since these sizes bend very easily. They are needed often and there's nothing quite so frustrating as having to stop work while waiting for the hardware store to open.

You will also need a set of forstner bits. These bits require a drill press to use and develop a fair bit of torque on the workpiece (which means that you have to do a good job of holding down the piece being drilled), but the holes are wonderfully clean! The sizes that you will need are 1/4", 3/8", 1/2" and 5/8".

Finally, you may wish to invest in a 3/8 inch "plug cutter". This handy gadget can be used to create a round tenon to fit into a drilled hole. Don't get the type that only cuts a shallow plug; they would not do the job. If it costs more than half as much as a cheap drill press, then you've found the right one. (You can get by without the plug cutter, cutting the tenons by hand and shaving them to fit, but the plug cutter makes things go so much more quickly.)

Scroll saw:

You can cut clock teeth with a small handsaw or with a needle file, but the quickest way to get nice, accurate cuts is with a scroll saw or a small bandsaw. If you are getting an inexpensive one, ask to see it in operation before buying it. Don't believe that the brand-X demonstrator that works so well in the store means that the same brand-X in the box will work as well when you get it home. Things to look for: smooth operation, easy to replace blades and no side to side oscillations when the saw is not under load.

Belt sander / sanding disk:

One of the most wonderful power tools available, today, is a little combination free-standing belt sander and grinding wheel. Make sure that the platform for the grinding wheel is adjustable and that it has an angle guide that can run in a parallel track. Remove the backstop from behind the belt, since you will need to use it between the teeth of the clockwheels, and the backstop is too thick. Be careful, though. I have collected more scars on my fingers over the years from disk sanders than I have from all other tools and accidents, combined. It can bite HARD if you get complacent with it.

Get sanding belts of different grades. Take care when using the belt sander to remove wood... it works very quickly. You can make more mistakes per hour with power tools than you can with hand tools.

Saber saw:

This hand-held power saw is handy for rough cutting of the parts. It can turn a fairly tight circle and cuts fairly quickly. The quality of the cut is often unsuitable as a finished cut, however, and further work on the scroll saw, lathe or with a sander will be necessary.

Dremmel tool:

This is luxury tool that you'll wonder how you ever did without. I find it most useful for cutting the little brass tubing that I use as bushings as well as the small nails that I use as bearings. You can do the same job with a file or with a small saw, but the dremmel is just so darned handy! Not utterly necessary, but highly recommended.

Hand tools:

You will also need a variety of hand tools. Among them:

- hammer
- needle files
- bastard mill file
- 1/2" wood chisel
- needlenose pliers
- other pliers
- outside calipers (must have!)
- various clamps and vises
- soldering setup (torch, flux and tin solder)
- combination square (small)
- compass