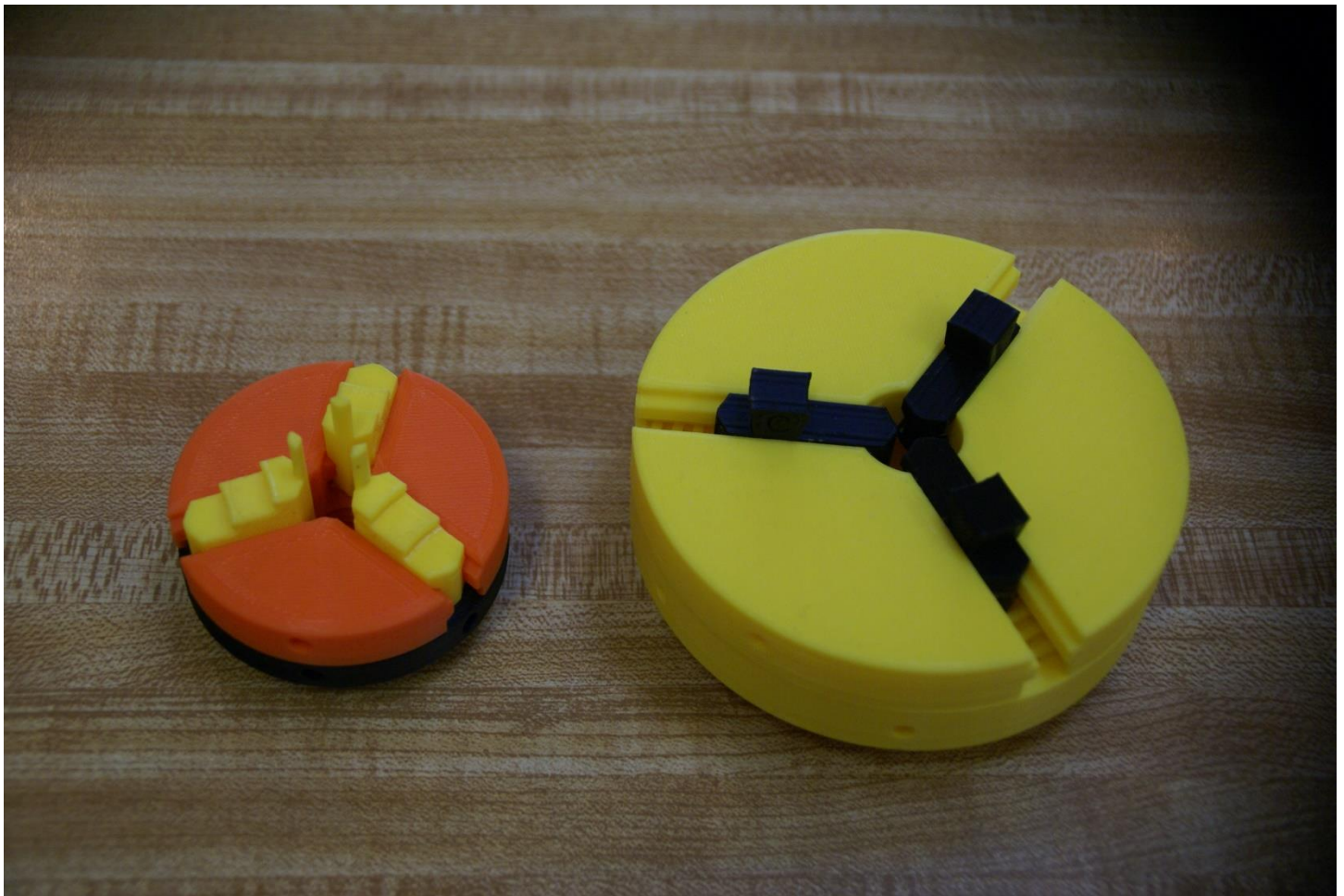


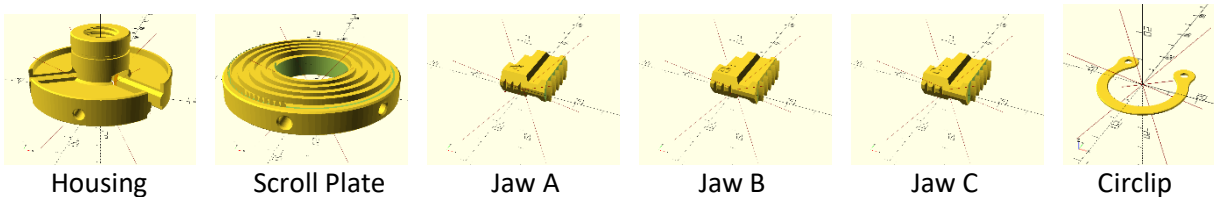
Chucks



I use two sizes of chucks; a 2.5-inch 3 jaw chuck and a 4-inch 3 jaw chuck. Let me say up front that these chucks are not for use on a normal lathe under power. I use these chucks on devices that turn them slowly – from 0 to about 25 rpm. I use them to mount wood turned pieces for finishing with polyurethane. The slow turning keeps the polyurethane from running.

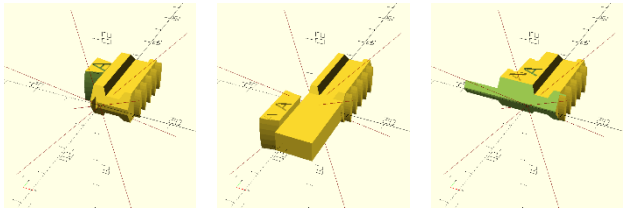
The 2.5-inch 3 Jaw Chuck

My 2.5-inch chuck is a remix of [thing:2670620](#) by [mdkendall](#). It is made with 6 parts:



I modified all the parts except for the Circlip. The housing was modified to increase the strength between the center hub and the three “wings”. In addition the threads were modified to fit my slow turner device. The original model was easily broken even when printed at 100% infill. The scroll plate was modified to allow a little more play. The jaws were all modified to make the “explanation point shaped” extensions on the bottom better defined.

In addition, I modified the jaws in several ways.



Bowl Jaws Long Bowl Jaws Extended Jaws

The extended jaws work great for holding small parts and parts with holes as small as 1/4-inch.

The 4-inch Chuck

A friend asked me to design a chuck which is larger than the 2.5-inch chuck. It was designed similar the 2.5-inch chuck. The housing and scroll plate were designed from scratch. The jaws were remixed from the jaws for the 2.5-inch chuck.

The Slow Turners

Bellow are some pictures of how I use the chucks on my slow turners.



Gang Slow Turner



Small Bowl Mounted with Chuck



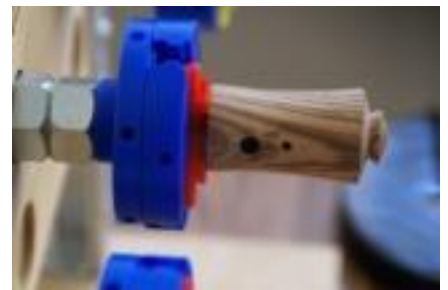
Extended Jaws in 1/4" hole in Icicle



Icicle Mounted in Regular Jaws



Top mounted in Regular Jaws



Birdhouse Body in Bowl Jaws

My gang slow turner is used a lot to finish Christmas ornaments.

Using a 4" chuck on large slow turner with 1" x 8 TPI spindle to hold small spalted beach bowl for finishing.

