

## Making Wooden Baskets



Making little wooden bushel baskets isn't especially difficult, but it is a bit fiddly and requires a good bit of time. Not counting the construction of the jigs and material prep, it takes me about an hour per basket. Power tools may not be absolutely essential, but for constructing the jigs and prepping the materials, they will make things ever so much easier – particularly a disk sander and thickness sander. Of course, the size of your basket depends on the scale of your boat. Real bushel baskets vary in size and shape because they are designed to hold a quantity – 1 bushel- rather than to be a particular size. These are about 20" diameter across the top, 14" diameter across the bottom, and 13" high (in real size, of course). These baskets were built for a 1:16 scale model. If you have good eyes and lots of manual dexterity, you might be able to make them for a 1:24 scale model. I'm not sure I'd try it. I definitely wouldn't want to make them for a 1:48 scale model! One other point to make right up front – these baskets look a bit rough, but that's by design. Real bushel baskets are cheaply made and look pretty beat up with use. So that's the look I was going for.

### The Jigs

There are two jigs you'll need to make before you begin. One is to make the circular bottoms of the baskets, and the other is for gluing the slats onto the bottom.



The basket jig is a simple cone shape. The bottom end (against the baseboard) is equal to the inside diameter of the basket. The top end is smaller than the inside diameter of the basket bottom, and the height is the same as the basket sides less the thickness of the basket bottom. As you can see, there's a 1/32" piece of brass rod in the center top of the cone. That's for the basket bottom to fit on. There are two brass rods in the bottom of the cone that hold the cone down onto a chunk of 2x4. The reason for two rods is so the cone doesn't spin around while you're gluing on the slats. The basket bottom will spin a little, but that's better than both of them spinning. I used 1/16" brass rod to hold the jig to the 2x4. You can ignore that small board glued on top of the 2x4 on the right of the jig. That was just a scrap of wood that was already there. Nothing to do with this project. You don't want to glue the jig to the base because you'll need to take the jig off later. Doubtless, you're asking, why not just put two rods in the top so the basket bottom doesn't spin as well? First, the glued up bottom and slats will be on and off that jig several times and two rods would make it harder to get them together. Second, you'd wind up with an extra hole in the bottom, which would be visible when you're done. In the picture above you can see two of the slats glued to the bottom piece. They are not glued to the bottom of the jig or to the 2x4 base. And the reason why the jig is narrower at the top than the basket bottom is because you don't want any excess glue to get on the jig, which might prevent you from getting the basket off.

The other jig you'll need is to help sand the basket bottoms round. It's just a scrap of wood with a piece of 1/32" brass rod glued near the end. One tip here – you want as little of the basket bottom protruding from the jig as you can. If you have too much sticking out, it will tend to get pulled down by the sanding disk and chatter because there's no support under it. You can see in the pic below that I had the rod in a hole further toward the edge at first, then moved it back.

Here's the jig:



And here it is on the sander:



All you have to do is rotate the disk around the rod and you'll get a nice round disk. It is hard to tell, but I have the table angled down to put a bevel on the edge. You can see that bevel in the pic of the conical jig above.

