Client and the Design Process
The Zen of Woodworking

The Old Saw

oil finish • low-relief carving • woodturning on-line
tool review • reverse curves • picture frame • hand planes • shaper jig

Calendar

Feb 4  BIG
Feb 18  Guild Meeting
... Routers at Homestead – p2
Mar 11  Period Furniture
Mar 18  Small Meetings
... Full Details – p22
... Staining & Coloring Wood
... Production Joinery
... Carved Molding
... Make a Spoke Shave
... Entertainment Centers
Mar 25  GSWT
Apr 1  BIG
Apr 15  Guild Meeting
... Note – Meeting moved to Apr 15
... Brass Hardware – p27
May 6  Period Furniture
May 12-13 Turning Symposium
... at Pinkerton Academy – p3
May 27  GSWT
Jun 3  BIG
Jun 17  Summer Trip
... Starrett/Nichols & Stone – p27
Jun 24-25  Canterbury
July 22  GSWT
Aug 5-13  Sunapee Fair

mark your calendar May 12-13 – page 3

Turning Symposium

lid & bowl by George Saridakis – photo by Jeff Baird

vase & photo by Brad Vietje
Reflections

Well, the hectic holiday season is over and another new year is well underway and it promises to be a great year for Guild members. Check out the Guild calendar on our website (www.gnhw.org) and you will see sixteen activities scheduled in the first six months! There is something for everybody in that schedule.

If you are a woodturner, this is the year! Once again we will host a major woodturning symposium and it will be bigger and better than ever – see the two articles on the next page.

How’s the Guild doing these days? Our membership is at record levels with 386 members and our financial position is solid. We have a very full schedule of activities as noted above, a newsletter that is top-shelf in every way, and a long list of members who contribute their time and talents to make this an organization that delivers on our mission.

I think it’s important to reflect on that mission from time to time so I’ll use my “executive privilege” to do that right now. Our mission statement is – “The Guild of New Hampshire Woodworkers is an association of professionals and amateurs bound by a common interest in woodworking. Through regular meetings, lectures, demonstrations, a video library of those demonstrations, juried exhibits, a newsletter (The Old Saw) and other activities, the Guild strives to bring together the diverse interests of the New Hampshire woodworking community.”

As I look back on the year just ended, and the plans that we have for this year, I believe we are doing a pretty good job of achieving that mission. The growth of the Guild since its inception is a tribute to the membership who are involved in so many different ways. We can’t rest on our past achievements though. We need to make sure that we continue to listen to you, our members, so that we are delivering the services that you are looking for.

Last year, we began the process of updating our audio and video recording and duplicating equipment in order to insure that we can record our presentations in high quality, enabling all of our members to benefit from the meetings even when they can’t attend in person. If you have ideas or suggestions on what you would like to see the Guild doing, please pass them on to me or to any steering committee member. This is your Guild, and we value your input.

I’m looking forward to another great year of woodworking and a great year of Guild activity. I hope to see you at a Guild meeting this year!

Feb 18th, 2006

“Routers – things you did not know you could do with them”

Next Guild Meeting – Homestead School

The next meeting of the Guild is Saturday, February 18th at Al Mitchell’s Homestead Woodworking School in Newmarket, NH. The topic of Routers: Things you did not know you could do with them, will be presented by Al Mitchell and Bob LaCivita. This offering is part of the general plan to present one major guild meeting per year where the topic focuses on a common shop power tool.

Al will show us how to make a sliding dovetail using a handheld router and a jig. He will also address safety issues and gives a number of “dos and don’ts” in addition to tips on how to avoid common unsafe operations. Al will also cover making loose mortise and tenon joints. If time allows, Al and Bob might be able to demonstrate operations requested from the audience, but this is not a certainty.

Bob will cover how to make a sliding tapered dovetail with the router, as an alternative to the dovetail technique Al will demonstrate. He will also cover pattern routing from setting up the template through producing the finished part. As part of this, he will concentrate on using router bits with bearings and detail the allowances and adjustments needed in work piece sizing. Bob will show us how to set up and produce cope and stick joints such as those used in making raised panel doors. His final demo will be on how to cut circular pieces using a router.

Like all Guild meetings, 10-11am is allocated for a social hour, jigs and fixtures, and selling or swapping woodworking related items. The business meeting will run from 11-12pm and be followed by lunch from 12 until 1pm. The router techniques presentation will run from 1-3pm. Homestead school has a limited number of chairs for seating, so to insure your own comfort so please bring some type of seating.

