Rabbets, Dados and Plows, Oh My!

Do you ever try to imagine yourself doing woodworking in a world without power tools? Think about cutting rabbets or dados without a router or a table saw. Today when we talk about or use hand planes we tend to think in terms of smoothing or flattening a surface. Planes used for that purpose (ie. smooth, jack and jointer planes) are referred to as bench planes. The fact is that bench planes are a very small portion of the hand planes that at one time existed.

When you look at all of the "specialty" planes that were once in common use, it boils down to this. All of the work that is today done with a planer, shaper, router, jointer and to some extent even the table saw was once done with some sort of hand plane. We're talking about molding, window sash, tongue and groove, sliding dovetails, raised panels, rabbets, dados and the list goes on.

Let's concentrate on those planes used for some joinery and are still in fairly common use even today.





Pictured are two rabbet planes (left) and two filletster planes (right). The rabbet planes have no adjustable fence, the filletsters do. The filletsters also have a spur ahead of the iron. This spur scores the wood fibers when working across grain. Both of the wooden planes shown have skewed irons the metal versions do not. The plow plane (below) is used for cutting grooves with the grain. With an adjustable fence and depth stop, the user can set it to cut a determined depth and distance from the edge of the board being worked. The plow plane has a set of 8 irons of different widths varying from 1/8" to 5/8" enabling you to cut grooves of various widths. This one is a Sandusky # 120 which in 1925 sold for \$13.70. A lot of money at the time. Still a good deal considering that the price on their top of the line plow plane, that same year, was \$44.00.





The plow plane has no spurs to allow cutting across the grain, so what about dados? Enter the dado planes. These were made in assorted sizes, each dado plane being made to cut a specific width dado. The dado plane (left) has spurs ahead of the iron. The spur is the cutter at the front of the plane which is at 90 degrees to the plane's sole. The metal plane (right) is a "combination plane". You can see that it very much resembles the plow plane with it's adjustable fence, depth stop and interchangeable irons but that's where the similarities end. This particular plane, a Stanley No. 46, also has spurs and the cutter is skewed enabeling the user to cut rabbets and dados as well as plows or grooves. It can also be used as you would a filletster. By the way, while searching through old catalogs and manuals, you will find filletster with no less than 3 different spellings.



So what about tongue and groove? You could use a plow plane to cut the groove and a rabbet plane to cut the tongue. You've probably cut a tongue using the table saw or router by cutting a rabbet on the edge of a board, flip the board over and cut another rabbet, same edge but opposite face. Two rabbets make a tongue. Just because your using hand tools doesn't mean you have to sacrifice efficiency so why cut a tongue in two steps if there is a plane that will do it in one?

Match planes (below left) were sold in pairs and their sole purpose was to cut tongue and groove. Each pair was made for a dedicated thickness of wood, one cuts the groove and the other cuts the tongue. The metal version (below right) is also for a given thickness but instead of a pair of planes, the one plane cuts both the tongue and groove. This is done by means of a pivoting fence.



After you've cut a rabbet, dado, groove or tenon you may find yourself having to "fine tune" the fit. That's where these little beauties shine. The one on the left is a shoulder plane, not to be confused with the British shouldering plane. The shoulder plane with it's cutter bedded at a low angle excells at trimming tenons to fit but it also will do a fine job of fitting tongues or rabbets.

The strange little pair on the right are what's called side rabbets and there is a left and a right. If the dado is a little tight, one of these will do the job. Having a left and a right handed plane to choose from enables the user to negotiate grain direction and confined space situations. Wooden versions of these planes were made as well but at present I do not own any.



I'll be the first to admit that I am certainly not ready to unplug every power tool in my shop. I do have to make a living and honor deadlines, at least for the present. Despite that, there are still many times when using one of these planes (as well as bench planes and molding planes) makes perfect sense to getting the job done in an efficient manner.

These tools can be a pleasure to use so, if you haven't already done so, give them a try when you get the opportunity.

Terry Landry