# Restoration of a Vintage N. Slater Woodworking Vise

August 2016

N. Slater of Hamilton, Ontario made woodworking vises from about 1917 until 1979. Their woodworking vises were heavy duty and were often used in high school workshops. I found this one for a good price and thought it was worth a chance.

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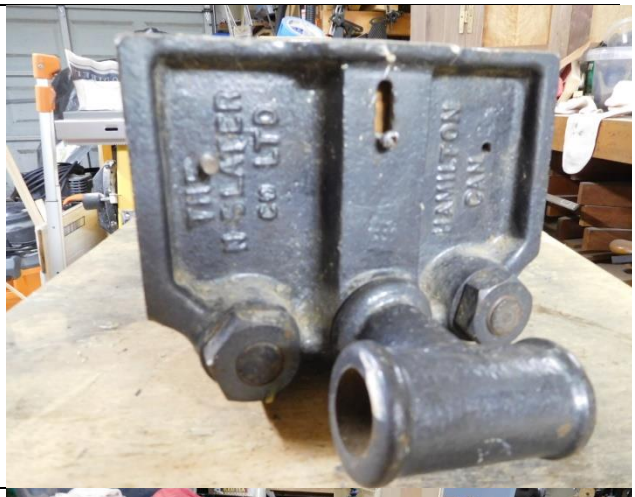
| This vise is in pretty good shape and most of the original black paint is present. There are a few white paint splatters. There is almost no rust, so it probably lived in a climate controlled shop. |  |
| Two pieces of oak baseboard trim were used as vise jaws and the dog is a replacement probably made from the same supply of oak. |  |
| Wow! The guide rods are 7/8 inch round bar stock and are bolted to the front, or dynamic, jaw. This vise was made for heavy duty work. |  |

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| The dynamic front is 7 inches wide, so this is a 7 inch woodworkers vise. Most vises this size open to ten or more inches and I am surprised to see that the leadscrew falls out at 9 inches. The leadscrew also lacks smoothness. Something is not right. |  |
| Woodworking vises generally have a cotter pin on one of the guide rods which is used as a stop. Once the vise is fully extended and the guide rod meets the end of the static face bearing, this pin prevents further extension. Of course, removing the pin allows disassembly of the vise. The nut housing is made like a “T”. The cross piece rides on the guide bars for stability and also to prevent circular motion.<br><br>Removing the “T” nut shows immediately where our problem lies. At some point, this vise was disassembled and the “T” casting was inadvertently reversed. Yet another clue that this vise came from a school with novice woodworkers. |  |
| As you can see, the threads are extend a little over an inch into the end with the crossbar. The remaining of the housing is in place to protect the acme leadscrew. I orient it properly and replace the static jaw and cotter pins. |  |
| Once I reassemble the vise I am able to get the full 11 inches of extension. An added bonus is that the screw action goes from just OK to Cadillac, probably because the nut threads are better supported. |  |

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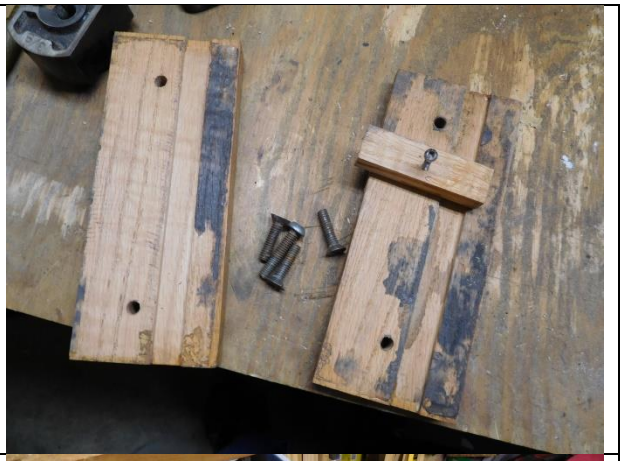
| Here are the faces and the dog. Notice the odd bolts used to attach the faces. Our previous owner used suitable wood, oak, and trimmed the pieces accurately. But then he used bolts for attachment. My guess is that he was a novice woodworker who was tasked with making these jaws. |  |
| Here we have reached the end of phase I. The mechanical issues have been resolved, white paint spatters have been removed, and the unsightly baseboard trim faces have been removed. Time for a good cleaning. |  |
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