Directions to the Homestead School can be found on their website at www.woodschoolnh.com. – Dave Anderson
announcements

May 13th, 2006

5th New England Turning Symposium

The Granite State Woodturners and the Guild co-sponsor a woodturning symposium every three years. It’s that time again. This year you’ll want to set aside Saturday, May 13th to enhance your skills.

The Symposium is open to new and experienced turners alike. For $50 you get a full day of demos by some of the best local and national talent available. Lunch is even included. It’s a full day starting at 8:30am and running until 4:30pm at Pinkerton Academy in Derry. A second related Youth Turning Symposium will be held the day before. See the article below.

There will be four rotations of demonstrations with seven choices for each rotation, a trade show filled with suppliers of equipment and wood plus an instant gallery where turners get to bring and display their work. Whether you are just starting out or have been turning for years, there will be more than you have time to see. Spindle turner or face plate turner, it doesn’t matter, there are programs for you.

Full details will be in the April issue of The Old Saw and will be listed on the guild website at www.gnhw.org. We expect registration packets to be available from the registrar, Clyde Daggett, and in a download format on the guild website around March 15th. Registration will not open until April 1st and early registrations will not be accepted in order to keep things fair. Fair Warning — this event fills up rapidly. So don’t delay when registration opens or you could be left out. – Dave Anderson

Youth Turning Symposium

We will be hosting a Youth Turning Symposium at Pinkerton Academy in Derry, NH on Friday, May 12th. This will be an extension of the New England Turning Symposium on Saturday, May 13th. The youth program will begin about 8:00am and end about 3:00pm.

There will be five - one hour presentations with three presentations to choose from at any time. The presenters will be Beth Ireland, Dustin Coates and Bob Rosand. The Youth Symposium is free to “students”. We will even provide pizza and soda for lunch when some of my students will demonstrate. I suspect that it will be difficult for teachers to get a professional day and for schools to make transportation arrangements. Therefore, I am hoping that the New England AAW Chapters can help out. If your members know of young turners they could offer to bring them to this event. Yes, your members could attend the presentations (for free). AAW members could also share the information with local teachers and encourage them to contact me so I can add them to the email list. We can handle about 100 students at this event. Although I don’t want to branch out too much, I want to mention that this event might also be of interest to students in art/sculpture or pottery classes. Heck, if AAW members have children or grandchildren, they could bring them. We have designed a program especially for youth and brought in presenters that are very good with this audience. It should be an exciting day. Please contact me if you want to be on the email notification list.

– Jack Grube at jackgrube@adelphia.net

May 12th, 2006

March 18th, 2006

5 Small Meetings

See details on page 22

Now that the snow has started to fly, it is time again to put the March Guild meetings on your calendar. There are five small meetings lined up for March 18, 2006. These meetings will follow the same format of past year’s small meeting venue. Instead of one large meeting, there will be five meetings at different locations during the day.

The Guild’s small meeting format has met with much success, so we hope you are able to take advantage of being able to see some other shops where the venue is focused to individual interests.

Remember to register early as there may be limited space in each workshop. The registration procedures are easy. Just connect with the contact person indicated under the description of the class. Call or email the contact person for directions. See page 22 for full details.

– Brian Sargent
Q Basic Tool Kit — What would be a basic cabinetmakers tool kit? — Anon

Bob LaCivita replies: Before, I list the tools, it must be made clear that a tool kit is dependent on what type of work you are trying to produce. A tool box for a craftsman who makes Windsor chairs will be similar but different than a maker of casework just as a master woodturner or carver. The question reads basic tools for a cabinet maker, so below I will list what I believe is very basic for this type of work.