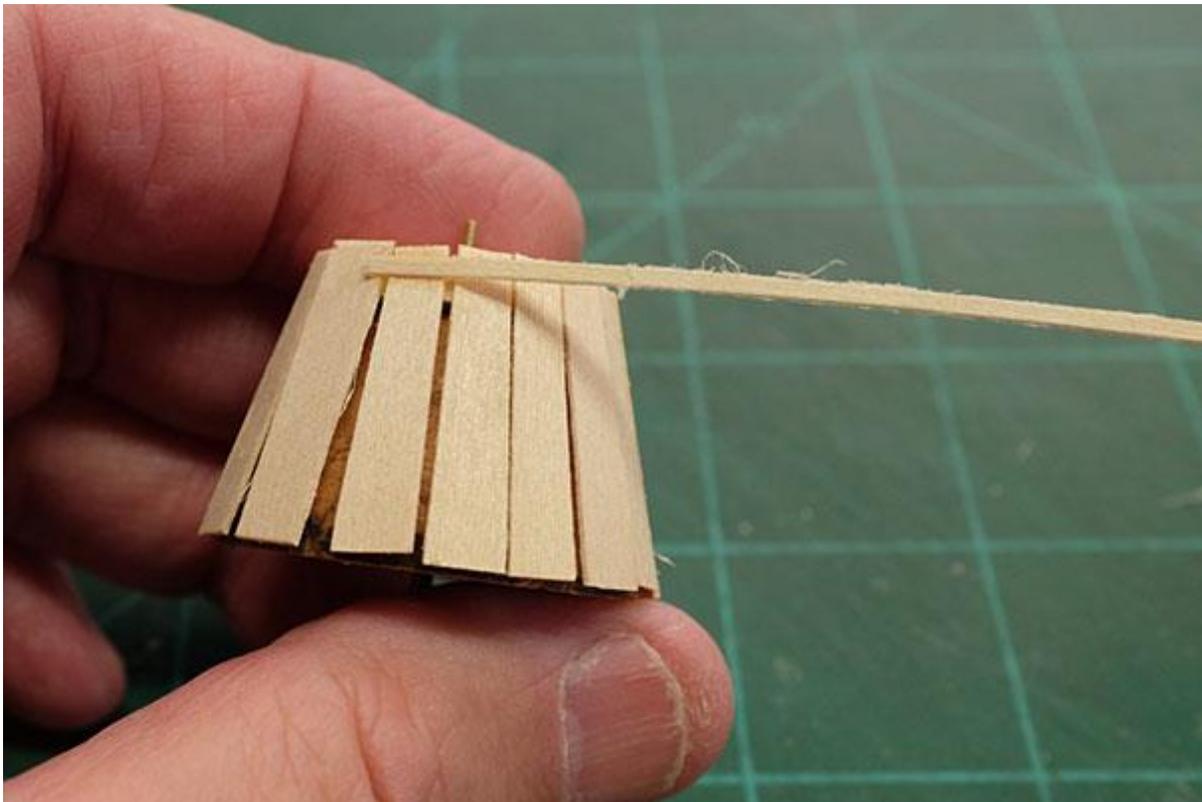
## Materials

With your jigs made, you can prep your materials. I used  $1/32$ " basswood for the slats, but I ran them through the thickness sander to get them down to around  $1/64$ ". Again, your measurements will vary depending on the scale. I made the basket bottoms out of  $3/32$ " thick basswood. The reinforcing bands were also basswood that I ran through the thickness sander so they weren't much thicker than paper. They were, of course, cut into narrow strips after thicknessing. I like basswood for baskets because it's easy to work with and looks good. You could use clear pine but you have to be careful of the size of the grain.

## Construction

OK – we’re ready to begin. The first step is to cut the slats to length. Then, they have to be tapered slightly. I use used an Exacto knife and straightedge for that. Then you can glue them on to the basket base. I glued on 4 first, on opposite sides and let them sit for a few minutes. Then I glued on the rest of the slats filling the spaces in between. The slats don’t all have to be precisely the same size or have the same amount of taper. You really don’t want these to look perfect! I wound up needing about 14 or 15 slats per basket. I found it easiest to put some yellow glue on the top of a slat (the part that glues onto the basket bottom) and grab it with a pair of tweezers to put it into place, holding the bottom of the slat against the cone. Once all the slats are on, let that assembly dry for a few minutes. Then, you can pull it off the cone, set it aside to dry fully, and start constructing the next basket.

Once you’ve make as many baskets as you need (or can stand to make in one day) and they’ve had an hour or so to dry, you will need to add the reinforcing bands. These reinforcing bands are made from the paper thin basswood. They won’t need to be soaked in water. They are thin enough to bend around the baskets easily if you’re careful. I start with the band around the basket bottom. That will help to strengthen that part of the basket. The first thing is to glue a piece of reinforcing band onto the basket with a dab of medium cyanoacrylate (CA) glue. You can glue all the bottom bands on all the baskets at once.

