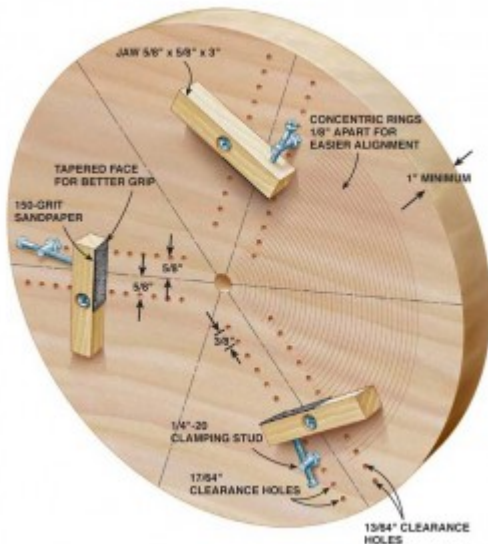


Shop-Built 3-Jaw-Chuck

A cheap, effective turning tool.



Three-jaw lathe chucks are virtually indispensable for a turner, yet the cost of buying one can be prohibitive. Three-jaw chucks are useful when turning small pieces at low speed, and permit multi-axis turning. This shop-made chuck can be made from scraps of maple and a few machine screws. By changing the arrangement of the screw holes, this can also be made into a 4-jaw chuck.

The jaws are positioned in a set of pivot holes depending on the size of the workpiece. For better gripping, add strips of 150-grit sandpaper to the jaw faces, and taper the face of the jaws, as shown. To assist in centering the turning, thin concentric rings are turned into the face of the chuck. With the workpiece in position, tighten the clamping screws equally. It is recommended operating the chuck with the lathe running at less than 700 rpm and only for small workpieces.

