Turn-a-Pot Tool

by James Duxbury

SUPPLIES

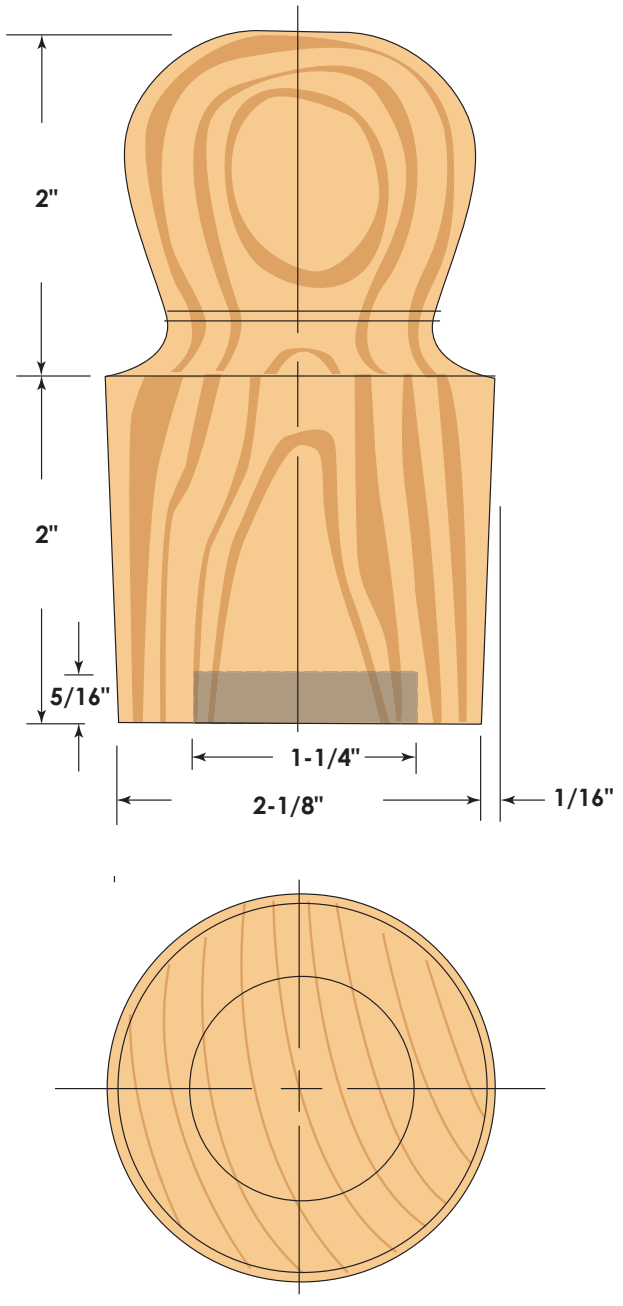
Wood: *construction lumber or wood of choice* – one piece 2-1/2" x 2-1/2" x 5" long; one piece 1-1/2" x 3" diameter
Tools: lathe with 4-jawed chuck and standard lathe centers, bandsaw, small parting tool, small spindle gouge, skew, clamps, calipers, ruler
3-1/2" x 16" strips of plain newspaper
12" length of No. 12 copper wire (*optional*)
Assorted grits of abrasive paper
Paste wax or finish of choice
Carpenter's wood glue
Masking tape
Paper towel
Face Shield

I am sure those of us that garden a little have, from time to time, had the need for a couple of plant pots for starting a few seeds or some special little seedling. This handy little tool is perfect for that. It is not only quick and easy to use, but it makes the biodegradable seed starter pots totally from recycled newspaper. They are molded to shape with a turned handpress easily made from recycled building materials. This is recycling at its best, because it really works!

