

# GADGETS AND KINKS



*A Department in which  
Readers of Power Boating  
Swap Useful Ideas*

front and/or back ends. Also, there is a ridge which nestles under the stainless steel trim screwed to it. Certainly, it is best to understand in what order saw cuts are made to make the job go as smoothly as possible.

## MAKING NEW QUARTER RAILS

### HOW HARD CAN IT BE?

by Sherwood Heggen

Have you thought about the quarter rails on your boat lately. No? Well, it certainly doesn't need to be a priority, but if you are refinishing or restoring your boat, they should have your attention.

So what is a quarter rail, also referred to as a spray rail? Typically, it is the strip of wood mounted on the aft end of the topsides near the water line. A strip of stainless steel, or rub rail, is fastened to the face of the quarter rail to protect it and the side of the boat from dock piling damage. The problem with quarter rails is that they have a tendency to rot because they are exposed to a lot of water at the waterline. Water gets behind them and does the rot thing; not in every case, but it happens.

How can you tell if the quarter rail is rotting? Check for yellowed varnish where the rail meets the hull side which could indicate water has migrated behind the quarter rail soaking the wood and releasing the varnish. That is a breeding ground for rot. Or, poke at the surface of the wood with a sharp object at the junction between the hull and the quarter rail to see if the wood is soft. Even if things look good on the outside, it doesn't mean the quarter rail doesn't have problems on the backside. The only way to be certain the quarter rail is solid is to remove it from the hull to inspect the back side where rot might be evident.

So, let's say you found out your quarter rails are shot. It will be necessary to make new ones and that is what this article is about.

There is quite a variety of quarter rails, so what is to follow hopefully will give you insight about what to expect in making new. Understand that making new rails is considerably more than running some lumber through a saw.

The process seems relatively simple, but it is important to accurately copy the dimensions to the new rail. Tools that are helpful in this task are a bevel gauge to copy the taper angle on the sides of the rail and a tape measure and a caliper to measure overall dimensions. Skill and experience with a table saw and band saw are important for bringing the rail to its final shape.

The quarter rails made for the example in this article are from a nineteen foot barrelback. Looking at them, they appear to be a six-foot length of wood that has tapered sides. But, when viewed from the side, they have a curve at the

First, cut a blank of lumber that matches the overall dimension of the original quarter rail. Then, cut

the ridge under the stainless steel trim. This is done by cutting a rabbet on each side of the stock to leave a ridge in the center with a dimension same as the original. Using the original quarter rail as a pattern, draw the curve on the side of the new stock as seen in the picture below, then cut it to shape on a band saw. Finally, cut the tapered sides with a table saw.



Now look at the backside of the original quarter rail and you will see it is slightly hollowed out leaving an eighth-inch wide edge on either side. This is so the quarter rail fits snugly to the slightly curved hull. Unless you have a shaper and a bit specific to the size for the hollowed area, an alternate tool must be used, and that would be a table saw. To do this, the stock must be run through the table saw at an angle as shown in the picture below.



The table saw must be set up accurately to get the correct depth and width of the hollow. To assist in getting things right, cut a length of scrap lumber to the same width



as the quarter rail as a test piece. Raise the blade to cut the correct depth of the hollow. Remove the fence from the saw and replace it with a straight length of scrap lumber clamped at both ends to the saw at an angle as a temporary fence. The position of the fence will center the cut on the stock and its angle will determine the width of the saw cut. The greater the angle to the blade, the wider the cut. Adjust the angle and position of the temporary fence until the cut on the scrap stock matches that of the original quarter rail. When the cut is correct, it is time to run the actual stock through the saw. But wait! The cut does not start and stop at the end of the stock. It starts and stops about six inches from the end. So, mark on the stock where those points are and also on the fence where the starting and stopping points should be. Make the cuts and hold the new quarter rail to admire your skills. Take some sandpaper after it to eliminate saw marks, drill the holes for the screws which will hold it to the hull side. Apply the stain and varnish and screw 'em to the hull. Done.

Luckily, this is a simple quarter rail to make and explain. Some have extreme tapers and odd shapes so a little thinking and imagination must be exercised to come up with the correct order of the saw cuts.

If you have any questions on this or any other restoration subject, don't be afraid to contact me at either [Heggensj@Centurytel.net](mailto:Heggensj@Centurytel.net) or 715-294-2415. I would rather you have information on how to do your restoration correctly than guess. I have to believe that there is a half finished restoration out there because the amateur restorer is just over his head. Contact me. We can work through it. Your boat deserves to be whole again.



## RESTORING BOAT RESTORES MEMORIES

After stripping away 50 years of paint and applying 13 coats of finish, Ed Sheldon's prodigal boat is finally seaworthy. Sheldon's reunion story began three years ago when he happened upon a

familiar-looking boat for sale only five miles from his house.

"I told the woman (selling the boat) that this boat looks a lot like the boat that my brother Dave used to have," Sheldon said. After sending pictures of the boat to his younger brother, Lee, he soon realized why. He said, "That's not like Dave's boat, that is Dave's boat!" Though Sheldon has had the boat at his house in Cold Spring for almost three years, it made its first public appearance this year in all its refurbished glory at the 19<sup>th</sup> Annual Antique and Classic Boat Show in Cross Lake.

But before Sheldon could dream of displaying the 16 foot, cedar-sided boat, he put in an estimated 2,000 hours of work — including stripping the boat down to its bare wood before repainting it in its original color. "There must have been 30 coats of paint, a lot of them painted on by my father," Sheldon said. "It was like stripping away all this history." Sheldon estimates that his family painted the boat once or twice a year while they owned it to keep it watertight. Because of the frequent painting, the boat was never given a true name. "We just called it Dave's boat or the Noeske boat," said Sheldon, referring to the Osage company that built it in 1955.

Noeske manufactured about 80 boats a year from 1932 until the early '60s, when it went out of business. Melvin Noeske, the 83-year-old son of the original manufacturer, thinks Sheldon's boat is the last Noeske in existence — though Sheldon said Noeske was skeptical about the boat's reliability. He called me and said, "You're not going to put that boat back in the water." Sheldon laughed. "We've done water tests. It's water-worthy." He proved that on August 5<sup>th</sup> when he and his family had a relaunching party on Fish Hook Lake near Park Rapids — the same lake where Sheldon and his family enjoyed the boat decades before.

"The boat is back in the family where it originally started," Sheldon said. "It brings back a lot of good memories." He, his brothers, and his children learned to water ski behind the boat. Sheldon's discovery of the long-lost treasure has become much more than just a restoration project. "It's been a great thing for my younger brother (Lee) and me," Sheldon said, adding that the brothers have spent a lot more time together since the restoration process began three years ago. "It had to be fate," Sheldon said. "It showed up so close to my house, like it wanted it to go back to its original owner."

