

THE CHARLOTTE SAWDUST

The Official Journal of
The Charlotte Woodworker's Association

www.charlottewoodworkers.org

Meeting Time

Meetings of the Charlotte Woodworker's Association are held the third Monday of each month, except for December. Meetings are typically held at THE WOODWORKING SHOP of Charlotte, 116M Freeland Lane, Charlotte, NC. Exceptions will be announced well in advance. If you need directions to the shop, visit their web site at <http://www.woodworkingshop.com> and click on the link to "Store Locations".

Following a social and refreshment time that starts at 5:30pm, our meetings start at 6:00pm. Get to the meeting early and get to know your fellow woodworking enthusiasts. Please refrain from placing food, drinks and trash on worktables and shelves around The Woodworking Shop, they have allowed us to use their facilities and being a good guest is, well just the right thing to do.

CWA Mentor Program

The following members have offered their help to anyone interested in learning skills or new techniques in their area of interest. Contact each person to arrange times to get together if interested.

Name	Area of Interest	Phone	Email
Wayne Cooper	***	704.409.1417	cooper@arconmfg.com
Bill Golden	Shopsmith & Totalshop	704.525.9691	poptoyshop@earthlink.net
Dwight Hartsell	Woodturning	704.598.6029	woodwright@aol.com
Jeff Jacobs	any woodworking	704.309.1263	jacobj@meckco.com
Wayne Manahan	Sharpening	704.768.0768	wmanahan@vnet.net
Gil Milsaps	Windsor chairs	704.875.0758	gad32about@aol.com
Alvin Tench	any woodworking	704.824.7717	alvintench@netzero.com

*** Wayne Cooper has a fairly complete shop and would actually like an experienced woodworker to use it and teach him how to use it properly in exchange for use of the shop. If you are interested in helping Mr. Cooper please contact him directly to make appropriate arrangements.

Email Option for SAWDUST

If you don't already receive THE SAWDUST by email, please consider this option. By receiving the newsletter by email you 1) save the organization money, 2) receive color pictures, and finally 3) quicker delivery. Sign up today for the email option by sending an email to secretary@charlottewoodworkers.org and your delivery method will be changed immediately.

\$\$\$ Save Money Everyday \$\$\$

As a member of the Charlotte Woodworkers Association you can save 10% off all your purchases from The Woodworking Shop, excluding wood and power tools. Thanks to our hosts at the Woodworking Shop for allowing us to have our monthly meetings and extending 10% off to CWA members.

Upcoming Events

Midwest Tool Collectors Association & Early American Industry Association in Hickory – May 17 @ Hart Square for more information contact CWA member Brent Richardson 704784-8891 or tooldad@vnet.com. Mike Patterson gave me some valuable information regarding this show; it's off Highway 10 and 127. I don't have anything else regarding the show.

Be sure to check ahead of time and schedule yourself into the classes you want.

Write an article for Sawdust

Next month we will have our first article from someone other than me in this section. Look for it next month; the article is on **Flattening your water stones for optimum performance**.

This month I'll talk a little about what I call my shop. My shop is actually a two car garage, and yes I actually do park both our cars in the garage, so long as I am not working on some project that takes up more room than I have. The last big project I did that used up a lot of space while putting on the finish was a cradle for some friends last June. I had pieces suspended from the ceiling on my side of the garage while staining and drying. It was a site to see.



My goal was to 1) support my new woodworking hobby, 2) support my other interests such as car repair, my own cars that is, 3) have function for anything else 'handyman-ish'. That's not always easy to do, I have quickly found out. Don't want to get brake dust or any type of car fluid on my bench to 'spoil' my projects, so I've come up with a new design for a workbench that functions more towards woodworking and I hope to remember to protect the top while working on car or yard stuff. I just know when I rebuild the carburetor on my '82 truck, I'll get gasoline and cleaner on the bench.

Here are a few pictures of my shop after completing the last workshop project (miter saw workspace) in mid-January.



