

Demo 3 items: I. celtic knot/egg; II. use of (brass) inserts; & III. Skyhook

I. Celtic Knot design imbedded in egg shaped piece:

- what, why, examples
- supplies required:
 - *blank 2"x2"x4" (square on all 6 sides)
 - *four pieces 1/16"x2"x2 1/4"
 - glue – Titebond II or III
 - * depends on size of piece; drawing an egg & use of drawing
- step by step instructions:
 - number all 4 sides
 - cut side 1 of blank @ 22.5 degrees. End of cut should be 1 3/8" from end of blank. Use stop block so all 4 cuts end on same plane.
 - glue insert in place. Let dry overnight. Chisel/sand any rough edges.
 - repeat last two steps for remaining 3 sides.
 - example of blank with all inserts and ready to turn
 - mount blank in chuck, pull up live center, turn egg
 - turn it round to 1 3/4" (45mm)
 - use parting tool to mark both ends of egg 2 1/2" apart (62mm)
 - mark other targets (about 3/8" from bottom to diameter of 1 1/4"; also mark fat area)
 - shape egg with series of convex cuts; sand & finish

II. Use of (brass) inserts in turning:

- what: wood screw threads on o.s./machine screw threads on inside; show examples of brass inserts.
- why: a) attach; b) connect two or more pieces; c) hold for further turning. Show examples of each.
- step by step instructions:
 - turn concave surface so no gap when completed
 - mark and drill center for brass insert. Depending on type of wood, may need to drill hole 1/16" larger than instructions.
 - Clear hole of dust & use of drop of thin super glue (not too much)
 - insert brass insert

III. Skyhook – is it magic or science?

- What: fun, educational, toy
- Why: upcoming civic demonstrations; chance to engage kids.
- step by step instructions:
 - start with blank 1"x1"x6" with 1/4" notch cut at 45 degree angle. Bottom of notch 3" from one end. Notch should be 5/8" – 3/4" deep.
 - turn as desired