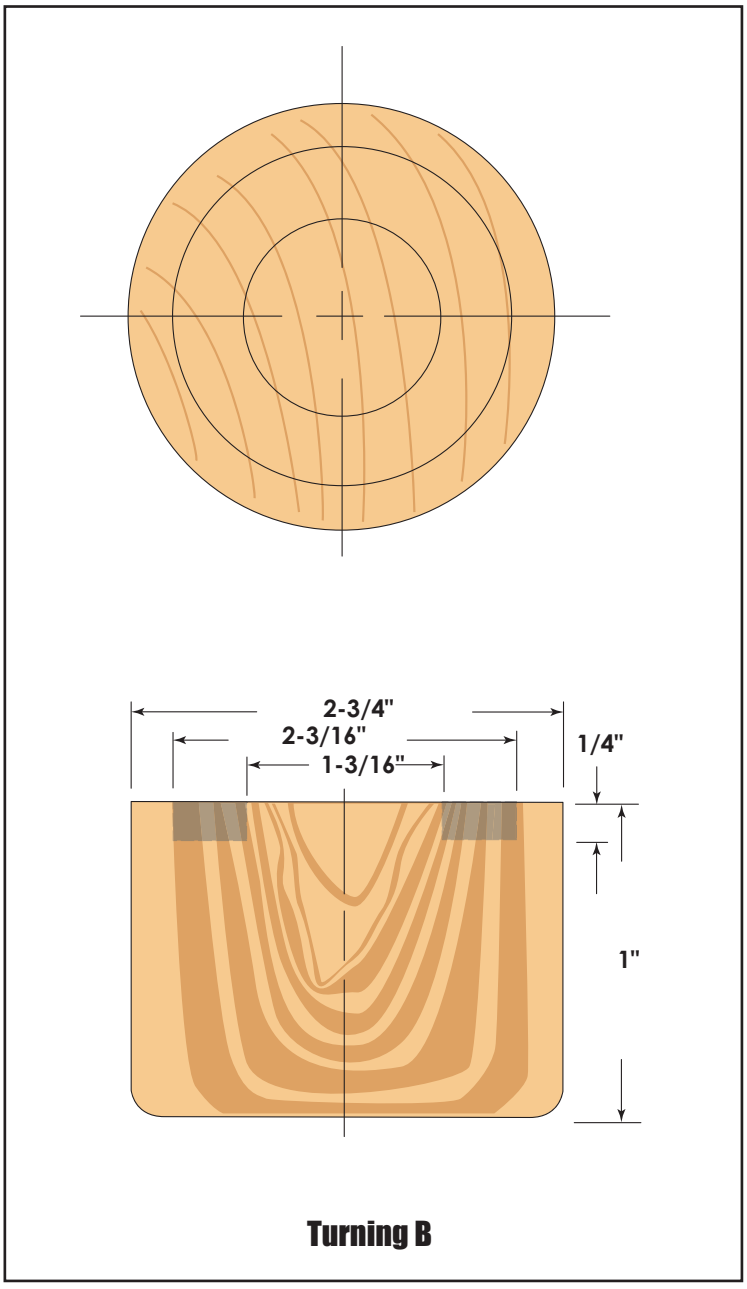
PREPARE THE STOCK

This handpress consists of two fairly simple turnings. In this case, they will be made from about a 20" length of 2 x 8, recycled off the scrap pile of a house being built down the street. Hardwoods such as maple, persimmon, cherry, poplar, or walnut would hold up longer, but I am sure the gardener that uses this turning as a tool will be more interested in the "roll your own plant pots" that it makes rather than the quality of the turning. Be extremely careful when using recycled materials. Check the integrity of the wood and be sure all nails, screws, staples, and foreign objects are removed; if in doubt, find another piece.

From the recycled length of 2 x 8, cut two blanks of straight-grained clear wood 2-1/2" wide x about 5" long. Glue them together to make a blank 2-1/2" x 3" x 5". This will be referred to as the mandrel end of the press or **Turning A** (see diagram). When the glue has dried, cut the blank to 2-1/2" x 2-1/2" x 5" long. Cut another piece of straight-grained clear wood 3" in diameter from the 2 x 8. We will refer to this as the socket or **Turning B** (see diagram). Mark the centers on both **Turnings A** and **B** (see **Fig. 1**).



Turning A



Turning B

TURN THE SOCKET

Set the lathe speed to about 1240 RPM, and with the chuck opened about 1-1/2", press **Turning B** securely against the ends of the jaws with the tailstock. With a small parting tool, cut a 1/4" long x about 1-1/2" diameter tenon. Reverse **Turning B**, tighten the tenon in the chuck, and face off the exposed end (see **Fig. 2**).

With calipers, mark the 2-3/16" and 1-3/16" diameter cut lines (see **Fig. 3**). (*Note:* Touch the wood with ONLY the left-hand point.) Next, with a small parting tool, cut inside these lines about 1/8" deep (see **Fig. 4**); this defines the female socket of **Turning B**.

Place a small piece of masking tape 1/4" from the end of the parting tool and finish cutting the slot in the socket (see **Fig. 5**). Check the depth with a ruler. Sand the socket smooth and finish with a good paste floor wax applied with a piece of paper towel (see **Fig. 6**).

Reverse the piece and tighten the chuck on the small tenon. Turn off the tenon, round over the corners, and smooth the end. Although optional, a couple of small grooves will break the flat surface look. These can be seen in **Fig. 8**.

Decorate the sides with a couple of wire burn marks. This is done with a piece of No.12 copper electrical wire about 12" long with 8" of insulation removed in the center. Twist the insulated ends for a good grip and hold the wire over the spinning piece (see **Fig. 7**) and let the smoke fly.