<table>
<thead>
<tr>
<th>Measuring and Layout Tools</th>
<th>Tools</th>
</tr>
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<tbody>
<tr>
<td>Tape measure — 16’ with fine increment lines.</td>
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<tr>
<td>Combination square — 12”, steel, calibrated ¼” on one edge.</td>
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<tr>
<td>Protractor — something with an adjustable blade similar to the one made by General or Craftsmen — inexpensive.</td>
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<tr>
<td>Trammel points.</td>
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<tr>
<td>Marking knife.</td>
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<tr>
<td>Marking gauge — the combination marking and mortising gauge might be the place to start.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Sharpening</th>
<th>Tools</th>
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</thead>
<tbody>
<tr>
<td>Stone — India combination stone (basic) or a combination diamond stone (a more expensive alternative).</td>
<td></td>
</tr>
<tr>
<td>Oil — sharpening oil for India stone.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Planes</th>
<th>Tools</th>
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</thead>
<tbody>
<tr>
<td>Block plane — low angle.</td>
<td></td>
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<tr>
<td>Smoothing plane — #4 or #4½.</td>
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<tr>
<td>Jack plane — #5.</td>
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</tbody>
</table>

| Jointer plane — #7. | |
| Shoulder rabbet plane — similar to a Record #73. This is a large plane and will do everything a small plane will do plus the large stuff too. | |
| Cabinet scraper - Sandvik. | |
| Burnishing tool — to sharpen the cabinet scraper. The oval ones are nice. | |

<table>
<thead>
<tr>
<th>Saws</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crosscut saw — 8 or 10 point.</td>
<td></td>
</tr>
<tr>
<td>Dovetail saw — 15 point or greater with a rip tooth.</td>
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</tr>
<tr>
<td>Backsaw — crosscut.</td>
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</tr>
<tr>
<td>Coping saw.</td>
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<tr>
<td>Chainsaw — just kidding — but handy at times.</td>
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</tbody>
</table>

Note — I was trained with western saws. But eastern saws are wonderful tools and can be substituted for the above list.

<table>
<thead>
<tr>
<th>Chisels</th>
<th>Tools</th>
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</thead>
<tbody>
<tr>
<td>Paring chisels — Set of six min. — ¼” thru 1” wide in ¼” increments. Buy the best you can afford. A ⅛” chisel is very handy too.</td>
<td></td>
</tr>
<tr>
<td>Mortising chisels — ¼” thru 1” wide by ¼” thick.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drills</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drill — cordless rechargeable — 12 volts min.</td>
<td></td>
</tr>
<tr>
<td>Set of twist bits ¼” up to ½” diameter.</td>
<td></td>
</tr>
<tr>
<td>Set of brad point bits ¼”, ⅜”, ⅝” and ½” diameter.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hammers</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warrington hammer — 10 oz.</td>
<td></td>
</tr>
<tr>
<td>Claw hammer.</td>
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</tr>
<tr>
<td>Wooden mallet — if you have chisels with wood handles, your mallet should be softer than your chisel handles. I like a mallet with a square head rather than a carver’s mallet. However, I see a lot of people using the round mallets.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sanding</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanding block.</td>
<td></td>
</tr>
<tr>
<td>Sand paper — 100, 120,150 and 220 grits.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finishing</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is tricky because of the vast number of choices. I will take a stab at it for basic oil based finishes such as oil, varnish, polyurethane, etc.</td>
<td></td>
</tr>
<tr>
<td>China bristle brushes — high quality 2 ½” - 3”.</td>
<td></td>
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<tr>
<td>Rags — lint free.</td>
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</tr>
<tr>
<td>Containers — plastic quart.</td>
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</tr>
<tr>
<td>Sandpaper — 220, 320 and 400 grits.</td>
<td></td>
</tr>
<tr>
<td>Steelwool — #0000.</td>
<td></td>
</tr>
</tbody>
</table>

If you buy all of this new, you are looking at $1,000 for marginal tools and perhaps $2,700 for high quality ones. I’ve bought cars for less. Go slow and buy the best tools you can. In the end, you will end up replacing the poor quality tools.

Q Flatness — How often does a professional who uses his planes all the time flatten or check for flatness the soles of his planes? — Anon

Garrett Hack replies: One of the advantages of cast iron plane bodies is that they hold up well to the wear and tear of abrasive wood. I suspect that the new ductile iron from makers such as Lie-Nielsen is harder and tougher, but the wear problem is not eliminated.

Soles abrade and miles of shavings wear the throat open. For fine cuts and accurate work, the sole has to be flat, so the plane doesn’t rock around. I want a jointer flat at the toe, heel and at the mouth, so that the whole length of the plane guides the cut. The same is true of my shoulder rabbet plane and smooother doing finish cuts. For a #4 doing rougher work, flatness is less important.

