

## Tip #16 Fences and Shutters

Just as a picture frame enhances a picture, fences and shutters can show off your home to its best advantage. Shutters frame your windows and make them stand out, while a fence will frame your whole house.

In addition to adding to the beauty of your house, they can also add privacy and security. Working shutters protect a home or shop against weather, vandals, and intruders when you're away. Fences help keep small children and pets from wandering off, or screen your yard from the street and traffic.

Both fences and shutters are ideal projects for early spring—they can be partially built indoors while the weather is still wintry, then hung on the house or planted in the ground when it turns warmer. But they each require their own special considerations.

### Making a Wooden Fence

"Good fences make good neighbors," Robert Frost's neighbor told him in *Mending Wall*. This may well be true -- an attractive fence not only adds to the value of your own property, but your neighbors' as well.

**Planning** - Your neighbor is the first place to start when designing a fence. After all, he has to stare at the other side of it. Would you be blocking a view or right-of-way? Where is the property line? Are there any underground utility lines to avoid? Also, check the building codes governing fences in your locality.

**Wood Selection and Treatment** - Locust is the traditional favorite for fenceposts. An untreated locust post will last half a century in the ground, but its availability is limited. Redwood and cedar are more available; they both resist decay; and they weather nicely with no need for painting. There are also several brands of pressure-treated wood made especially for outdoor projects that are usually available at your lumber store. And properly treated, pine fenceposts can last for many years.

To treat your own posts, select a good preservative. Tar is not recommended - it seals the wood, preventing the posts from breathing the ground moisture and actually speeds decay. Pentachlorophenol or "penta" is the most widely used wood preservative, but it's harmful to garden plants and may be a health hazard. The safest, most effective preservative we have found is copper naphthenate.

Mix up your preservative in a large trash can, filling it just a few inches deeper than the posts will be sunk into the ground. Cut the post stock 6" to 12" oversize and stack them in the can to soak for a day or two. It's not necessary to treat the part of the post that will sit above the ground or the other parts of the fence, but we do suggest you soak all untreated fenceposts, even redwood and cedar.

**Setting the Posts** - There are many ways to set a post, but the simplest and least expensive method is often the best. Dig down 18" to 24", set a large, flat rock at the bottom of the hole, and set the post on the rock. Check to see that the post is straight by putting a level against two sides 90° apart. Then make sure it stays straight with arm braces nailed to stakes a few feet away. Put a little gravel around the bottom of the post to insure good drainage, fill the hole with dirt and tamp down. When the post is



properly set, straightened, and braced, cut if off to the desired height.

When the fence is complete, the tamped dirt should hold the posts steady and the rocks will keep them from sinking. If you set the posts in cement, don't cover the bottom. This will trap moisture and speed decay.

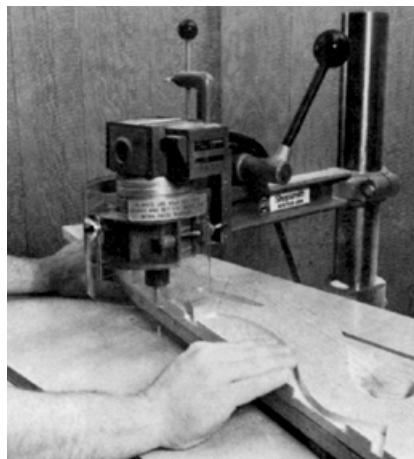
**Attaching Crossmembers** -Your posts should be spaced 6' to 10' apart - any further and the crossmembers will sag. Nail your crossmembers to the posts as you set them to insure precise spacing.

There are several ways of attaching the crossmembers, depending on your design. If your fence consists only of posts and crossmembers, these can be nailed to the side of the posts or set in mortised slots. If you are going to attach siding to the crossmembers, nail the top crossmembers to the top of the posts and the bottom crossmembers to nailing blocks set a foot or so above the ground. Lap the top crossmembers for added strength.

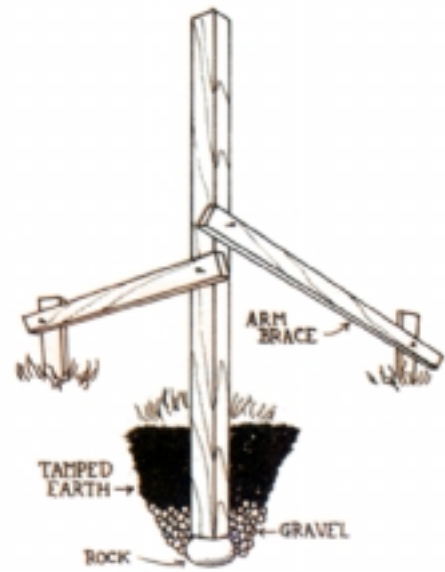
**Making the Siding** - Cut all your siding boards to size and true the edges on a jointer. Both rough-cut and finished lumber will have slight bends that will make it hard to align the pieces if they are not joined.

Cutting decorative designs in the siding is a tedious job at best, especially if you have a large yard to fence. But there are several ways to make this chore go faster.

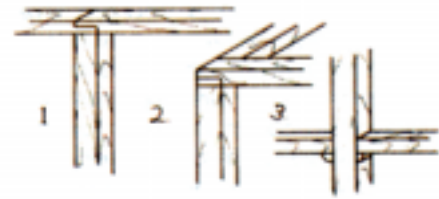
To cut simple pickets, stack the boards 4 deep and mitre them at the desired angle. Turn the stack over and repeat the mitre cut. If your design is slightly more intricate, stack the boards 6 deep and cut them on a bandsaw. For very intricate or 'carpenter gothic' designs, cut out a masonite pattern on a jigsaw and reproduce that pattern in your siding boards on a router arm.



