HAT AND WIG STANDS

John Kelsey

Hat and wig stands ranging from 7" to 14" tall, with 6" bases and 5" tops.

Rummaging through the library at the Center for Art in Wood in Philadelphia, I stumbled across several 100-year-old woodturning textbooks. They were filled with turning exercises and projects. Wanting to improve my skills with a gouge and skew chisel, I tried some of the traditional spindle exercises *(Photo 1)*.

Not wanting to blow through expensive hardwood, and to follow the advice of those old shop teachers, I worked in softwood *(Photo 2)*. After a few evenings wrestling the low-density stuff, I wondered what to do with all the practice pieces I had generated. I had no need for more candle stands, but what about stands for hats? I turned a pair of discs to assemble a test piece and my wife pointed out the stands would also work for wigs. Additionally, making the smoothly curved discs for the stand, base, and top would add faceplate-turning skills to the exercises *(Photo 2)*.

Hat stand design

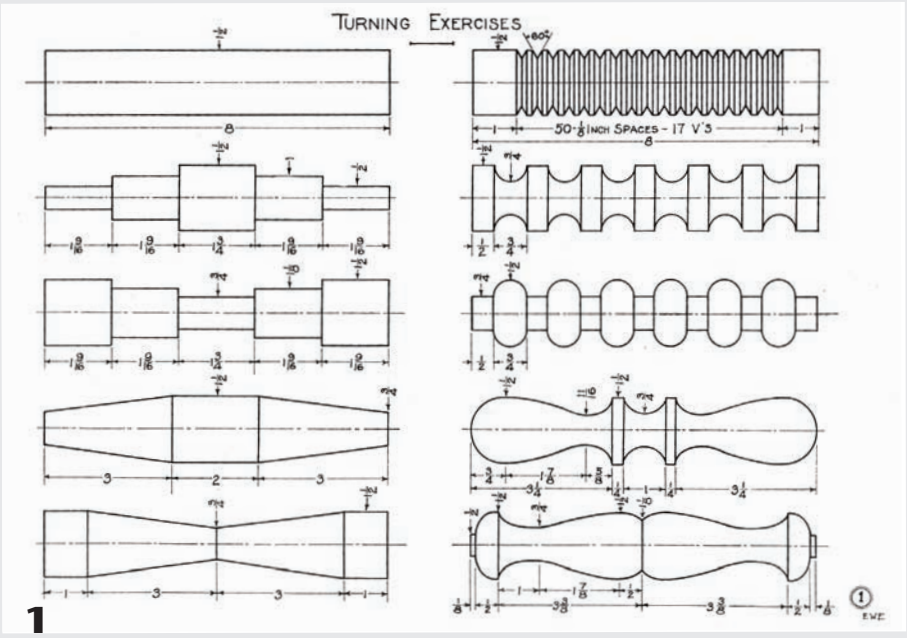
I made test pieces to refine the design. It turns out stability doesn't require thick wood or a large base—a full inch × 6" (25mm × 152mm) base with a full inch × 5" (25mm × 127mm) top is fine, even under a cowboy hat. A thicket of hats can overlap at different heights to use less space. Floppy hat brims on stands shorter than about 7" (18cm) will drag, and stands taller than about 14" (36cm) need a larger base.

I turned the discs smooth and free of ornamentation to avoid creating dust crevices. Tops with the underside left rough will catch wig hairs, although a rough underside poses no problems for hats.

Turning lessons

The old spindle-turning exercises were challenging and they highlighted a number of skills:

- *Turning to dimension and turning tenons to fit a drilled hole.* I found ▸



1

2

Pine is inexpensive softwood well suited for turning practice and design experiments.

Traditional introductory exercises from Earl Ensinger's 1926 book *Problems in Artistic Woodturning*. Ensinger writes, "No sanding should ever be done on any exercise. The student has not properly learned the process, who cannot turn soft wood smooth with the tools alone."

it best to establish a slightly oversized tenon using a vernier caliper *(Photo 3)*, define the tenon length by reducing the surrounding wood to match the established diameter, and use light shearing cuts with a skew chisel to establish the final tenon diameter *(Photo 4)*.