My well used cast iron planes need a minor touch up on a sandpaper lapping plate once a year, or more likely every few years. My wooden planes get this treatment far more often.
Once a day for a week, once a week for a month, once a month for a year, once a year for life! This is the saying for a good oil finish. Twenty-two coats of linseed oil will be about the equivalent of a coat or two of varnish.

The advantage of an oil finish is its ease in application, no runs, no drips — wipe on, take a puff break, wipe off. Wait 24 hours, do it again, and again, and again and so on. After five or six coats it's starting to look good. Still natural looking with a slight sheen. Maybe good enough for table and chair legs or stretchers, but for tops, or seats etc, you have just begun. I need to speed this process up!

Linseed is the traditional oil. It develops a deeper and redder color bringing out a natural patina with age. Tung oil produces a lighter finish. Cherry for example, will darken on its own and I like to enhance this with linseed oil. If you want less darkening, you may choose to use tung oil instead.

This is how I do it. I pick a jar that is just big enough to hold the approximate amount of oil mix I would need to apply four or five coats. For example, a sofa table with top, legs, stretchers and a shelf will need about a 9 oz. jar.

Make the oil mix two parts boiled linseed oil (6 oz.) and one part Thin-X (3 oz.). Apply the first coat liberally — this is the only time I can be called a liberal. Let the oil soak in and re-coat a few times. If you have any defects or glue spots, fix them now. Re-oil before the first coat dries. I don't usually do any wiping on the first coat. It will all soak in unless you are working with an extremely dense wood. Then after half an hour or longer, I wipe off the excess.

After this first coat is applied, the amount of finish left in the jar is down about an inch or so. I should mention, I am not a chemist, whatsoever! Fill the jar back to the original level with more varnish. I think any good spar varnish will work. You could use a poly or any oil based finish. I just happen to use Hopes Tung Oil Varnish. This is a wiping varnish, but straight from the can it's too fast tacking and less absorbent than linseed oil.

Apply the second coat, wait a few minutes and wipe off the excess. I usually wait 20-24 hrs between coats. If there is any dust, nibs or roughness, lightly sand with 220 or Scotch Brite 7447 (Maroon) pad.

Fill the jar back to original level with more varnish. Apply the third coat, wait a few minutes and wipe off the excess.

You will notice it is tacking faster and getting harder to wipe off each time you add varnish to the finish. Depending on the size and complexity of the piece, do it in portions if you can. Stop adding varnish if you can't wipe it off before it gets too tacky. If it gets too tacky to wipe, re-wet and wipe it off.

If you're not having any problems, keep filling the jar with varnish after each coat. Usually I add varnish four or five times. By the time I've done five or six coats, the piece is done!

Apply as many coats as you want until you are satisfied. If at some point you have added too much varnish, just add more linseed oil and mix 2:1 to your finish. You'll be back to the previous coat mixture.

Soon you will have developed a smooth, glossy, wet looking finish, or stop at any point for a less glossy look. After the final coat, I rub it out with #0000 steel wool. To reduce the scratch pattern, I apply a final coat of linseed oil 2:1 — no varnish — and wipe off like it's a polish, but lasts longer. Do not touch until it's dry!

Router Bit Holder — There are any number of ways to store your router bits. I made this simple holder in an hour. The shelves are about 2” wide and are screwed on through the back with sheet metal screws. The angle is about 20 degrees so that the bits can be extracted without hitting the shelf above. The holes are ¼” and ½” and are spaced in varying increments to accommodate large round over bits as well as quantities of straight flute bits, etc. It’s hanging on two screw hooks to make it easy to take down and modify or move elsewhere.
I enjoy carving and the learning process that blossoms when I work with a teacher and other students. So last September I drove to Rosewood Studio in Almonte, Ontario where I began a two week Relief Carving workshop. My teacher was Chris Pye, from Herefordshire, England. This was my fourth trip to Rosewood and it would be my first time learning from Chris. During the first week, he led us step-by-step through two projects designed to give us a thorough grounding in low-relief and high-relief carving. This is what I learned about his low-relief methods.

**A Selection of Carving Tools**

The first day started by reviewing our recommended selection of carving tools. Chris introduced us to the Sheffield List, explaining this particular numbering system and why these tools were chosen for this work. There are many carving tools but they fall into three main categories – gouges, chisels and V-tools. By practicing with these tools and using different hand holds, we were able to learn which tools will do various tasks.