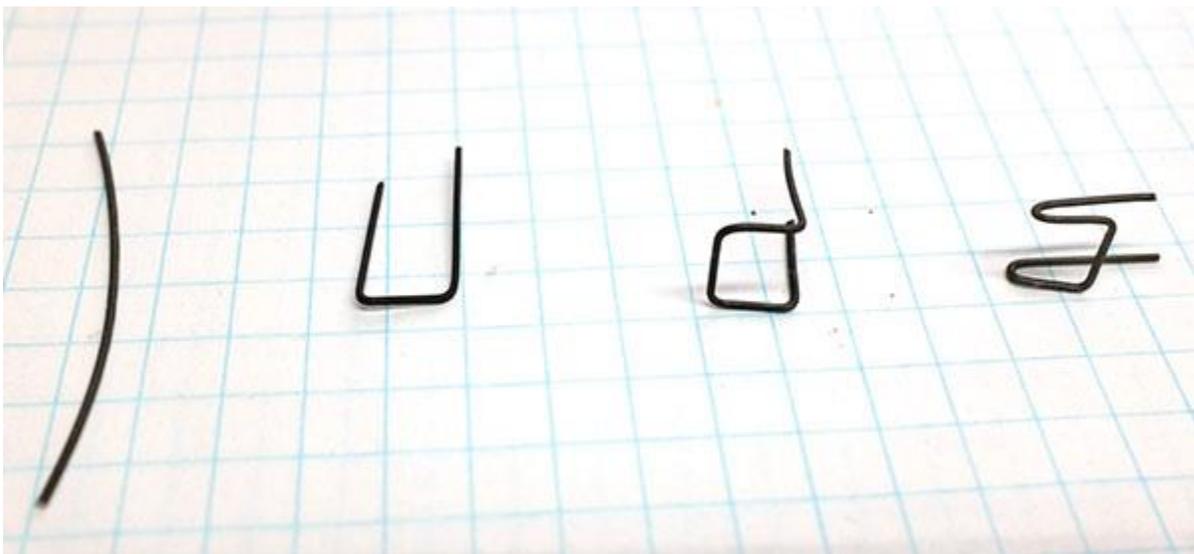


Now, you want to put the cone back inside the basket. This will give you something to push against as you wrap the bands around. Put some yellow glue on the band, then carefully wrap it tightly around the bottom. At the end of the band, put another dot of CA to hold it tightly. The end of the band should overlap the beginning of the band a bit.

As you can see in the picture below, I've added a reinforcing band inside the top. If the inside of the basket will be visible on your model, you'll need this. If the inside won't be visible, you can skip it if you want. This band is a bit tougher to get in place. I found it easier to start it with a dot of CA, then when the CA had set, move a bit farther along and hold that part in place with another dot of CA, working my way around until the whole band was in. Just be careful not to glue your fingers to the basket!

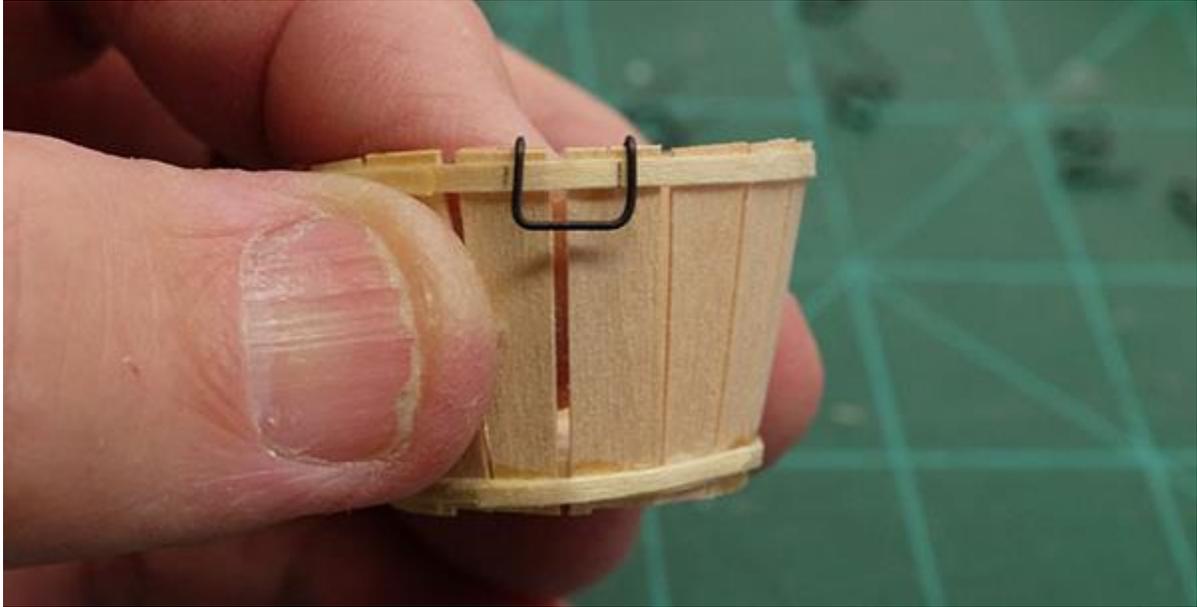


Now, we need the handles. I made my handles from 22 gauge annealed black wire. It's easy to bend and doesn't have to be chemically blackened. You could use a silver-colored wire as well. There are 3 steps to prepping the handles as shown in the pic below.

