Lathe Bed Extension

Charles D. Hepler August, 2009

I needed to turn chair posts that were longer than my ancient lathe (ca. 1939) could accommodate. If a bed extension were ever available, those days are long gone. My reading about the importance of rigid cast iron beds, alignment, etc. had made me skeptical that a homemade bed extension could serve. To turn those posts, however, I would have to buy a new lathe or try a wooden bed extension. The finished bed extension is shown in Figure 1 with a steady rest and additional tool rest.

My strategy was very simple. I would attach the tailstock to a heavy oak block using lag screws. The block would be supported by side rails, which would rest on my 2 x 12 pine table top. I could line up the bed extension with the bed using a straightedge.

Horizontal alignment of the block would be easy enough. The tailstock would rest between thin oak strips to keep it from rotating out of horizontal alignment (Figure 2). The side rails would make it easier to line it up vertically. In the event, I had to shim the rails a bit. (Figure 3) The bed extension worked fine.



Figure 1. Bed Extension in Place, with Extra Tool Rest and Steady Rest



Figure 2. Side View of Bed Extension. End of iron lathe bed appears at the left.



Figure 3. Top View of Bed Extension. The thin oak strips at the sides act in place of the iron bed rails to keep the tailstock aligned horizontally.