## Plane-adjusting Hammer Plan of Procedure

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## Materials

Head brass 1 - 7/8" dia x 1 7/8" long brass bar stock

Head wood 1 - 15/16" octagonal x 5/8" long hard wood (rosewood, ipe, etc)

Tenon 1 - 5/16" dia x 3/4" long dowel

Handle 1 - 7/8" x 1" x 14 –16" long hardwood (ash, hickory, or white oak)

Wedge mat'l 1 - 3/8" x 1" x 4" hardwood (contrasting color to handle)

Adhesive 5-minute epoxy

- 1. Cut the brass to length. Drill a 3/8" hole centered in one end, about 3/8" deep.
- 2. Drill a 3/8" hole in one end of the head wood, about 3/8" deep
- 3. Cut the tenon to length to fit inside the head brass and wood. Epoxy the wood to the brass with the tenon in place, centering the wood on the brass. Ensure the epoxy is thoroughly mixed before use.
- 4. While the epoxy is setting, work on handle. Cut the handle stock to rough shape on the bandsaw. The handle will be 8 9" long when complete; the extra length will be used to hold the handle during the next step.
- 5. Shape the handle using a spokeshave. The head end should be about 5/8" diameter.
- 6. Cut the tenon on the head end using a 3/8" Veritas Tenon Cutter or equivalent. Align the cutter carefully to ensure the tenon is parallel to the handle.
- 7. On the glued-up head, trim the wood flush to edge of brass by planing, filing, sanding, etc. Be careful not to scratch the brass too deeply; it will be difficult to remove the scratches. Final sand up to at least 400 grit.
- 8. Drill the 3/8" handle-attach hole in the head using a jig to center the hole.
- 9. Deburr the bottom edge of the hole using a small half-round file or sandpaper.
- 10. In the handle tenon, cut a slot for the wedge, perpendicular to the growth rings.
- 11. Cut a wedge of contrasting wood.
- 12. When the head and handle are completely shaped and smooth, epoxy the head onto handle using the wedge to tighten the tenon.
- 13. Trim the tenon/wedge flush to the head (or leave proud).