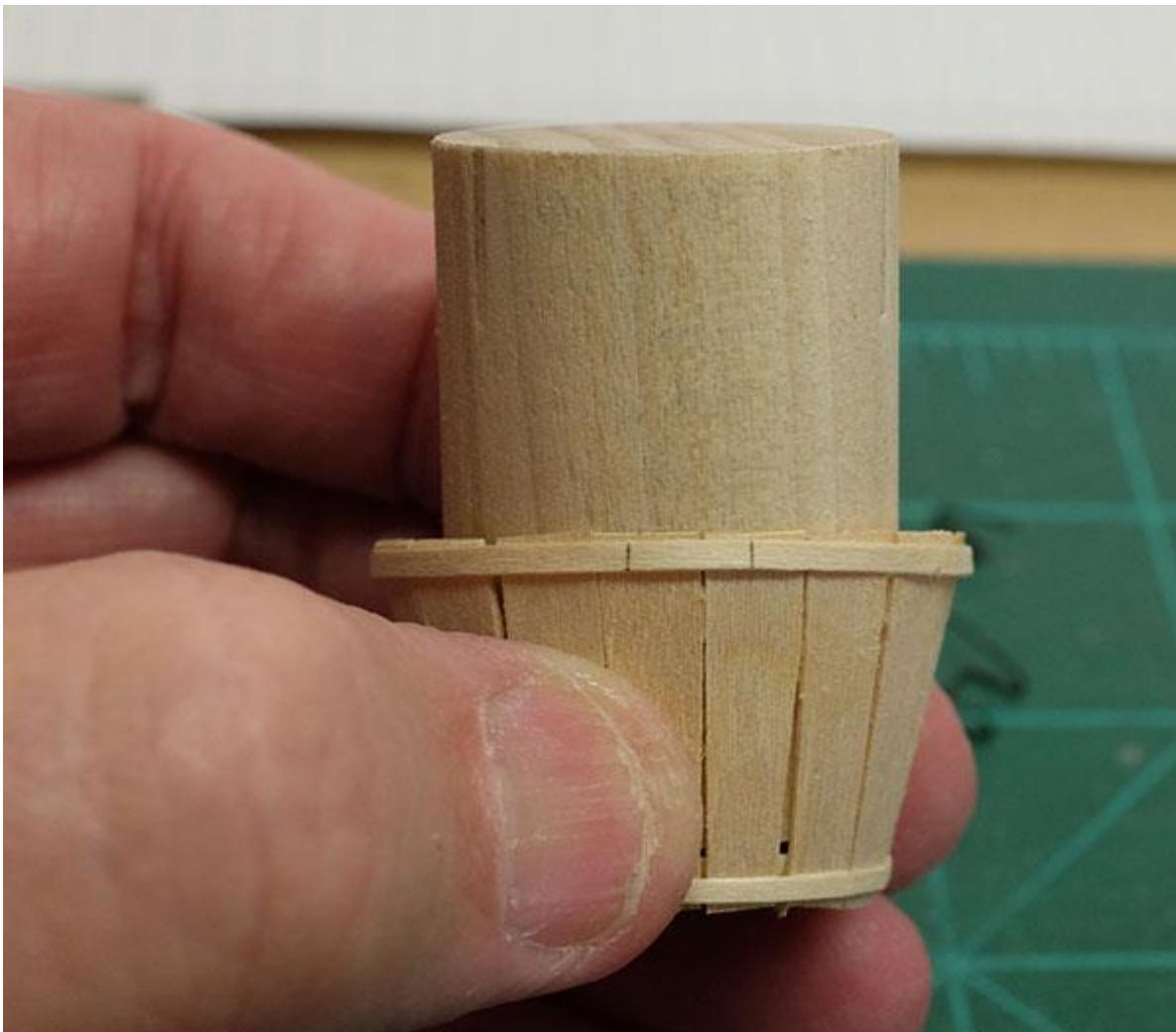


I just used square-nose pliers to make the bends.

