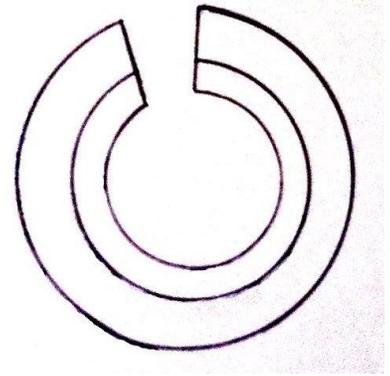


Mark St. Leger style compression jig

Turned from end grain hardwood. A groove is cut to enable the wood to slightly deform and compress as the jaws of the chuck are closed.

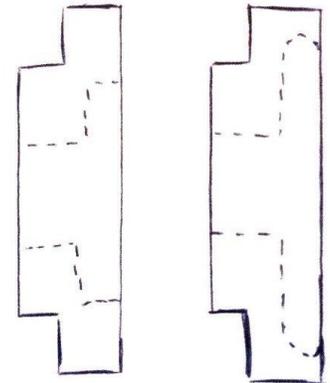
- Mount the blank between centers and turn it round, cut a tenon to fit the jaws of your chuck.
- Mount the blank in the chuck using the tenon and turn a recess on the front face to fit the piece to be turned.
- Place the piece to be turned in the recess, close the jaws of the chuck so the piece is secured.



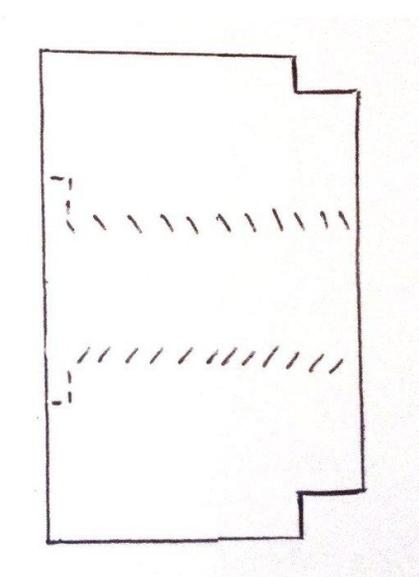
Ring turning compression jig

Similar to the compression jig above, The outside of the ring is turned between centers and is then held in the compression chuck so the inside profile can be turned.

- The recess on the jig should be profiled to match the outside profile on the ring.



Spindle Jam chucks



Scrap wood drilled and tapped to fit the spindle threads. Useful as jam chucks for lidded boxes, peppermills, kaleidoscopes, etc.

- Mount blank between centers in face-grain or side-grain orientation. Turn down to a cylinder and if appropriate turn a tenon to fit your chuck.
- Mount the blank in your chuck and drill a hole with the appropriate sized bit (1/8" smaller than the thread you're tapping – 7/8" drill for a 1" diameter tap).
- Tap the threads. If possible lock the spindle and use a 60° live center in the tailstock to keep everything square. Turn the tap by hand using a wrench.
- If necessary superglue can be used to reinforce the threads. Re-tap once the glue has dried .

Vacuum chucks

Made similar to jam chucks as above.

- Schedule 40 PVC couplers are used to form the drum portion.

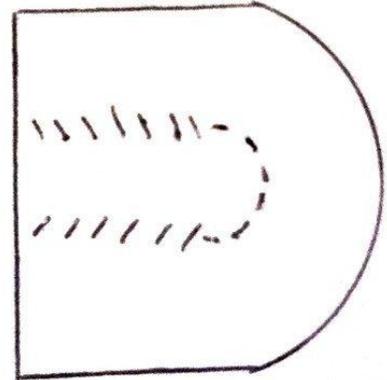
Shop-Made jigs

- Recess turned on the face to match the inner diameter of the PVC coupler.
- Craft foam applied to the end of the PVC to prevent marring the finished surface.
- Used in conjunction with a vacuum source (dedicated vacuum pump, venture vacuum generator) for finishing the bottom of items, can also be used to refinish older items.

Live center adaptor

Similar to jam chucks except they're drilled and tapped only part way through the blank. Outside of the Blank can be turned to any shape desired.

- Mount a blank in your chuck. Or turn and tenon and grip that with your chuck.
- Square the face of the blank and drill a hole for the tap slightly longer than the length of the threads.
- Tap the hole as above.
- Use a small screw or other small object to lock the bearings and prevent the live center from rotating. Thread the blank onto the nose of the live center.
- turn the blank to the desired shape.



Can be used for driving peppermills, kaleidoscopes, spheres, and other objects where you don't want to mar the surface like a normal live center would. Also useful for preventing turner's elbow.

Additional jigs:

Go/No-go Tenon jig

- Cut from plywood to give the maximum and minimum tenon size for each set of jaws.
- If the tenon fits inside the larger end but does not fit inside the smaller end it will fit inside the travel of the jaws.

Multi Axis pendant jig

- Made from scrap melamine coated particle board.
- Multiple holes are drilled on the back side to enable the blank to be turned on multiple centers.
- Drill bit size will depend on the manufacturer of the woodworm screw. Nova – 5/16". Oneway – 11/32". Vicmarc – 7-8mm.
- Jig is secured to the lathe by a Woodworm screw secured in the jaws of a chuck.
- Pendant is secured to the jig using double sided tape.

Materials:

Beall spindle tap - 1" X 8 TPI ~\$18, 1 1/4" X 8 TPI – ~\$27
Woodcraft, Craft Supplies USA, Packard, Amazon, Etc.
3/4" X 10 TPI NC Bottoming tap - \$23.48 shipped
Enco part # 311-0142.