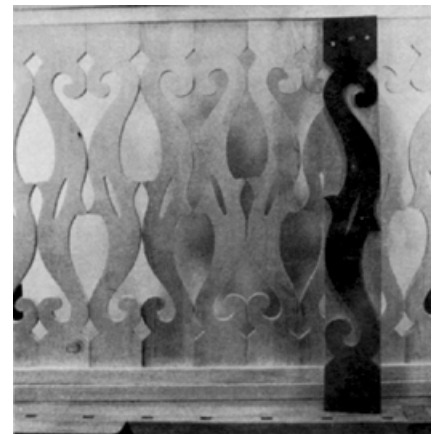
Cutting a "carpenter gothic" fence board on a router arm.



**Setting the Posts.** A fencepost, properly set and braced, ready to be cut off to its proper height.



**Attaching Crossmembers.** From left to right; (1) Lap joint to join top crossmember, (2) Turning a corner, (3) Bottom crossmember supported by nailing blocks.



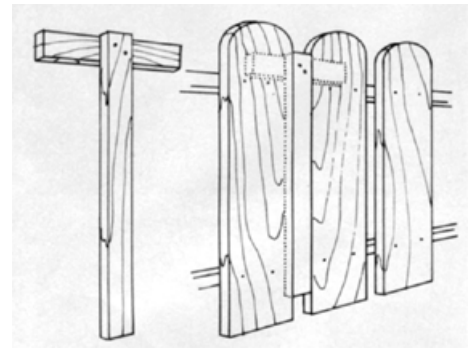
A section of a "carpenter gothic" fence and the router arm template used to make it.

When nailing the siding to the crossmembers, a simplejig (built as shown) will help you get the spacing even. If you are building a privacy fence or windscreen and don't want any spaces between the boards, use your jointer to put a rabbet in the edges and lap the boards as you put them up. When attached to the fence, the siding should clear the ground by at least 2".

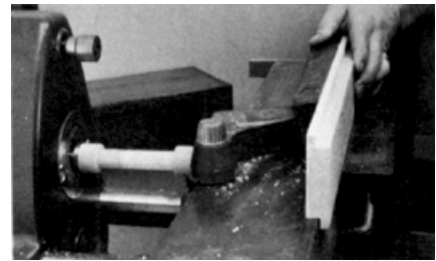
**Gates & Stiles** - Build your gate frames 1" narrower than the width of the gate opening. Use lapjoints and a diagonal brace to keep the gate from sagging. When attaching the siding to the gate frame, you may have to vary the distance between pickets or the widths of the boards from the rest of the fence to get an even spacing.

In choosing gate hardware, look for weather-resistant coatings - cadmium, zinc, or galvanized. And buy something a bit sturdier than you need. Things, strap hinges, and lag-and-strap hinges all provide plenty of strength. As for latches, there is a lot of hardware available, but perhaps the most attractive are those you can make yourself from wood.

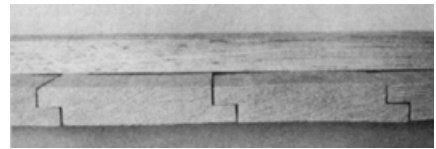
In some fences (especially garden fences) you may not want a gate. If that's the case, build a fence stile - a double stepladder just high enough to clear the fence.



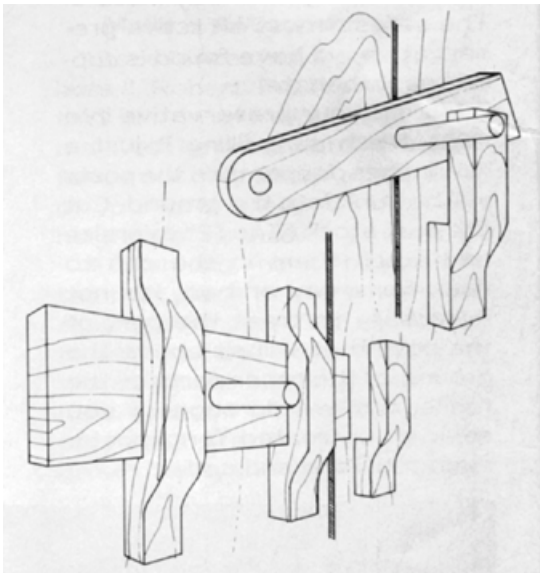
**Simple nailing jig.** horizontal board rests on top crossmember, vertical board spaces fence boards.



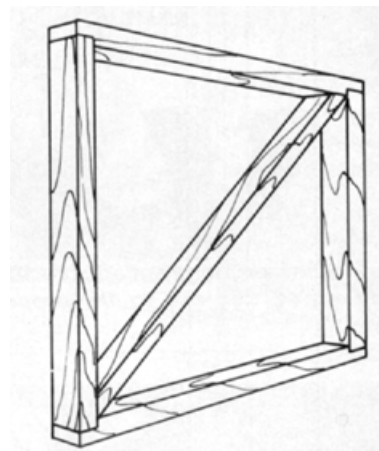
Using the jointer to make a rabbet cut.



Lapped fence boards.



**Two simple gate latches** you can make yourself from dowels and scrap wood -- one pivots on a lag bolt, the other slides into place like a drawbolt.



**Typical gate frame** - made with lapped joints and diagonal brace for sturdiness.