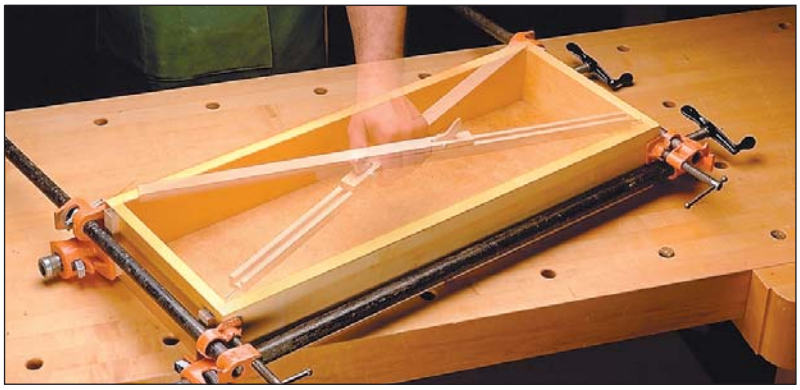
Squaring Gauge

If you're used to checking square on a cabinet by comparing the length of the diagonals, you know it can be difficult to get the end of a tape measure over the corners of the project once the clamps are in place. You could place the tape inside the corners, but this makes it hard to get an accurate reading.



I solved this problem by making an adjustable squaring gauge, as shown in the photo above. The gauge is simply an adjustable length of wood that I can use to compare the inside diagonals of a cabinet. By sliding the pieces together or apart, I can adjust the length to fit a variety of different projects. An L-shaped hook at each end fits precisely into the corners, and a small cam device allows me to lock-in my first diagonal measurement.

The gauge consists of upper and lower extension strips that are held together with a sliding dovetail joint. (I used a 14° dovetail bit to rout the groove and then used the same bit to sneak up on the size of the matching tongue.) The cam is an irregular-shaped piece of hardwood (see pattern) that fits in a slot in the upper extension. Simply raise the cam when you need to lock the gauge in place.