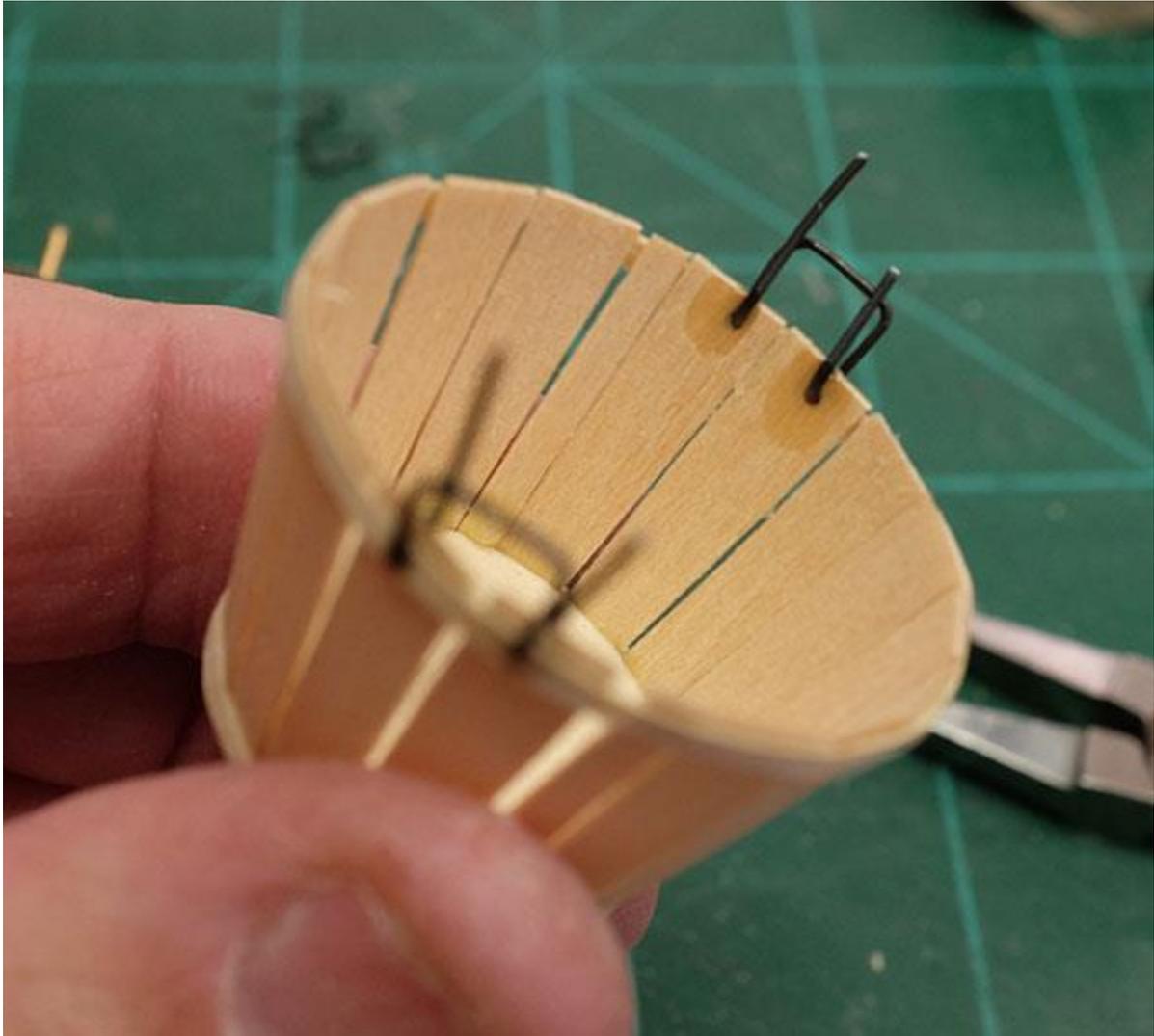
Now, you have to drill holes in the top reinforcing band for the handles. You can use a handle to determine where to drill the holes.



