

4 X 6 Horizontal/Vertical Bandsaw Vice Jaw Extensions, Version 1.1

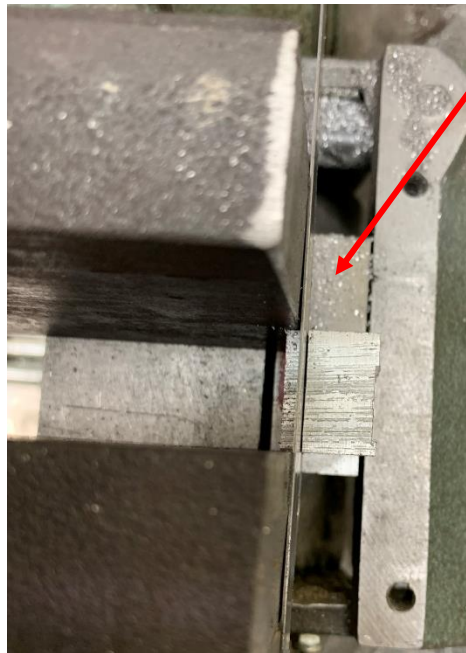
By R. G. Sparber

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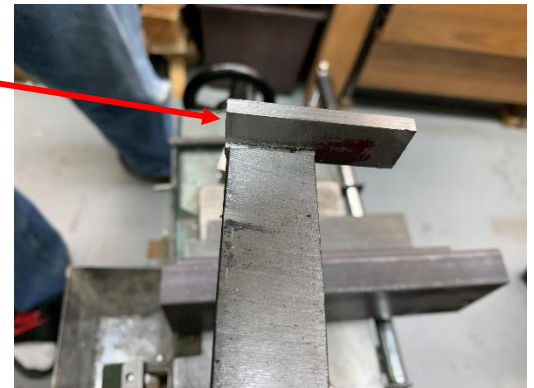
There are times when I need to saw a small bit of metal in my bandsaw, and the jaws do not extend close enough to the blade.

My solution is obvious but does contain three useful features. Well, the first feature is a consequence of what material I had on hand. I've had a 1 inch x 3 inch hot rolled steel bar kicking around my shop for over 12 years. This stuff is not going to bend, so I used it for the extension jaws, although insanely overkill. I made my previous jaws from ¼ inch thick strap, and flexing was a problem.

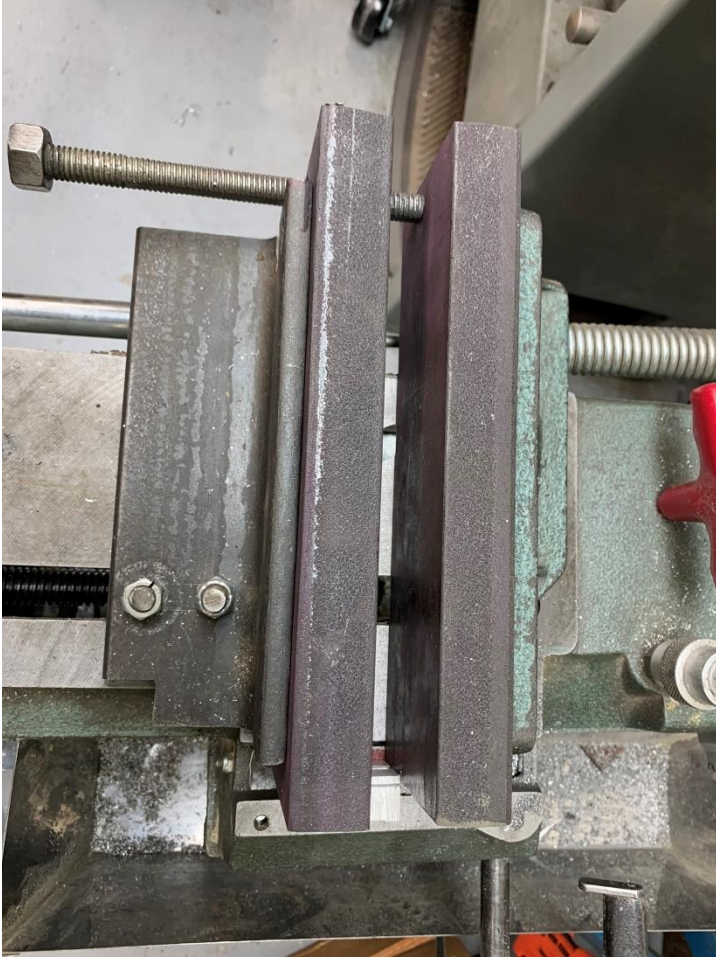


The second feature is a plate attached to the end of the fixed jaw. It is a stop, not a clamping surface, and fills the gap under the blade so stock does not fall through.

I secured the plate with two 6-32 pan head screws.



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The third feature is a quick-adjust jackscrew. I have one on my regular jaws, and it is useful. I tap drilled $\frac{1}{2}$ -13 through the end of the bar such that the threaded rod is also a stop for the movable jaw. Then I clearance drilled $\frac{3}{4}$ of the way through. Tapping $\frac{1}{2}$ -13 in steel is hard work, so I didn't want to cut any more threads than necessary.



Then I filed out the threads on two sides. This lets me slide the jackscrew until I'm close to the correct distance and then give it a $\frac{1}{4}$ turn to lock it in place. The jackscrew goes back into my regular movable jaw when not in use.



As a test, I held a small cube of aluminum by about 0.1 inches and had no problem sawing it.



I did have one minor annoyance. The hot rolled steel was not squared up on the edges. I used my disk sander to cut a flat area for the plate, but this put the plate about 0.075 inches above the vise ways. I had to add a shim it to bring the plate's face level with the ways.



After sleeping on this idea overnight, I decided I wanted a better way to align the movable jaw to the fixed jaw. I bolted a bar to the end of the fixed jaw. I used a Belleville washer so I can swing the bar up as needed.



To use, I drop in the fixed jaw. The plate on the right end aligns with the slot under the blade. I then slide in the movable jaw until it touches the bar on the left end of the fixed jaw.

I sure hope I don't drop one of the jaws on my foot!

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