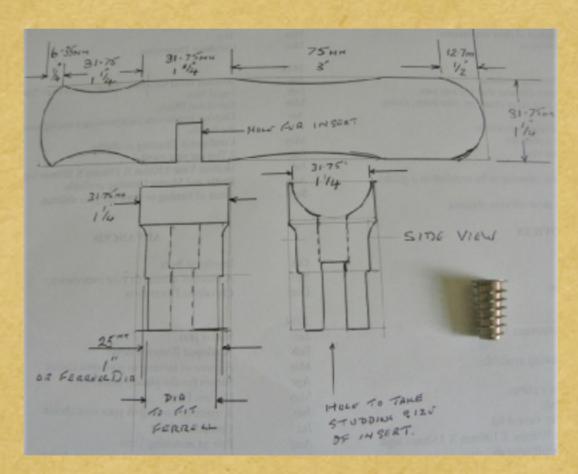
Links

Four Part Walking Stick

By Don Smith

Recently whilst walking around our estate Aline and I found that with the state of the pavements that a walking stick just helped us steady ourselves over the bumps and dips. So I came up with an idea to make a four part walking stick which would come apart so that it could be packed away in a suitcase for when we went on holiday so what follows is how I came to make it.



The first obstacle was how to make the handle sustainable and strong enough to take peoples weight.

The drawing shows how I came to make the handle.

The drawing shows the finished dimensions for the handle.

I won't go into how or what tools I used but what size pieces of wood that was used to

produce the finished article.

The handle itself was made from a piece of square section $38mm \times 38mm \times 175mm (1.5 \times 1.5 \times 8")$ and was turned between centres to the shape and dimensions as seen in the drawing. The insert that I used (seen in bottom right hand corner) required a 3/8" hole (which had a 6mm thread through the middle) which was then fitted to the finished handle.

The next item to be turned was the fixing between the handle and the stick. The wood used was $1.5 \times 1.5 \times 3.5$ " long. On one of the 3.5 long faces I found the centre of the width and 1" in from the top edge a 1.25" hole was drill right though. Placing it on the lathe between centres a spigot was turned on the end opposite the hole and was replaced on to the lathe using a chuck making certain that it ran centrally. At this point I used a saw to remove the top $\frac{1}{4}$ of the wood around the hole.

Before I started turning it was slightly sanded before bring the tailstock into play before turning the piece to the desired design. At this point a hole was drilled down the centre to accommodate the 6mm studding which I was using. All the time I was turning it down to the 1 $\frac{1}{4}$ diameter I was checking the fit against the handle. Satisfied on the fit I finished off by turning the opposite end to the handle to take my first Ferrell. Once I was satisfied that everything fitted well it was put to one side whilst I turned the first piece of the walking stick. Using 1 $\frac{1}{4}$ x 1 $\frac{1}{4}$ x 7.5" long a 3/8 hole was drilled in the centre of each end to approx $\frac{1}{2}$ deep to take an insert.

To enable you to fix the insert I placed a 6mm bolt in my chuck screwed an insert on to the bolt positioned the wood to it and bringing up the tail stock and applying light pressure proceeded to screw the insert in to the wood by hand.





Photos show the insert on the bolt with the wood in place to start to screw the two together.

Remove the item and reverse it follow the same procedure as the first insert. Leaving it on the lathe you are now ready to turn it down to the round by turning the two ends to fit your Ferrell's. Once this has been done take two odd pieces of Ferrell and place on each end to help with turning he stem down to the correct size of the Ferrell diameter. Sand and polish.

All the other three pieces can be made in exactly the same way except the last piece which will only require one insert. Once you are satisfied with the finish on all six pieces you will need to cut you're (in my case 6mm) studding. For the handle to be fixed a length of 3" will be required.

Using super glue in the insert in the handle screw your studding in when dry add glue to the fixing stem and bring it up onto the handle using a 6mm nut tighten it up until it fits perfect and allow the glue to dry.

Add super glue to the insert on the first part of the stick and around the Ferrell screw the first piece on tight. You will now require three more pieces of studding which you will need to decide on the length by screwing it into the insert, place the Ferrell over the end and cut the studding level with the top of the Ferrell



Once you have established this you can put it back on the lathe and reduce the stick to the required height before turning the diameter down to take the Rubber Foot. Photo below is the finished article.

Notes: - I drilled the holes in the tops on my Pillar Drill to make sure that they were square to the wood. I also countersunk them with a drill slightly bigger than the head to make certain that they laid flat.

By using the bolt method of attaching to the lathe and bring the tailstock into play iy will give you a better chance of it being parallel to the next piece and so on.

I do have a few inserts available if any member wants to try making this type of walking stick.

Ferrell sizes are 22mm diameter by 25mm long. The two odd pieces were 22 mm diameter by 15mm long for use in turning the correct diameter of your stick, This is so the one's to be used on assembling the stick will not been damaged through turning or sanding.



Making certain the stick screws together properly before gluing once satisfied glue both the studding and the Ferrell on the top of each remaining piece.

The other thing to mention is, do not finish the bottom piece until you have it assembled and determine the height



Project designed, written and photographed by Don Smith.