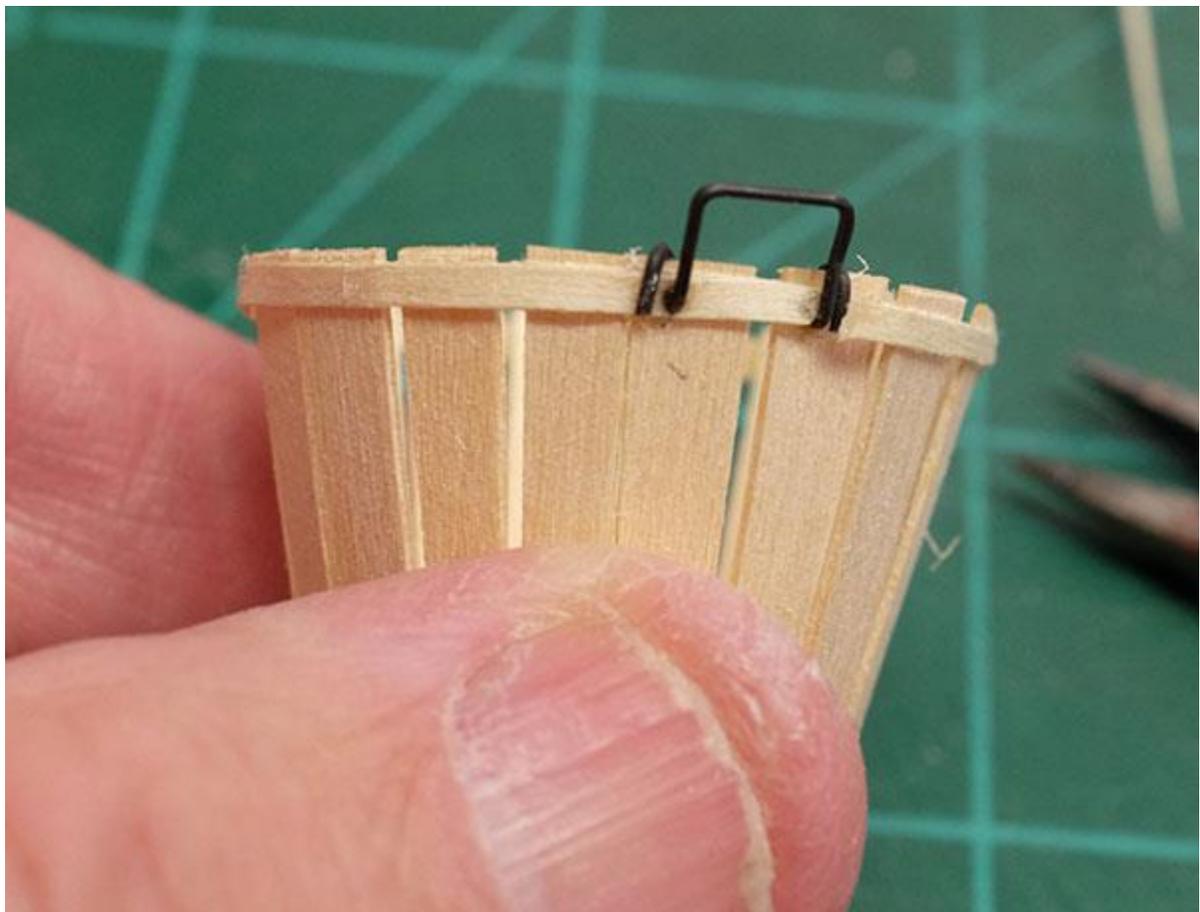
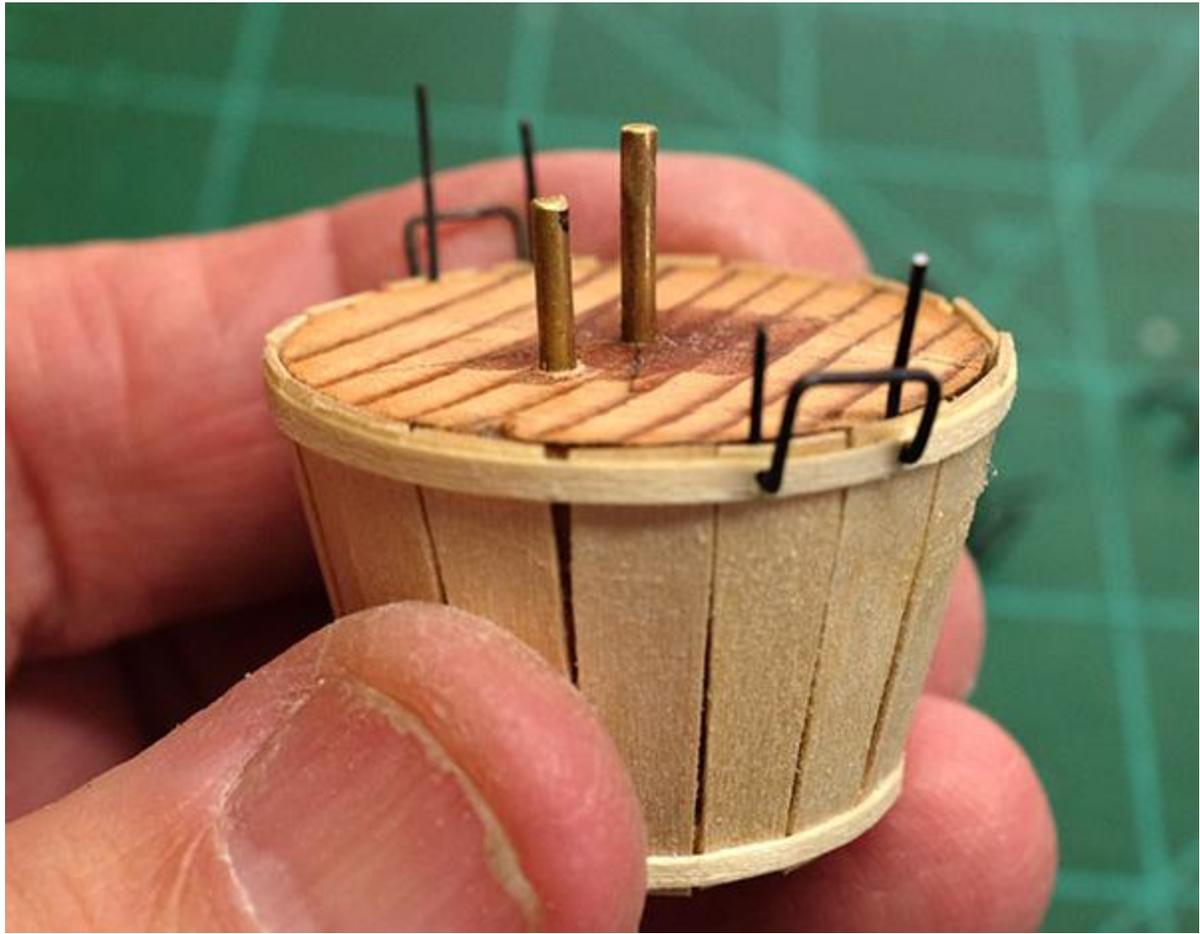
You'll want a piece of dowel to back up the bands as you drill:



