has a harder, smoother side and a slightly rougher, fibrous side. The harder, smoother side should face up when you're weaving your seat. When you open the splint roll, you'll notice that some strands are much longer than others. The longest strips should be used first when wrapping the "warp" strips — those that pass over the front and back rungs. The "weavers" are the strips that pass from side to side.

Begin the seating process by creating a rectangle in the center of the seat area. To do this, measure in from each front post a distance that is half the difference between the length of the back seat rung and the front seat rung. In the case of this chair, half that difference is $2\frac{1}{2}$ " (Photo 2).

Start your first warp strand by taping one end to the inside of one of the side seat rungs as shown in Photo 3. Then wrap the warp strip under the front seat rung (keeping it inside the marks made in Photo 2), then over it and around the back seat rung and over it until there isn't enough length remaining to make another pass. At this time, you'll need to join the end of this strip to the beginning on the next.

All your weaving joints should be made on the bottom of the seat, as close to the back seat rung as possible — even if this means cutting off and discarding some of your first strip of splint. The joints are created by lapping the last six inches of the first strip over the first six inches of the second, fastening them together with three staples from a regular office stapler, as seen in Photo 4. (Don't worry. The staples hold things together only until the seat is woven. It's the tightness of the weave that holds the finished seat together.



Photo 2





Photo 4

Photo 5 shows you what the seat should look like when you've filled in the area between the back posts.

The very first weaver runs between the back posts on the top of the seat as shown in Photo 6, using an under three/over three pattern. Tuck in the ends of this first strip under the warp.

At this point, invert the chair so that it's upside down on your work table, as seen in Photo 7. (I lay down a towel to protect the arms). Then start a weaver across the back using the over three/ under three pattern.



Photo 5





Photo 7

Invert the chair again — it's back to right-side-up —so that you can work on the top of the seat. Using the end of the weaver you started on the bottom, insert that end into the top warp as shown in Photo 8 using the over three/under three pattern. Please notice that this weaver is entering the warp one strand beyond the entry point for the short weaver between the back posts. This staggered entry point must be maintained for each entering weaver. I warn you: The weaving process is not as easy as it looks. I've taught chairmaking to well over a hundred students at the Marc Adams School of Woodworking, and every single one of them struggled to get this pattern right. It looks simple, but it's so easy to get it backwards, or in some other way screwed up, that you will almost certainly find yourself unweaving and re-weaving some sections of your seat before you get it right.

When it's time to start a new weaver, simply flip your chair again and weave the first six inches of your new strip over the last six





Photo 9

inches of the last. (Photo 9) I always make these joints on the bottom of the seat because I think it produces a smoother surface, but some chairmakers make the joints on both the top and bottom to avoid wasting material.

The triangular areas on each side of the seat's central rectangle are called gussets. These need to be filled in with short strips as shown in Photo 10. Weave these warp strips into the weavers, tucking in the ends. Then invert the chair and repeat the process on the bottom. I usually do the first couple of gusset strips when I'm halfway done with the weavers, then the last couple of gusset strips when the weavers have gotten close to the front rung.

Tightness accumulates as the weavers approach the front rung, and I find that a butter knife (and maybe a pair of needle-nose pliers) make it easier to tug these last few strips through the warp (Photo 11).

After you've finished weaving, let the seat dry for a day. Then apply whatever finish you're using on the wood for the chair frame to the rattan splint. In my case, that was a Minwax[®] Wipe-on Poly.

Then, you're ready to have a seat.





Photo 11