## 2. The Boom Section Alignment Fixture

The base board of the Alignment Fixture is a 1" x 6" x 72" long Select pine board that was carefully selected to be absolutely FLAT. Also carefully selected (to also be straight and FLAT) were (2) 1" x 2" x 72" long select pine Side Runners. The idea of the fixture is to have one runner/baseboard (inside) corner edge to be the straight bottom/side Alignment Fence to which to clamp two joining boom sections in order to align them straight, before drilling the four 1/16" dia Pin Connector bores (one bore per Corner Rod).



Shown in the left and right side photos are a Boom Center Section and a Boom Base Section aligned and mounted to the Alignment Fixture. Note that the Boom Base Section's foot is mounted to the Alternate Boom Base Mount (that is described at the bottom of page 5 of Sketch 300-A Addendum to the E size Sketch of the Boom Base Section). In this case, the Alterna Boom Base plate was shimmed from the top of the base board using the same 1-11/16" 1.5" x 5.75" spacer that was described on the top of page 12 of the above referenced Sketch 300-A and similarly bolted in place after aligning the attached Base Boom Section with the left side Alignment Fen



Shown below is the Alignment Fixture mounted square with, and Left/Right centered with the milling machine's table. Note the same Fixture Spacer described in the center of page 5 of Sketch 301-A, is also used to mount the Alignment Fixture to the milling machine table, with the 1/2" dia. bolt holes transferred to the Alignment Fixture base, where two 3/8-16 table studs & nuts are shown holding the fixture to the table.

