

Top 10 Hand Tools

...in no particular order

By Tom McLaughlin

EPIC
WOODWORKING



#5 Hand Plane

Alright we've all seen the pictures. It's always the guy hand planing a board, the iconic photo of a craftsman at work. The number 5 hand plane, also called a jack plane, is indispensable for quickly flattening a surface, cleaning off the dreaded rippling machine marks, and straightening and truing parts like drawer sides and runners. But when it comes to choosing my favorite plane, it's

almost a toss up between the number 4 and longer number 5, but if I had to choose only one, I reach for the number 5 for its additional straightening and truing capabilities.

The actual #5 Jack plane in my tool cabinet is a sweet older Stanley/Bailey model that are sometimes available at flea markets, and online. Or maybe you'll find one in your grandfathers toolbox somewhere, like I did my treasured #7 jointer plane that I like to keep prominently on top of my tool cabinet...a reminder of all the great craftsmen who have influenced me. But if you prefer to buy new, you can do very well to pick up a fine modern reproduction like the Lie Nielsen brand. I recently acquired the Lie Nielsen low angle jack plane that is giving my older Bailey a run for the money.



Card Scraper

Pound for pound this flat rectangular piece of metal is probably the most effective tool in my cabinet. When well-tuned and used properly the card scraper will yield the most beautiful light and wispy shavings, unachievable with a hand plane. The genius of this flat flexible piece of metal is the cutting edge along the length, which is actually a slight curl of metal called a burr. Forming

this burr is a hand skill which takes a little getting used to, but with practice, you will master the skill and think nothing of it when the times comes to refresh the edge.

The card scraper is very useful for shaving and smoothing out rough patches, and detail scraping to remove small areas of tear out. But this tool can really do so much more. I often use it to blend two surfaces together, most commonly the intersection of two pieces joined at a right angle to one another, intended to be finished in the same plane, or flush as we say. And you can also scrape shavings without concern for grain direction, especially useful cleaning up wild figured woods and around knots you might like to feature. All in all, the card scraper is a pleasure to use, as well as a tremendous time-saver in reducing the amount of sanding you will need to do.



Bench Chisels

What would a tool cabinet be without chisels? They come in various lengths. Some are short, called butt chisels, for close control work. While the longest, called pairing chisels, are great for hand shearing cuts. But the most used in my tool cabinet are the average sized all-purpose type, called bench chisels. Commonly available in sets of five or six that run from 1/4" wide to 1" wide, but larger widths are available.

You don't need to buy the most expensive to do nice work, but price is a reflection of the quality of chisel you can expect for the money. Quality is generally based on the fineness of the steel and its ability to hold an edge, meaning to stay sharp for extended use. My first was a set of blue marbles chisels, and now my bench chisels are the Swiss Made brand which hold a very nice edge.

6" Metal Rule

(15 cm outside US)

In addition to carrying a longer rule of some kind, (for me it is a 16' tape measure on my hip), the most frequent go-to measuring tool I own is a 6 inch metal rule which I keep close by in my apron chest pocket for quick access. I use this inexpensive rule frequently to check dimensions on all kinds of project materials...material thickness, tenon length, dado depth, etc.



Unlike nearly all the rest of the world which uses the metric system, here in the United States we use the imperial system, so my rule has increments in inches, 16th's, 32nd's, and 64th's. But every once in a while I need to know the measurement in metric, so I have another 6 inch rule which has metric on the reverse side, approximately 15 centimeters.

The increment markings are cut finely and cleanly into the steel giving precise and quick readings. And there are also handy increments marked on each end of the rule which, when laying the rule on its long edge, makes a convenient accurate way to check heights of things like router bits and saw blades.

Sliding Bevel Gauge

Also called a sliding T-square, the bevel gauge is an adjustable square, used for transferring angles accurately. I use mine most often when building chairs because of the numerous angles involved. If copying from another piece, the bevel gauge is simply adjusted against the angle and locked in. But when working from a drawing, the angle can be transferred by actually laying the bevel gauge on the drawing.



