

When I built my workbench 38 years ago I wanted a rigid tail vice that effectively did not rack when clamping something at one end. I purchased a quality screw and had the other components fabricated from my design by a local metal shop. I saw a design which I modified, but I have not been able to relocate that reference, or even other examples. So, a sliding bracket on a set of stationary rods is not original to me, but I don't know who to give the credit to.

The mobile rods are welded into 5 x 3 x 1/2" plates, and bolted with 4 lag screws into the jaw. There is an angle iron (steel) with brackets anchoring the rods at a second point inset and hidden in the jaw. Sleeves are embedded into the table side jaw for the mobile rods to slide in. The mobile rods are anchored (bolted to) at the other end by a heavy 'U" shaped bracket which slides on the stationary rods. The jaws and end bracket for the stationary rods are hard maple, the same as the rest of the bench. The vise rigidity has held up over time. After 38 years the maximum racking over the 24 inches with a tightly clamped 3/4" piece on one end is only 0.06 inches. The vise still works smoothly.