Left – clamps, drill, jointer, tools



Back – sheet storage and workspace



right hand side – miter saw station

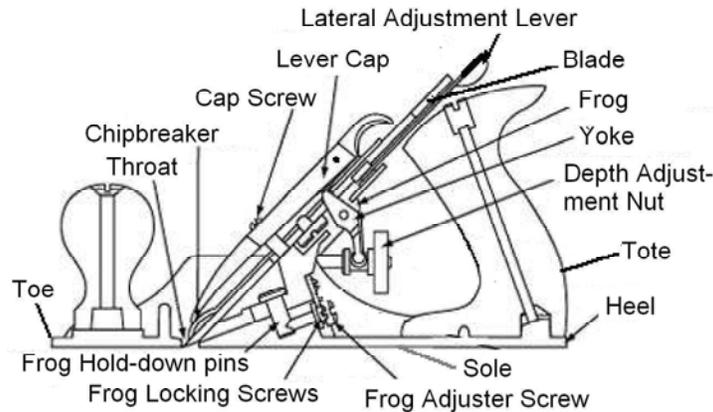
If you are interested in any of my projects or the chronological progression of my shop, you can visit my, always under construction, web site at: <http://www.johnswoodworking.com> . Perhaps next time, I'll bore you with my future plans for this shop and what I dream about in my next shop/garage combo.

Why not share some of your knowledge with your fellow CWA woodworkers. Share safety stories, project stories, tool experiences, perhaps even talk about the different tools that you use more often and why. It's your newsletter, why not make it better.

Scrapers and Handplanes for Woodworking - Part 1 – Scrapers – March Meeting

By Wayne L. Manahan in cooperation with Brent Richardson

In March I gave a demonstration on scrapers and handplanes and talked about some of the important characteristics of each. In last month's issue of Sawdust I published part 1 of the written information that I'd put together to provide a handy written reference concerning some of the important characteristics of scrapers and outlined the steps for sharpening a hand scraper. This month I'd like to provide a few guidelines concerning handplanes for woodworking, and some tips on their selection and use as well as a few ways to make them work better for you.



Parts Breakdown for a Bedrock Style Bench Plane

When you get down to the basic mechanical function of a handplane, it can be described as a wood chisel mounted in a fixture that holds it securely at the selected depth of cut, and allows minute adjustments to the blade's setting to be made with relative ease. The characteristics of the handplane's sole, its length, its width, surface treatments, and so forth, contribute to the handplane's ability to create a smooth flat surface, or to remove wood quickly and aggressively, as in the case of a scrub plane.

The overall design of this blade-holding fixture contributes to ease of use, and comfort when the plane is used for extended periods of time. If the tool is properly built for you, you will find reaching for it to be automatic when the task calls for its use, and you will find using such a handplane a pleasure that is difficult to explain but easy to feel, even for the first time user.

Today we are seeing resurgence in the use and availability of handplanes. Modern makers, such as Clico Tooling, which makes the Clifton line of handplanes, and Lie-Nielsen TOOLWORKS, Inc. are reintroducing models of handplanes that haven't been commercially available for decades, as well as introducing new and improved models that offer features never before available. Antique handplanes are still available, and while collectors seek many, there are still plenty of good working handplanes available in the second hand market for those who take the time to learn what is worth buying and what is not. While I don't pretend to be an expert in this area, I can offer some tips that will help you select and tune handplanes for everyday woodworking tasks. Here are a few tips.

Different Jobs Call for Different Planes

Roughing lumber to dimension calls for a scrub plane. This is work usually done with a power jointer, possibly resawing, and power planing. If you are sticking to traditional hand tool methods, you'll probably need to do some of the work with planes. A scrub plane, Stanley #40, with its curved edge and open throat design, makes

quicker work of removing large quantities of waste than other types of planes. This plane works best when planing is done at a skew angle to the direction of the grain.

For all-around bench use, a No. 5 Jack plane works well.

For flattening large surfaces, the long soles of a jointer plane, Stanley #6, #7 or #8 depending on sole length and overall heft, ensure that flatness is optimized.

For that final smoothing, a heavy bodied smoothing plane, Stanley #3, #4, #4 ¼ or 4 1/2, perhaps with a high angle frog, does an excellent job.

For work on small items with complex curves, such as the violin that I've been working on, various small violinmakers' planes are the proper choice.

