

## **TO BUILD A CHAIN MESH FENCE. *By Peter A.***

I have been mucking around trying to build a satisfactory industrial type chain mesh fence for some time, with very variable results. I have taken this exercise to the stage where I am reasonably confident about sharing my ideas with you, hence this article.

The following is based on what I do/have done. It is not necessarily the best way, or indeed the only way – but it may be a place for you to start.

### **LOCATION, LOCATION**

A few factors to consider:

1. Decide exactly where the fence will go.
2. Do you have enough clearance between the fence and any existing or planned track work?
3. Where are the gates going to be?
4. Does it make sense to put a fence there?
5. How much material will you need?

### **MATERIALS**

I use fiberglass fly wire for the chain mesh – cheap and easy to come by.

In the past I have used large glider clips cut to size and shape for the posts. Peter McEvoy has used these to good effect on Crestwood around the container yard. Recently I visited the Art and Craft Riot art shop in the Woden Shopping Mall (next to JB Hi Fi) as reviewed by Ron Geeves in a recent Bulletin. Ron's review was spot on – good, friendly service (not entirely due to my good looks!) and a good range of useful items for model railroaders. Among these are packs of "Panacea" brand 18-gauge stem wire (i.e. used in flower arrangements) wire cut to 300 mm for around \$3.00. Very handy for down pipes, general piping, etc, and ideal for fence posts.

As discussed later, I use "Bostik Multi-Bond" glue to fix the wire to the fence posts – available from the Reject Shop at \$3.50 per tube; cheap and effective. Doubtless, there are other similar types (i.e. Selleys) on the market, but this stuff works and is inexpensive.

### **PREPARATION - Chain Mesh**

I suggest that you cut the fiberglass fly wire at a 45-degree angle (i.e. so the strands run 45 degrees to the ground or horizontal). It looks more realistic, but takes up much more fly wire. As you can see from photo 1, however, you can usually get away with vertical strands, particularly if the fence is a little distance from the observer.

Cut it to about 1 cm longer than the fence, but remember that if you apply pressure, it does stretch, particularly when cut on the angle.

### PREPARATION - Fence Posts

The bend in the top of the fence post can be tricky. I use a pair of Kadee pliers (Figure 1) to gently bend the wire at both ends (that way you do two posts at once). Using the pliers gives you a reasonably standard bend of the same length and angle.

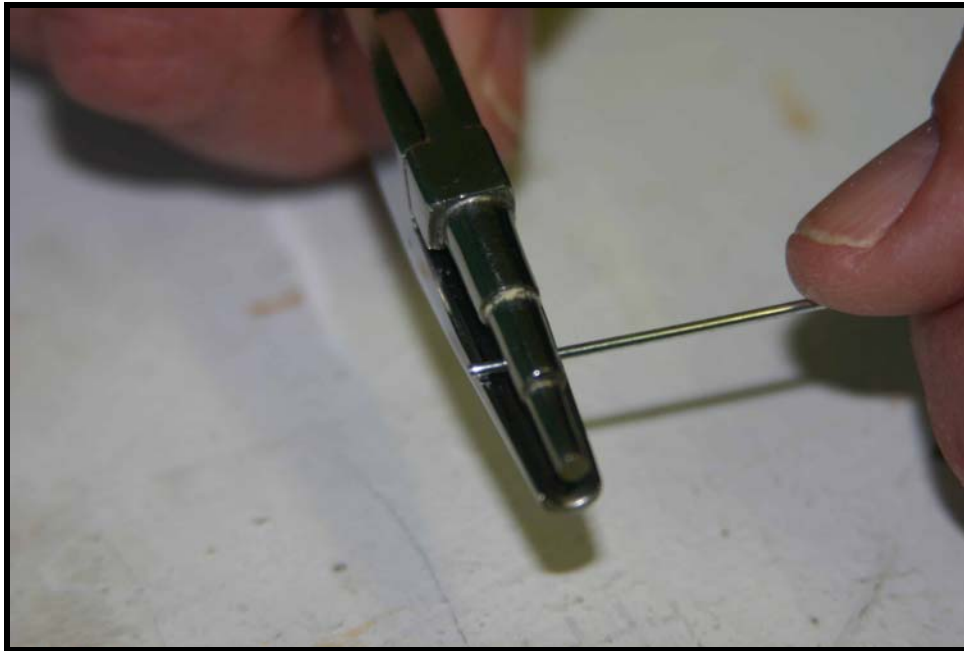


Figure 1. Bending the wire with Kadee pliers.

Cut the wire, using wire cutters, old tin snips or pliers. The wire is quite tough and can make a mess of blades not suitable for the purpose. You can also buy small bolt cutters that are excellent for the job. I use a primitive jig (Figure 2) to get the length about the same for each post. They do not have to be identical as you can adjust the height when you put them in the ground.



Figure 2. Cutting jig for fence posts.