- *Sanding tenons to fit usually removes too much wood and knocks the tenon out-of-round.* However, loose tenons can be wedged. Saw a kerf into the bottom of the tenon and tap in a wooden wedge *(Photo 5)*.
- *Turning clean beads and coves that match.* I found it best to first establish the transitions and fillet diameters using a skew chisel, parting tool, and vernier caliper, and then turn the features between these points. While I could form all of the shapes with a spindle gouge, the ½" (13mm) skew chisel produced the cleanest finish.
- *Building skill with turning tools.* In softwood, it is possible to sand any surface into a flowing shape, but with sharp tools it is also possible to cut a smooth, crisp surface. Scraping tools used on the face-turned discs can produce a surface that needs minimal sanding *(Photo 6)*.
- *Turning harmonious shapes and proportions.* How large is the bead compared to the adjacent cove? The old books suggested small, whole-number relationships (for example 2:1) to create successful designs. Thus, a bead would be twice the width of the cove. How do the beads, coves

3

Part the tenon shoulders down to a slightly oversized diameter.

4

Trim the tenon with a skew chisel. Practice and patience combine for a perfect fit.

5

If the tenon is loose, add a narrow saw kerf and tap in a slender wooden wedge.

6

A freshly sharpened scraper produces paper-thin shavings and a smooth surface on the face-turned discs.

and fillets connect? They suggested the spindle would look best if each transition formed a 90-degree angle, which I found to be a useful guideline but not an unwavering truth *(Photo 7)*.

Mounting the work

Mount the blank between centers and true the blank using a spindle-roughing gouge. Establish the tenon *(Photos 3, 4)* and work from the tailstock toward the headstock to minimize vibration *(Photo 8)*. Adding ¼" (6mm) to the tenon's length permits parting off the piece and paring the end grain to remove the center marks.

For the discs, the old books recommend gluing the blank onto a waste block with a layer of paper in the joint, and screwing the block to a faceplate. A lot of bother, but they didn't have four-jaw scroll chucks. I turned a jam chuck, using the drilled mortise in the blank as the attachment point. I aimed for a tight friction fit with the disc seated against the shoulder of the jam chuck, and learned a slightly undersized tenon could be salvaged with a wedge tapped into a kerf cut in the tenon *(Photo 9)*.

Joints

The joint that holds the pieces together is a 1"- (25mm-) diameter tenon inserted into a 1" drilled mortise. It helps to have a tight fit, but an undersized tenon can be salvaged with a kerf and thin wedge if the mortise extends through the disc to allow access to the tenon. If you don't want to see the tenon on the top of the stand, drill only part way into the disc and size your tenon accordingly. Snug-fitting components seem like they should hold together without glue. We'll see about that after a few turns of season. ■

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Shaker pegs

Make the mounting board from ⅝ × 4" (3cm × 10cm) stock. Use your available space and the number of hats you would like to hang to determine the rack's length. The pegs, also made from ⅝ pine, protrude 3½" (9cm), are spaced 6" (15cm) apart, and have ¾"- (19mm-) diameter tenons.

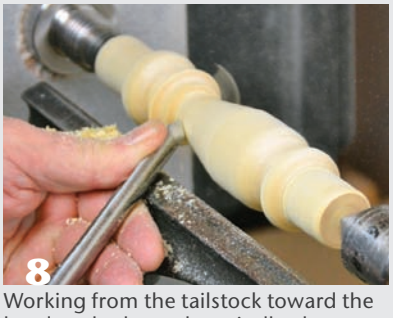
For turning practice:

- Mount a peg blank between centers and round it with a roughing gouge. Establish the tenon and shape the peg details with a gouge and skew chisel. Each peg is an opportunity to practice parting off cleanly. If you use a scroll chuck, add about 2" (5cm) to the blank length to provide material for the jaws to grip, and clearance to avoid those spinning jaws. Use the tailstock for support.

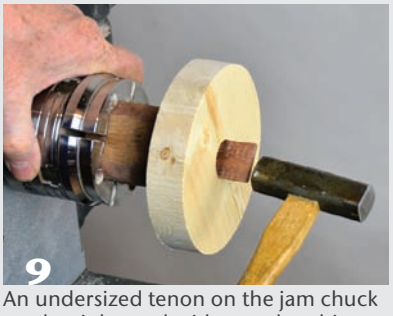
A hat rack featuring Shaker-style pegs is a practical turning exercise and another good place to park hats.

- Try to turn identical pegs. Which is more important, matching diameters or matching lengths? You might also make each peg different. Give them all a shoulder where the peg meets the tenon for a positive fit and to conceal any tearout from drilling the mortises.
- Challenge yourself to make the tenons a perfect fit using a vernier caliper and a parting tool.

7 The vase shape at the top has a nice tension and turns its lip at 90 degrees, but the V transition to the ball is too sharp. The top half of the ball is rounder than the bottom half; it would look more spherical if the height matched its diameter. Okay, turn another spindle and keep practicing.



8 Working from the tailstock toward the headstock, shape the spindle elements with a gouge and skew chisel.



9 An undersized tenon on the jam chuck can be tightened with a wedge driven into a saw kerf.