A lively discussion developed about the various brands of woodcarving tools. Each product line has its pluses and minuses. Then there is always the fun of finding an old tool which once restored becomes a new favorite.

**Sharpening Carving Tools**

Chris prefers to teach carving so that projects are left straight from the cutting edge with no final sanding. We learned his particular method of sharpening to help us achieve crisp edges, fresh lines and clean surfaces.

He works with a cutting angle of 20 degrees which lets the knuckles clear the wood when using a low-angle tool grip. We were shown how to create a 5 degree inside bevel. This significantly improves tool control and cutting when the tool is used upside down. He uses the traditional oil bench stones and slips tones for shaping and sharpening, squaring off the edge, polishing the edge, setting the bevel angle, sharpening and stropping. For stropping, he uses a bench strop made from thin leather over a thin board. Folded leather is used for inside bevels.

As beginners, we were encouraged to practice shaping and sharpening our tools with hand methods, to assure we learned what is required to make an efficient carving tool.

**Low Relief – Getting Ready to Start**

What is relief carving? You need to fool the viewer into perceiving there are three dimensions when there are really only two. You are playing with depth, creating the illusion of more than there really is.

How do you select what you should carve? First pick something within your skill level to develop your abilities. Consider how easy it is to translate your idea into wood – flowing lines, rounded edges and simplicity can help to achieve your goal. Think about how much research and drawing is needed. Do you have the right wood and tools? How will you hold down your work? All these questions need to be answered before you begin carving.

**Transferring the Drawing to the Wood and Depth of Background**

We started out by making a few rough sketches of a basic fish in profile. Once we had our idea down, we then drew a full scale working drawing. We filled the space leaving ½” all around. Curved lines, no sharp angles and wood grain direction were considered so there would not be any weak areas which could break off. The final sketch was transferred by taping the drawing to the wood and using a ballpoint pen to heavily trace the lines. This created indentations which were highlighted with a pencil.

We set the background depth at ½” using a marking gauge around the free edge. Now we were ready to carve.

**Carving**

We carved the fish using a seven step method.

1. **Lining In** – Using our V-tool, we created a groove around the fish which created a separation from the waste wood. We learned to be mindful of the depth, how close we were to the drawing line and grain direction.

2. **Grounding** – Using our deep gouge, we plowed a series of even furrows across the grain just above the final surface depth. Then with our flat gouge and a low-angle grip, we used a slicing technique, leveling to our final surface.

3. **Setting In** – To define the outline of the fish, we sloped the walls out by 5-10 degrees by choosing either the slicing technique or matching. Slicing is when the cutting edge of the gouge slices along the outline like a knife. Matching is when the sweep of the tool is matched to the outline.

*Continued on Page 9*
Learning to turn wood and improving your turning is easier than ever before. Just 25 years ago, scroll chucks designed for turning were a fairly rare new invention, and most bowls were turned on a faceplate — with a scraper.

While many of the changes in turning styles and techniques were driven by the evolution of new hardware like scroll chucks, bowl gouges and laser-assisted stabilized deep hollowing tools, the explosion of interest in woodturning was also due to the home computer and the internet. These days, you can find a wide variety of turning resources on the web, and the same is true for all other woodworking disciplines, too.

The on-line woodturner can use the web to find turning clubs, ask questions and receive almost instantaneous help or advice, post photos for design critique, find tools or parts, and even watch turning video clips with a broadband connection. There’s simply far too much turning information on the web to describe in detail here, but I thought I’d offer a few thoughts and share some of my favorite turning web sites.

Woodturning web sites tend to fall into two broad categories — informational sites, such as manufacturer web sites and most personal web pages; and interactive sites in which you can participate as a “member” and share your own thoughts, or post questions.

Informational Sites
- These sites are not strictly “read-only” and do have some interactive elements, but these are usually limited to emailing a question to customer service, or making a few comments in a guest book. Manufacturer and supplier sites are easiest to find by searching under the company name, such as Oneway Manufacturing or Teknatool.

Interactive Sites
- Most of my on-line turning time is spent visiting interactive sites, and I’m an active member at a few of them. I’m defining interactive sites as those that allow you to join and participate by posting comments, photos, or questions. The earliest of these were text-only email list serves, but these are being eclipsed by sites that allow posting of photos, so I’ll comment on three of my favorite illustrated sites. Each of these is members-only, and there’s a great reason for this. A few unregulated turning groups have gotten out of hand with unpleasant, rude, or nasty people, or “trolls” that think it’s fun to post inflammatory off-topic garbage — I avoid these sites entirely.