Corner posts need to be supported to enable the fencing wire (i.e. the fly wire) to be stretched out so it is tight and stands up. Soldering the supports to the corner posts is the only tricky part of the operation, but if I can do it, so can anyone else. Again, I use a primitive jig to help me with this simple task.

a. Bend a shorter piece of wire into an S shape, but with both ends (i.e. the end to be soldered to the post and the end to be placed in the ground parallel. In the crappy illustration below (Figure 3), the ends have been grossly exaggerated to make the point. The middle section is of course at an angle suitable to the size, etc of the support post

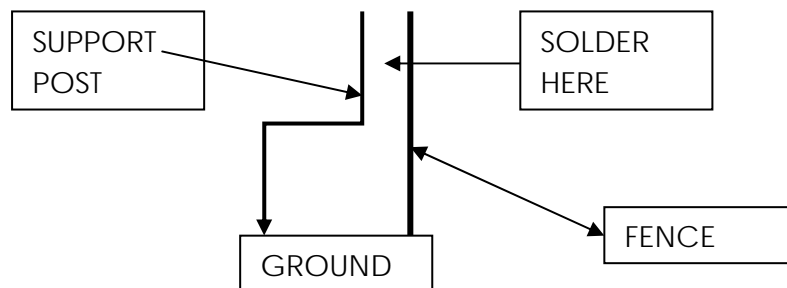


Figure 3. Corner post diagram to support the fence. □

b. Use the jig to steady the fence post as you solder the support to it (Figure 4). Don't worry about a neat job – no one will see it – just make sure it is as strong as you can make it.

c. Maybe super glue is an alternative, but I have to confess that I have not tried it. It is generally accepted that solder provides a strong join that can also be "undone" if required.

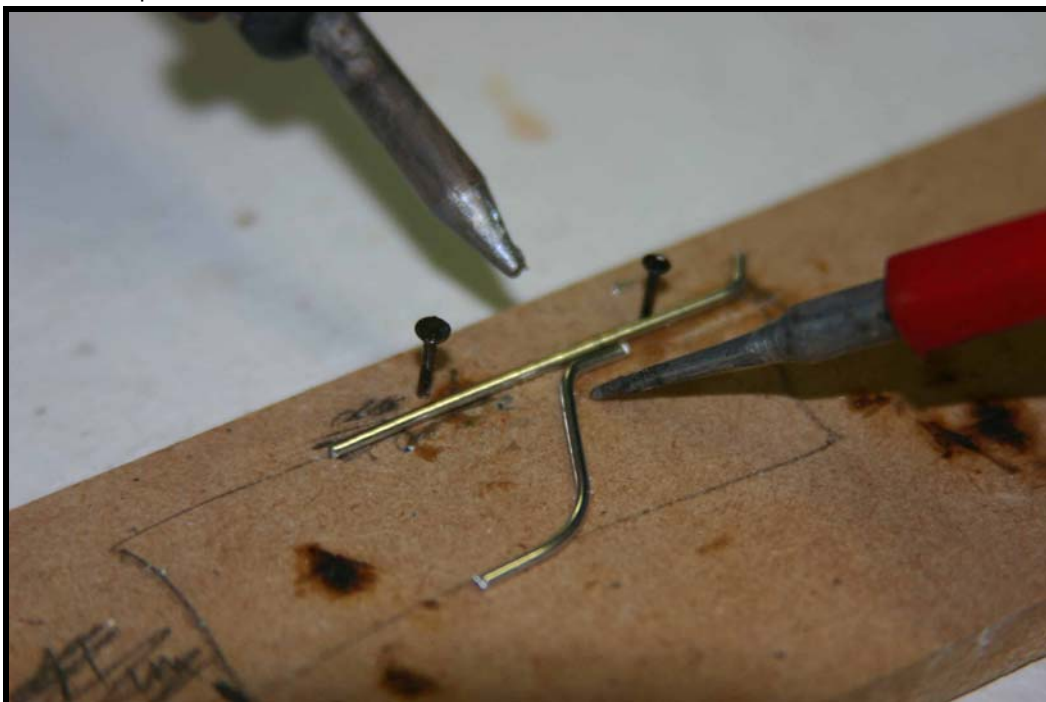


Figure 4. Soldering the corner posts.

## PLACING THE POSTS IN THE GROUND

Mark the route of the fence with a pencil line or similar

Mark the position of the posts along the line at whatever intervals seems OK to you. As a general indication, I use 10 HO scale feet or 3-metre intervals.

Drill holes at the marked positions along the line. The drill bit should be slightly larger than the diameter of the wire, to allow for glue.

Place the corner posts first. Dip the bottom of the posts in glue such as the Bostik and place the post in the hole making sure that the posts are as vertical as possible. Use a simple jig, i.e. a piece of wood or plastic notched at the right height, to get the height of the posts uniform and at the height, you want them.

Repeat for all posts – check alignment and heights leave them overnight so the glue can dry properly.

The fly wire should be folded over by about 5mm at one end of the fence, glued to itself and the fence post with Bostik or similar and clamped (Figure 5). Continue down the fence, dripping a bead of glue down each post before you lay the wire on it and finish at the end of the fence in the same manner that you started, making sure that the fly wire is stretched so that it is upright and fits the fence. I use one clamp (or clothes peg) per post - that is usually sufficient, if the fly wire is stretched enough, to ensure a good joint.



Figure 5. Holding the mesh in place with clamps.

### The finished product!

Leave the glue to dry overnight and you are finished. DO use care when removing the clamps, as sometimes they stick a bit.

Think about the location of the fence – is it well kept or does it have grass and debris along the base? This is easy to simulate if it does.



Figure 6. The finished fence! Don't forget the weeds, grass or other features as per your favorite prototype.

Now to make the barbed wire for the top of the fence... ☺