Now, insert the handles as shown below and put a dot of CA on each one on the inside of the basket. This is important to strengthen the wood there – especially if there’s no interior reinforcing band as in this one.

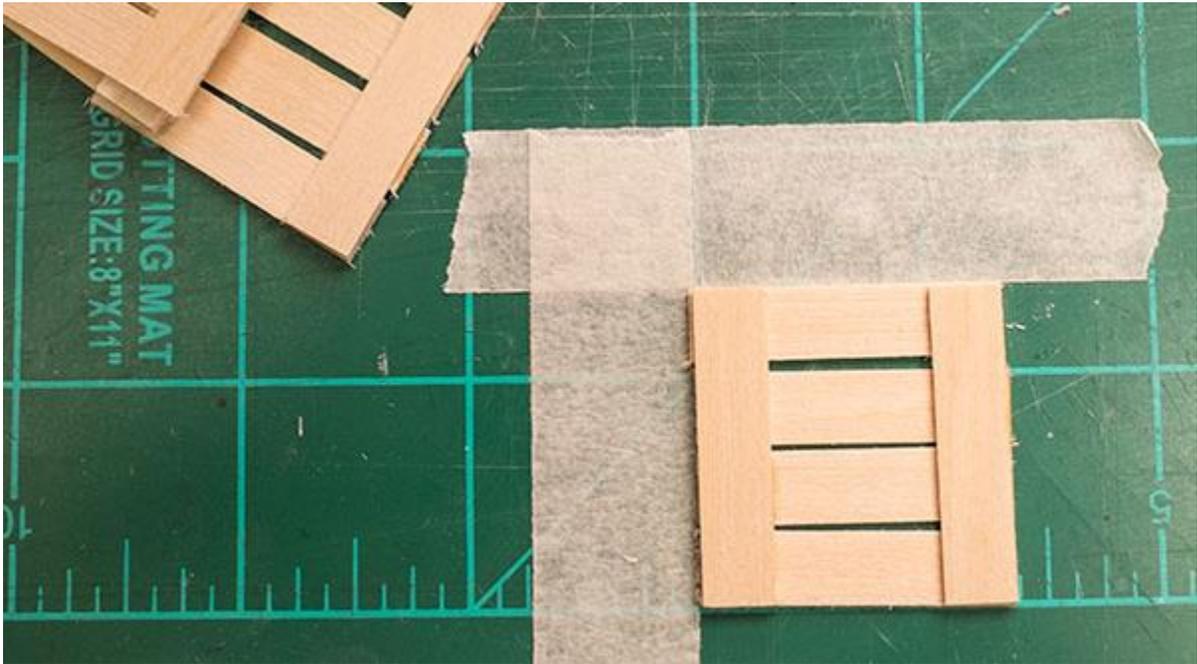


Once the CA has set up, you will want to re-insert the cone. This will give you something to push against as you bend the wires down . Grab the wires with needle nose pliers and pull them tight down around the outside of the handles. This is exactly the way handles on real baskets look. Once they’re tight, snip off the bottoms of the wire just under the reinforcing band. Et voila – you’re done!