There are specialty planes for shaving tenons, cutting dados, trimming rabbets and so on. The variety is almost endless.

To more fully appreciate this variety, I highly recommend reading a book published by Taunton Press entitled "The Handplane Book" written by Garrett Hack. This book is extremely well written, very readable, and details everything most woodworkers will ever need to know about handplanes (and scrapers too). It is available from all local bookstores, woodworking shops, and directly from Taunton Press. To learn more about Stanley planes and their value, I recommend "Antique and Collectable Stanley Tools" by John Walter.

Look at What You Have to Cut, and Then Select the Proper Handplane

It's really that simple. Think about the cut you need to make. Must it be flush to the edge of the plane? Must the surface be especially flat? Is the wood highly figured and difficult to cut? If it still doesn't make sense to you, talk to someone whose knowledge you trust and most of all; try the plane to see if it does what you need it to do. See if it's comfortable for you to use. This is very important. If a handplane doesn't work for you, you'll never use it and its purchase is a waste of you budget. Don't throw money away on something that doesn't work.

Look for quality, solidly built tools. A flimsy handplane is never a bargain, not even for free. Handplanes need to be solid, sharp, and well adjusted to perform well.

If buying used, beware of cracks in cast parts, and also of excessive, damaging rust. (Surface rust is fine but once pitting has begun making the tool useable is just about impossible.) You must start with something that there's hope for if you ever expect to have a good tool at the end of your restoration efforts. I recommend Mike Dunbar's book "Restoring Antique Tools" as a guide to understanding tool restoration.

Ductile Cast Iron

At least one modern maker, Lie-Nielsen, makes many of their tools from ductile cast iron. This type of iron is not brittle like traditional cast iron was. Dropping a tool made of ductile cast iron by accident leaves you with the same tool, typically no worse for the incident. Dropping a normal cast iron plane could easily leave you with pieces. If you can afford to buy ductile cast iron, it is probably money well spent.

Quality of Steel in the Plane Iron

Modern makers are using specialty steels such as A2 tool steel that take and hold a finer edge than some of their predecessors. It is also true that some of the steel in irons made earlier in the 20th century are better, from a point of view taking and holding an edge, than many of those sold in the 1970's on in standard production tools. Also, everything else being equal, a thicker iron is a better choice, as it chatters less, leading to a smoother cut.

Mass in the planes iron is generally a good thing to have when selecting a plane. One source of a thicker plane iron is to purchase one of the blades manufactured by Ron Hock. These blades are available from several sources including directly from Hock Tools at:

HOCK TOOLS, 16650 Mitchell Creek Drive, Fort Bragg, California 95437

Hock Tools toll-free telephone number is (888) 282-5233 and their fax number is (707) 964-7816

On the web, you can find Hock Tools at <http://www.hocktools.com>, I've ordered from them in the past and have been pleased with both their product and their service. If you feel more comfortable dealing with a retailer, Highland Hardware in Atlanta has these blades in stock. Their toll-free number is 800-241-6748.

Fit and Finish

The better parts fit, the better the plane will typically work. The fit of some parts, like the fit of the chip breaker to the plane iron, must be tight or shavings will catch in the gap and jam up the throat of the plane.

You should be able to make the front knob and rear handle (tote) fit tightly as well, since a secure fit there is necessary to give you proper control of the plane.

Ideally, the backlash (slop) in the blade adjustment mechanisms will be small. Otherwise the plane is more difficult to adjust.

Surfaces that will contact your work should be polished to slide easily. To some extent, you can do this yourself after the purchase, but having it done to start with adds value.

Surfaces that contact each other in the assembly of the plane should fit well. Perfect fit is best. A plane where all parts fit perfectly will tend to work much better than one that doesn't have such a fit. Think of it like this, if it isn't loose, it stays where it is positioned. It doesn't chatter. It just does what you adjust it to do.

Weight

In most cases a heavier plane works better, cuts easier. Weight keeps a plane down on the work surface and the mass helps carry the plane through areas of difficult grain.

