

Offset Tailstock Center

RATHER than offset the lathe tailstock when turning tapers, after it has been adjusted to accurately turn work between centers, make up an offset center as shown in sketch. This can be quickly set at any position from zero to .625 in. on either side of center, allowing tapers to be turned with either the large or small end at the tailstock of the lathe.

Make the offset center from an ordinary drill pad, with a slotted crossbar supporting a short lathe center screw-fastened to its face. Cut the slots in the crossbar with an end mill and drill a hole in the center to receive the 60° hardened point. Turn the short lathe center point from toolsteel to 60° on one end and shoulder down on the other for a press fit in the crossbar. Harden, draw the temper and cool the piece before mounting in the crossbar. Mill .125 x 1-in. cross groove accurately in the center and a flat across the top parallel with groove. Top flat will aid in setting up center in same plane as lathe bed ways and at right angle to center axis of lathe headstock. Drill and tap the screw holes in the drill pad, then attach the crossbar with washers under the screw heads.—C. W. WOODSON.

SET IN SAME PLANE AS LATHE
BED WAYS WITH LEVEL