## Lids

If you're going to put crabs in these baskets, you're going to need some lids, otherwise they'll be crawling all over the boat! Start by cutting 6 pieces of wood, same width and length. The key is to make them a dimension that will fit the top of your basket. Lay them up as shown below. Glue these with CA.



Next, cut a circle out of card stock the same diameter as the top of your basket and mark each square. You can rough out the circle on the band saw if you have one or just cut them with a hand saw. Then, bring them down to the circle on the disk sander.



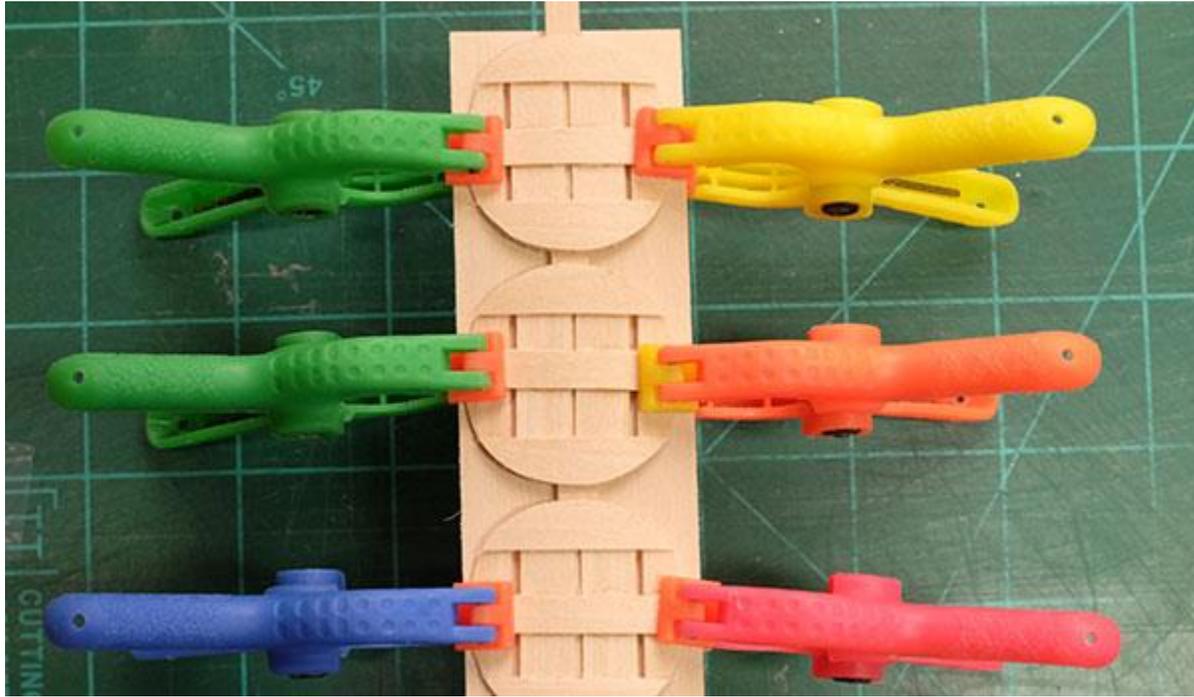
Next, you'll need to glue on a narrower, longer strip. This strip is meant to fit through the basket handles, so make it about the width of the handle openings.



Now, you'll have to thin these down with the thickness sander. I made a simple push stick to help get them through. You'll want these pretty thin. Sand from both sides and take a couple passes per side so you can sneak up on the final thickness. Don't take all the material off from just one side.



Now, you need a little shaping jig. It's nothing more than a piece wood with a narrower piece in the center. Clamp the lids down over the piece in the center so they get a nice curve to them. I wet the three cross pieces, then hit them with a hair dryer for a couple minutes. When they cool down, they'll hold that curve.



Here are some baskets and lids I made for my round-stern workboat.