I love the directness of this tool, taking it right from the drawing to the workpiece or the table saw where it is used to set the angle on the saw blade or the fence angle on the crosscut sled. Of course the angle can also be set from a protractor or other calibrated angle measurement. I have several, but the one I use most is a Japanese aluminum style called a Shinwa sliding bevel.

Combination Square

Every tool cabinet needs a good combination square. And while you can get by with less expensive, beginner versions of some tools like chisels, it is well worth spending the extra money to get a first-rate combination square right from the start. Just as a carpenter must have a dead-on accurate level, the furniture maker and fine-woodworking craftsman requires a true and trustworthy square to rely on with absolute confidence. The kind I have in my cabinet and have enjoyed using for years is a Starrett brand.



In addition to its primary use for verifying 90 degree angles on work pieces, the combination square is frequently used for marking out joinery. Also a great tool for setting up machinery, checking tables and blades for squareness. The slide bar is convenient for checking depth of mortises, dados, etc., and the beveled side is useful for marking out and verifying 45 degree angles like simple rectangular frame miters.



Marking Gauge

I always get the feeling I'm using an old world tool when I pick up my marking gauge. But just because it has been around a while, does not mean it has become obsolete.

I often share in my classes, the secret to great hand-cut joinery is simply marking and cutting to those marks with accuracy. The marking

edge, having simply a block-like fence with an adjustable cutting or marking edge, is ingenious in its simplicity.

This tool shines when laying the joinery for hand-cut dovetails, the signature joint for fine craftsmanship. Once the fence is set to the desired distance, the marking edge actually scores, or cuts, the layout line most often across the grain...guaranteeing accuracy because it is referencing the depth directly off the end of the workpiece. And the added bonus of the resulting layout line, is the fact that it is actually a finely cut line, leaving a perfect, fool-proof seat into which is set the sharp chisel edge allowing you to chop to the line with great precision and confidence.

I am still using, mostly because it is what I started with, the old-style wooden block type. But I have used on occasion those with a round brass style fence that works well and feels great in your hand, perhaps easier to use than the block style...but some habits die hard.



Spokeshave

Maybe it's my Irish roots, and all those potatoes I peeled as a kid helping prep for dinner for our family of ten, but I love using the Spokeshave...a vegetable peeler-like tool for wood, such a direct and responsive tool. Of course, it is much heavier than your typical peeler, but the concept is very similar.

The spokeshave is actually a plane with a very short sole, and extension handles at each side. Most commonly, the sole is flat, and the cutting iron is set just as you would a hand plane to achieve a nice shaving. However, you can find spokeshaves with a variety of shaped soles, often curved to facilitate working with rounded parts.

The name comes from their original, earliest use, forming rounded spokes for wagon wheels or chair backs. You may have seen the old shaving horses, which held the workpiece in a swinging jaw, held tight by pushing away the lower pendulum with your feet. This made for a comfortable, quick and effective way to hold the work, while the spokeshave was used with a pulling motion drawing toward your body.

But I use mine for all kinds of shaving cuts, pushing and pulling, sometimes setting the cut heavy to remove material very quickly. Then other times adjusting to a finer, thinner than a potato peel, shaving for finishing cuts.

The brand I have and use most often is an older Stanley #151 that I picked up at a flea market years ago. I like the adjustment knobs that help change the setting quickly and accurately. But I own 5 or 6 in various sizes and shapes. Some of the best available these days are made like the earlier ones, in wood, but with modern adjustments and fine steel cutting edges.

Blockplane

If there ever was a "go-to" tool in my cabinet, my block plane would be it. An everyday tool for sure, that fits in your palm so sweetly it becomes an extension of your hand. So useful for all kinds of small trimming and shaving tasks. One minute I might be using it to create a chamfered edge on a chair leg, and the next I might be shaving an inlaid strip to flush with a tabletop surface.