Sand all surfaces smooth and finish the bottom with the paste wax to complete the socket or **Turning B** (see **Fig. 8**).

TURN THE MANDREL

The mandrel or **Turning A** will be made from the 2-1/2" x 2-1/2" x 5"-long stock. Mount the blank between standard centers and turn it to about a 2-3/8" diameter cylinder. Cut a tenon about 3/8" long x 1-3/4" on one end with a parting tool. Turn the piece around and using the tailstock for alignment, tighten the tenon into the chuck. Face off the end (see **Fig. 9**).

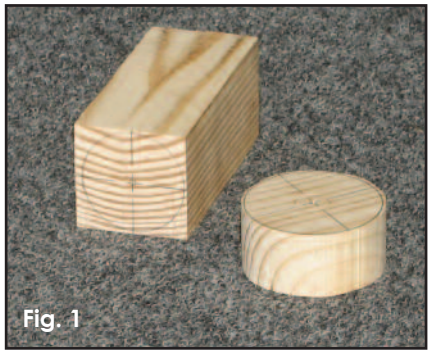


Fig. 1

The stock for the mandrel is on the left and the stock for the socket is on the right.


Fig. 2

Face off the end with a spindle gouge.


Fig. 3

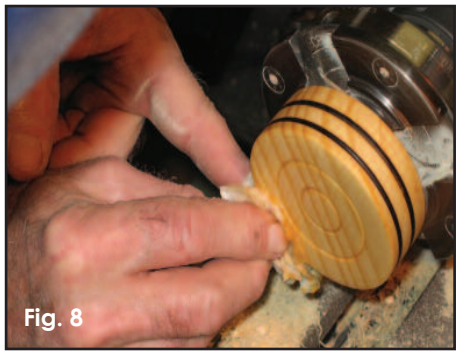
Use calipers to mark the location of the socket.

Define the lines with a small parting tool.

Use a small piece of tape as a depth gauge.

Paper towel is a safer choice for finishing than a cloth rag.

Decorations add a little class to the turning.

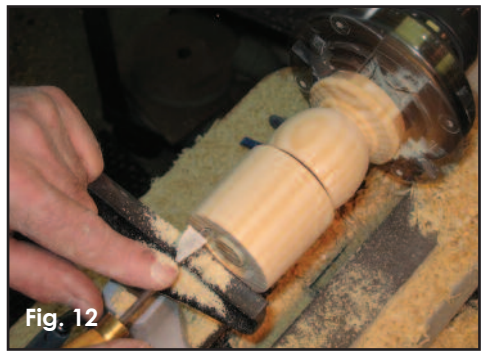


Finish the bottom with wax.

Face off the end of the mandrel after reversing it in the chuck.

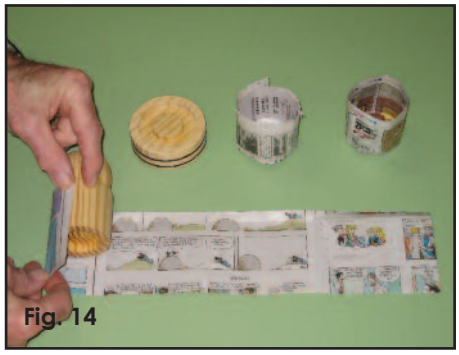
It's easier to burn a line here rather than sand the area smooth.

Mark a 1-1/4" diameter circle with the calipers.

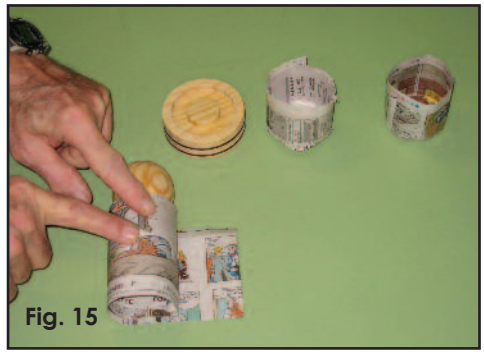


Enlarge the recess with a small parting tool.

Ready to make paper pots.



Start to roll a strip of paper.



Be sure to roll it tightly.

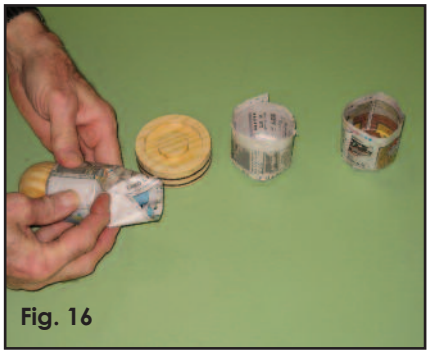


Fig. 16

Fold the loose end first.


