Light and Fan Pulls

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ttractive cutoffs can be turned into one-of-a-kind light or fan pulls to replace the plain ones that typically come with a fan or pull-chain lamp. They make great gifts and are excellent for developing turning skills.

## Prepare the blank

Select a length of hardwood from 1½" (38mm) to 3" (76mm) and about %" (22mm) to 1¼" (32mm) square. Using a drillpress, drill a %4" (4mm) through-hole, which will accommodate a typical 1/8" (3mm) beaded chain (Photo 1). If you are using the pull on a cord, use a 1/8" drill bit. Counterbore a second hole, 5/16" (8mm) diameter and about \(^3\mathre{s}''\) (10mm) to \(^1\sqrt{2}''\) (13mm) deep. This hole will conceal the end of the chain or a knotted cord. The larger hole also holds the blank onto a mandrel for turning.

## Mount the wood between centers

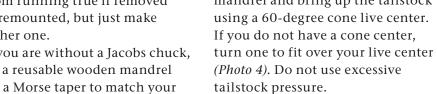
Mandrels function well to easily mount small projects between centers of your lathe. A simple and effective approach for making your own mandrel is to insert a 3/8" (10mm) dowel into a Jacobs chuck, projecting about 1" (25mm). This dowel length allows you to shape around the bottom of the pull and avoid touching metal with your tools. Taper the end of the dowel slightly for a friction fit into the 5/16" (8mm) hole in the blank (Photo 2). The Jacobs chuck will deform the

end of the dowel and likely prevent it from running true if removed and remounted, but just make another one.

If you are without a Jacobs chuck, turn a reusable wooden mandrel with a Morse taper to match your lathe's spindle (Photo 3). The manufacturer of my four-jaw chuck advises against using it at speeds greater than 1440 rpm, so I recommend not making a mandrel for a four-jaw chuck if you plan to turn at high speed.

Mount your drilled blank onto the mandrel and bring up the tailstock using a 60-degree cone live center. If you do not have a cone center, turn one to fit over your live center (Photo 4). Do not use excessive tailstock pressure.

A short toolrest allows you to get in close for safe tool support. Use a spindle-roughing gouge to turn the blank to a cylinder and slightly taper it toward the tailstock end (Photo 5). I typically use a \%" (10mm) spindle gouge to turn my desired shape. You



## Commercial supplies for light pulls

Light-pull kits are available from various woodturning vendors. These kits generally have a metal finial in different finishes with a matching 3" (75mm) to 4" (100mm) length of chain. Some kits require the use of a pen mandrel or a special mandrel. Commercial light-pull mandrels are available from woodturning vendors. Generally, these use a Morse taper to match your lathe and have a series of steps at 1/8" (3mm) intervals. They could also be used for other small spindle projects.



will get your best results if you take light cuts and move the gouge slowly across the wood.

## Design and embellish

Unleash your creativity to come up with your own designs, but keep in mind that form follows function. Make the base a larger diameter than the top so it is easily grasped and pulled. Embellish with beads, coves, V cuts, texture, or burn lines. Add finish, a bit of chain or cord, and you are ready to install the light pull.

Short lengths of chain in nickel or brass are available from some woodturning vendors. They typically have a chain coupler on one end and a ¼" (6mm) ball stop on the other to secure them inside the counterbored hole. Your local hardware store is also a convenient source; they typically sell chain by the foot and sell the couplers and other fittings that can be used instead of a ball stop (*Photo 6*). An alternative is to glue the chain into your pull using CA glue or two-part epoxy.

Mike Peace is active in several woodturning chapters and enjoys teaching and demonstrating in the Atlanta area. You can see pictures of Mike's work and his previously published articles at MikePeacewoodturning.blogspot.com.



A wooden parallel clamp with a pair of opposing notches cut out will firmly hold turning blanks for drilling.



A 3/8" (10mm) dowel inserted into a Jacobs chuck serves as a mandrel to hold the turning blank.



If you do not have a Jacobs chuck, turn a mandrel with a Morse taper to fit your lathe.



If you do not have a 60-degree cone center, turn one to fit over your existing live center.



The initial roughing of the wood can be done using a spindle-roughing gouge.