Adjustable Throat

The ability to adjust the throat of a plane allows you to improve the quality of the cut you make. This is because tearout can only occur to the degree that the throat opening allows. There are at least two ways to adjust the throat opening. One way is to move a plate in the sole forward or backward to adjust the opening, another way requires moving the frog. The Bedrock design, which Lie-Nielsen has copied, has a movable frog. The drawing of the handplane at the beginning of this article shows this design. Of these two ways, the plate in the sole is usually quicker and easier for the operator, but for a plane like a smoothing plane that would usually be set accurately once and then adjusted infrequently, the Bedrock design provides an excellent solution.

Corrugated Soles

Soles of planes were often corrugated to reduce friction. Whether or not you prefer this is up to you. Try both types of soles and see if you can tell the difference. I think that I can. Be aware that on a new plane, corrugation usually adds to the cost of the plane, as it requires an additional machining step beyond what a flat-soled plane requires. One point to keep in mind is that a corrugated sole is easier to hone flat, and a flat sole is absolutely critical to effective plane use.

Tips on Plane Preparation and Setup

Sharpening

Use flat stones - you can flatten your stones using wet-n-dry paper on plate glass, or using a diamond stone larger than your plane, or probably by several other methods. You just need a material that will cut away the surface of the stone to flatten it, and that material needs to be large enough to allow the entire stone to be in contact with it at one time.

Consider using Norton waterstones if you use waterstones - These stones cut faster and have a more uniform abrasive size than many others. Mine cut almost twice as fast as a competitive Japanese waterstone. Or is sure seems that way. Others report similar results.

For effective sharpening, I always focus on getting the back of the blade honed flat as a first step before focusing on the beveled edge. A flat back is imperative to the forming an effective edge. A diamond stone is effective for this work as it removes material very fast. Once you have flattened the back of the blade, ensure that you bring the back surface to a high polish. You should be able to easily see your reflection in the finished surface. It should appear clear and scratch-free.

Once the back is flattened and polished, you should never need to more than a minor touch up to this surface. The simple step of removing the burr from sharpening the bevel should keep this surface at a high polish.

As an aid to sharpening, you can use permanent marker on the edge to give a visual indication of your progress. This lets you check that you are removing material from the blade where you should be removing it, and if you aren't you can make intelligent adjustments to your approach.

Grind a square edge, hone with 1000 grit waterstone or equivalent, and polish with 8000 grit waterstone or equivalent. This is a quick and totally adequate approach.

For the finest edge, strop with a flat leather strop and a honing compound such as Yellowstone Compound.

Both sides that intersect to form the edge must be sharpened and polished. Typically the back of a plane blade is kept flat.

Once again, you should be able to see your reflection in an edge that is properly polished.

Adjusting

Slightly loosen the blade locking mechanism prior to adjusting the blade. Tighten once the blade is adjusted.

Don't tighten the blade with more pressure than necessary. This has a tendency to warp parts out of flat in some plane models.

To check for uniform depth of cut, take a fine shaving from each edge of the iron. If the shavings are identical in thickness, the iron is adjusted parallel with the sole of your plane.

If you have further questions, send them to John Cahill and ask him to post them in a future issue of Sawdust. Hopefully someone in our association will have the answer you need.

Note: Although Brent Richardson asked for no credit for his contributions to this article, his help was invaluable. Thanks to Brent, several more good references were identified, and a number of key concepts that I had missed were included. Brent also pointed out that Hock blades are available to anyone seeking to upgrade a

plane's cutting iron or simply seeking to use a valuable historic tool without putting further wear on it's blade. I appreciate his help, and thank him for his able assistance.

Share your lumber sources

Do you have a good lumber supplier you can share with your fellow CWA members? Let's get a list together and share that information on the web site and in the newsletter, everyone likes to save a dime.