Fig. 17

Crimp the end with the socket.

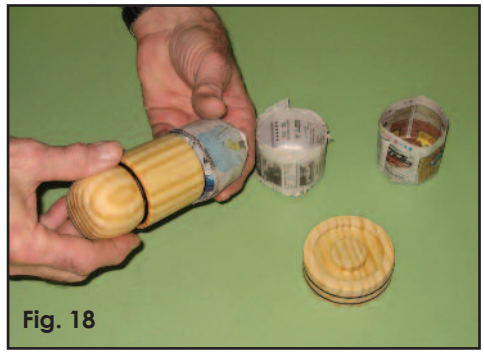


Fig. 18

Remove the finished pot.

Mark a line 2" from this end and with a skew, point forward, define the male end of the mandrel (**Turning A**), and roughly shape the handle.

Most designs of this mandrel make this 2" surface a straight 2-1/4" cylinder, but I have found that it works much better to draft it about 2°. So with a parting tool, cut down to 2-1/8" diameter on the tailstock end and 2-1/4" diameter in the middle at the base of the handle. Then with a skew, connect the two diameters and shape the handle. A burn line makes a nice decoration here also and eliminates a difficult place to sand (see **Fig. 10**).

Sand smooth, then with the tailstock removed, face off the tailstock end. Pay attention and make light cuts, because this end is over 4" away from the chuck. With calipers, mark a 1-1/4" diameter circle (see **Fig. 11**).

Put a small piece of masking tape on the parting tool 5/16" from the tip and cut the 1-1/4" recess (see **Fig. 12**). Sand and finish with wax as before and part off the piece. This completes both **Turnings A** and **B** as shown in **Fig. 13**.

INSTRUCTIONS FOR USE

From a sheet of newspaper, cut strips 3-1/2" wide x 16" long. Use regular newspaper, NOT the glossy inserts. Start rolling one strip of paper on the mandrel, holding it even to the top of the 2"-long cylinder (see **Fig. 14**).

Roll the entire 16" length tightly on the cylinder (see **Fig. 15**).

Hold the cylinder in one hand and crimp the end of the newspaper cylinder over flat (see **Fig. 16**). Fold the loose end in first.

Place the covered mandrel into the socket (see **Fig. 17**). Press down hard and twist.

Slide the finished pot off the mandrel and it is ready for a seed (see **Fig. 18**).

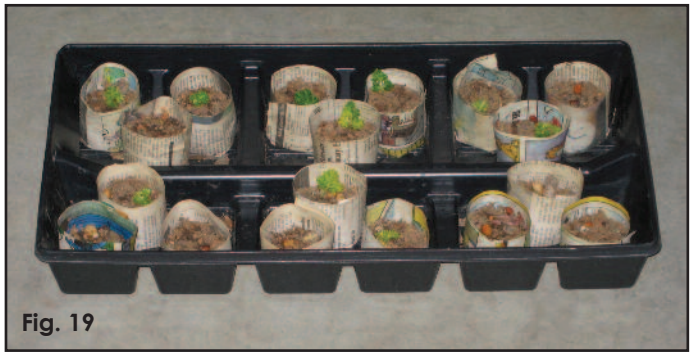


Fig. 19

These make good biodegradable seed starters.

Once you get the hang of making these useful little pots, they can quickly be pressed out as needed, eliminating trips to the garden center. I wish I could tell you more about how to plant the seeds in the little pots (see **Fig. 19**), but I am a much better turner than gardener. You are on your own there...Good Luck!

James Duxbury

James Duxbury, woodturner and inventor, is the kind of guy who thinks and creates "outside the box." His turnings are unique and he seldom turns the same thing twice. With the help of his pet parrotlet, Bean, creativity abounds—all sorts of fine turnings are made from small bottle stoppers to bowls, bud vases, trays, furniture, kaleidoscopes, turned wooden hats, pens, and even a working Foucault Pendulum.

Jim's kaleidoscopes are a signature item, custom designed, and have been the recipient of numerous blue ribbons. Although Jim quit working in 1996 and has claimed to be retired, he has since obtained two U.S. Patents and has a third one in progress.

The inventor of particulate dust respirators, his company, Duxterity LLC, markets the Resp-O-Rator™ and Resp-O-Rator Jr™, while Elegant Creations markets his gallery of fine wooden objects, including Kaleidoscope Plans, Kaleidoscope Building DVD, and custom wooden Kaleidoscopes. Details can be seen at www.duxterity.com.

Jim welcomes your questions and comments and can be reached by e-mail at cyberdux@bellsouth.net.