I always liked the many practical and effective uses of the hand plane, and I am not getting paid to say this, but my precision and pure enjoyment with this great tool sky-rocketed when I broke down and spent the \$165 to buy my first Lie-Nielsen low-angle #60 1/2...thanks to the persuasion of my friend Garrett Hack. The 60 1/2 is a fantastic hand plane that, when well tuned, is capable of the finest, most precise and controlled work. Able to beautifully shear thin shavings across end grain, you will grow to love the reassuring feel of this plane in your hand. At times I have also clamped this plane upside down in my vice when needing to plane small pieces cleanly and accurately.

Rasps

My first encounter with a rasp was in my basement growing up. It had very coarse cutting teeth, laid out in straight rows. And having no handle, we wrapped hockey tape around the smaller end so we could get a good hold it...a rough course tool for less than fine work, especially in our young, hurried hands.



Fast-forward years later, when I learned about the existence of finer cutting rasps from a Phil Lowe woodworking video (pre-internet days!) The beauty of these tools is the teeth are laid out in a random pattern, so very few teeth are meeting and the work at the same time. The result is a shockingly smooth, fast and controlled cutting tool. One side is flat, the other convex for working into concave surfaces and the end tapers for smaller spaces. I love this tool for finer sculpting and smoothing surfaces, usually following spoke-shaving.

But there is a greater cost in producing the random tooth pattern into polished metal, then hardened to hold a sharp edge over many uses. So be prepared to spend a bit to own the pleasure of using these fine tools. I have the Nicholson Pattern Maker Cabinet Rasp, which is best owned as a pair, the #49 which is a faster more aggressive cut, and the #50 which offers the finer smoother cut.

And a few bonus favorites as it was difficult to hold the list to 10!



4" Double Square

This is one of those tools I wondered if I really needed when I bought it years ago, but now I can't imagine working without it. This little 4" square does so many things, just easier than the larger combination square. I love the quality, weight and feel of it. So simple to verify a depth, mark a quick layout line, or check squareness of the bandsaw blade.

I remember reaching for this square during a class, while showing a student something. He took one look at this mini square, started laughing and said "You have a tool for everything!" I couldn't help seeing the humor in it myself, but it is seriously a great tool, that I reach for every day.



The Scalpel

Only in recent years did I discover that companies who supply scalpels to the medical field, were more widely making them available to the craft world. So now, when the situation calls for it, instead of just saying it, you really can make a cut "like a surgeon!"

I can't say enough about the quality of cut and control you can experience with this relatively cheap cutting tool. You need only buy the handle you prefer, some are inexpensive plastic, while other handle options are a heavier, sturdy feeling steel. And they can take a variety of shaped blades that are interchangeable with a standard locking mechanism.

But the beauty is in the control and ultra sharpness of the cutting blade, which is hardened more than the typical utility knife so it lasts longer. They also have a slight hook shape toward the end of the blade that adds to the cleanliness of the cut, which I find especially effective for accurate veneer and inlay work. I got mine from CS Arts & Crafts, and I like the stainless handle #3, with the size 10A cutting blade.

Dovetail Saw

Over the years I have experimented with a few different styles of hand saw for cutting dovetails, Japanese which are very thin and cut quickly on the pull stroke, American which cut on the push stroke, and hybrid saws which were shaped like American, but cut had Japanese teeth and cut on the push stroke. While I enjoyed success with each of them, my favorite to use when cutting dovetails is the American style.



It may have something to do with your preference for the grip, the Japanese more of a straight extended handle, and the American being the more traditional pistol-grip type handle. I have a more controlled feeling with the pistol grip, especially those that are sculpted so nicely to fit so comfortably in your hand.

The true dovetail saw is actually configured with a "rip tooth" configuration since the majority of dovetail cuts are done along the grain. A light touch, with my thumb gently against the side of the saw as a guide, gets me off to an accurate start, then the saw tracks smoothly and quickly to the bottom of the cut with just a few strokes. The one I have in my cabinet is the 15 teeth/inch Independence dovetail saw from Lie-Nielsen, a true pleasure to use.

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