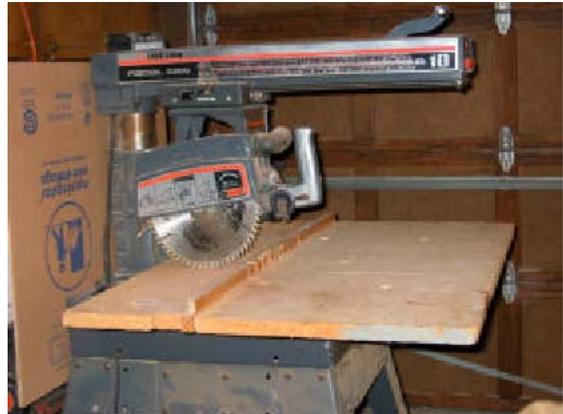
Classified Section

\$\$ For Sale \$\$



Vertical/Horizontal metal cutting bandsaw with 80" cutting depth by Carolina of Traveler's Rest, SC. Saw has a new motor with less than 10 hours of use. Blade is 115 1/2" x 3/4". The unit is 41" tall and 51" wide. Will sell for \$500.00.

Contact Rick Hartsell @ 704.238.0682



Craftsman 10" radial arm saw with 1 month old motor, with 1 year warranty. Can be wired for 110 or 220 volt. New this would cost \$800.00, will sell for \$375.00.

Contact Dwight Hartsell @ 704.617.0188



Multico Mortising Press, Model # PM12. Purchased from Garrett Wade and has never been used. New this would cost \$375.00, will sell for \$225.00.

Contact Dwight Hartsell @ 704.617.0188

Approximately 150 board feet of 1 inch thick Heart Pine – various widths from 3 to 8 inches. This wood is approximately 100 years old. Asking \$100.00 for all. Contact Mike Patterson @ 704.435.5179.

Approximately 1000 board feet of 1 inch thick Oak – various widths from 6” to 10”, the boards are about 12 feet long. Asking \$1/bf with a 100 bf minimum, would like to see all 1000 bf for \$900. Contact Mike Patterson @ 704.435.5179.

Craftsman 6” jointer with extras \$250.00 and a Belsaw 12 ¼” 3 hp planer with extras, \$600.00. Contact Bill Skinner at btskinr@worldnet.att.net or 704.364.5168 (before 6pm)

Wanted

Help with the JessEm ROUT-R-SLIDE™

- Patrick Perry needs a tutor who can help him learn to use the JessEm ROUT-R-Slide™ to make dovetails. He is willing to pay for your time, or swap some exotic lumber for your help. If you are able to help you can contact Patrick @ 803.366.6080. You may call collect.
- A UNCC student, Jordan Moore, is looking for a job as an apprentice or whatever would be available to learn some woodworking skills. He is looking for about 20 hours of work a week. You can contact Jordan at jordanmoorels@yahoo.com or 704.907.1877.
- Sandy MacDonald is looking for woodworking course or seminars the week of 14-18 July 2003, anywhere in NC, SC, GA or TN. Sandy's wife is taking a class in Greenville, SC and he would like to take a class during the same week. They are from Canada so a trip together would be ideal. You can contact Sandy at ajmacd39@hotmail.com.
- The Boy Scouts are looking for a woodworker to assist in setting up a woodworking shop at Camp Grimes (located south of Marion, NC). The shop will be used by Boy Scouts and camp counselors, only hand tools will be allowed, no power tools. Contact Mark R. Thompson @ 704.536.0784 if you are interested in helping.
- Fine Woodworking magazine is offering 10% off if 10 or more people renew or get a new subscription.

H & S Lumber

Mr. Robert Boland, Manager
4115 Monroe Road
Charlotte, NC 28205
704.333.3130 (sponsor)

Harbor Freight USA

Mr. Martin Treadwell, Manager
3852 E. Independence Blvd.
Charlotte, NC 28205
704.569.0182 (contributor)

The Woodworking Shop of Charlotte

Mr. Tony Collums, Manager
116M Freeland Lane
Charlotte, NC 28217
704.521.8886 (contributing/sponsor – except power tools
and wood)

2003 CWA Officers

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Upcoming Meetings:

May 19, 2003

June 16, 2003

July 21, 2003

At The Woodworking Shop

Woodcraft

Mr. David Boyuka
1725 Windsor Square Drive
Matthews, NC 28105
704.847.8300 (contributing)

Show your CWA membership card at any of the listed places and receive benefits (except for Woodcraft and Harbor Freight USA, which are not able to provide sponsorship in the form of discounts).