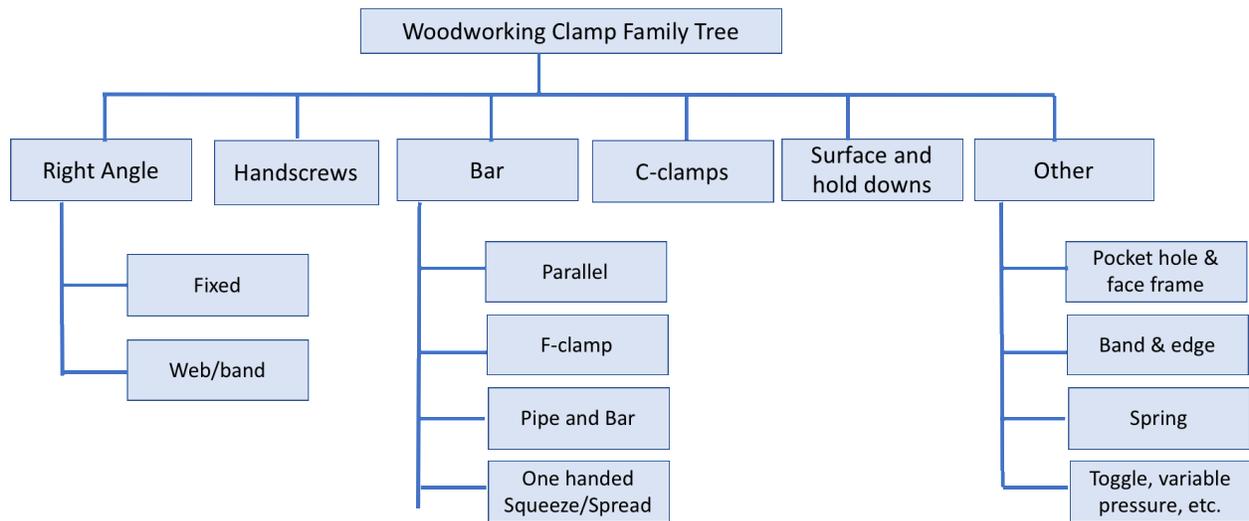


The Squeeze

Bevel Cut 2018-04 March

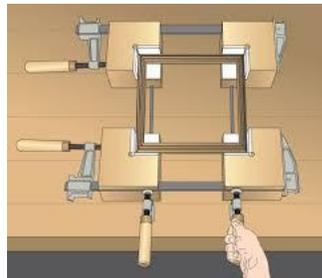
It's a well-known fact that you can never have too much gas mileage, too much bandwidth, or too many clamps. If nothing else, a nice collection smartly displayed in your shop is sure to impress friends and family. In thinking about this article and after glancing through a couple of catalogs from well-known woodworking supply houses, I came up with my woodworking clamp family tree. You can put this in your archives along with my vices family tree from last November.



I have a collection of F-clamps and they are my go-to clamp of choice – I probably use them when other types would do the job better. F-clamps are clutch-style clamps that work by moving one end of the jaw along a rail; moving metal plates use friction to apply the needed force. While these come in light duty and heavy-duty versions, I realized relatively recently that they also come in different “throats” and you don’t have to live with a 2 ½ limit. Of course, the larger throats need heavier bars, and the cost can skyrocket.



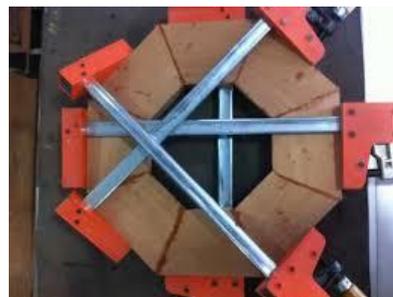
Parallel jaw bar clamps typically have a large clamping surface and maintain the squareness of the item being clamped. They can deliver a lot of pressure but can also be reconfigured to spread rather than squeeze. Disadvantage is mostly cost – they are expensive, but very handy when building cabinets and even drawers. I've also found them useful for holding pieces upright.



I think pipe clamps have been around since the pilgrims landed in Provincetown. I don't own any, but I gather they provide flexibility in length (just get a longer pipe and use the same end pieces) and low cost. I've read lots of complaints about pipes leaving black stains on the woodwork. Aluminum bar clamps are similar in function, and also low cost, but I hear they can bend under pressure.

Squeezer/spreader clamps can go both ways, but to me their real distinction is the ability to apply the clamp to the workpiece when you have only one hand available. These come in a variety of "strengths" and lengths from four inches or less to 36 inches and more. Prices vary hugely.

Handscrews were a total mystery to me for a long time. I still don't think I've ever used them for a glue-up. I have used them to hold parts while I edged workpieces on the router table. I've also seen cases where the handscrew held the workpiece while the handscrew itself was clamped to a workbench. The magic is the flat surface which allows the clamp to be held on a work surface or even in another clamp. The second piece of magic is that the jaws need not be parallel – a variety of possible closing angles supports unusual positions compatible with wedges and other shapes. A third element is that the clamps are made of wood, so you can shape them to meet your needs or drill into them to add some special capability.



There are a whole family of "right angle" clamps mostly designed to meet the needs of picture framers, but some are aimed at cabinet makers as well. These include metal and plastic jigs as well as band (strap) clamps in both 90 degree and variable degree versions. I've had good luck with the band clamps and their ratcheting mechanisms, but not so much with the fixed versions.

I started out years ago with a bunch of C-clamps, but must admit I haven't used one in a long time. If you walk through a woodworking supply store or spend time flipping through their catalogs, you will find dozens of special clamps that solve specific challenges – edging, pocket holes, face-frames, spring

clamps, etc. There's no limit on how much money you can spend on clamps. The question to ask is whether there is a material difference between cheap clamps and more costly ones. Given my experience with woodworking tools in general, I would suggest that there is. More than just mashing two pieces of lumber together; the clamp can make the experience more divine! I wonder if there isn't a business opportunity for a "clamp lending library" or even a rental service for those times where you need a particular clamp for a particular glue up.