Turning And Talking is a Yahoo! Group that allows photos and files to be posted in separate files, and thus functions as an illustrated email list-serv. This group has nearly 1500 members from around the world, from absolute novices to experienced turners. Most of the posts are from people seeking a solution to a problem, or offering up photos of their latest creation. This is a very nice group of people, and one of my favorites. To join, just visit the T&T link, and follow the instructions. You’ll have to establish a Yahoo! user name and password if you have never done so. These can be used at any of the thousands of other Yahoo! Groups, as well.

Wood Central Turning Messageboard is the site I visit most often. While most members are from the US, there are quite a few from the UK and other parts of the globe. This group includes some fairly well known turners, and many members are very talented, indeed. Membership is open to anyone who
Essential Hand Planes

Five Essential Hand Planes

| Bench Plane                                      | #4 or similar size — set up for general purpose work |
| Smoothing plane                                  | Tuned and dedicated to smoothing                     |
| Jointer or longer bench plane                    | #5 and #7 are two favorites                          |
| Block Plane                                      | For small smoothing work,                           |
|                                                  | cutting chamfers, and trimming end grain            |
| Shoulder Plane                                   | #93 a favorite, for fitting tenon shoulders and      |
|                                                  | sizing rabbets.                                     |

L to R – #4 Bedrock, Norris smoother, #7 jointer, #60½ block, #93 shoulder planes

catalogs arrive here monthly filled with sometimes dozens of different planes. Which ones do you really need? I have five that I can’t imagine working without, each one quite versatile, and together capable of a wide range of work.

My most used plane is an old Bedrock #4, a common size in a useful line of planes known as bench planes. Stanley called it a smoothing plane, which is one for it, but it is also a good length and weight for sizing parts, cutting end grain edges (especially longer ones), cutting bevels or chamfers, fairing convex curves, or any planing where you want a two handled tool to really apply some effort to the work. Lie-Nielsen, Clifton, and Veritas (Lee Valley) make good #4 bench planes today, along with many other sizes. So many other manufactures once did that any flea market will turn up more. For an older plane, buy a new thicker replacement iron (Hock or L-N) and even a modest quality tool will work quite well. Some prefer a smaller and lighter #3, others the much heftier and wider #4½.

No less important than my general purpose #4 is a dedicated smoothing plane. This is a plane that does such important work — putting on that final smooth and glossy surface — that I suggest you buy the best plane you can afford. What sets a smoother apart is its heft, helping it to hug the surface and overcome cutting resistance, a very fine mouth, and an iron with a very slightly curved or cambered cutting edge.

The best traditional smoothers are British, once made by Spiers, Norris, and others, short planes made of steel or gunmetal and infilled with rosewood or similar dense timber. Capable of just as fine work are Japanese (or Chinese) wood-bodied smoothers and the simple coffin shaped wooden smoothers common before cast iron planes dominated the market. These just might need a bit of sole work, inlaying a new wooden insert to tighten up the mouth. All of these various patterns can be found old or newly made by some very talented makers, for anything from a hundred dollars to many thousands.

Or you could do as I do on the road—slip a cambered iron into your #4 for a smoother that can handle all but the trickiest grain.

For jointing long edges, flattening large surfaces, or where you want the heft and accuracy of a plane with a long guiding sole, a jointer plane is the tool. The longest Stanley made or, remade today by others, are the #7 and #8. If you are so inclined, wooden jointers even longer can be found, sometimes made of beautiful rosewood, and while wooden jointers might not stay perfectly true all seasons of the year, at least they are easy to flatten.

If I had to choose one jointer it would be a #7, not too heavy and long enough at 22”. A close second would be a #5, much shorter (14”) and lighter, but less tiring to use and still fitting well the scale of much furniture making, such as sizing a drawer, flattening a panel, or trueing up a set of square tapered legs. I often use the low angle version of the #5, the #62, which I appreciate for the considerably less effort of low angle cutting. And since Lie-Nielsen came out with a low angle #7 they call the #7½, I use it, but neither the #62 or #7½ are as consistent in difficult woods as my old high angle #7.

Two block planes are always close
at hand — a small bronze Lie-Nielsen #102 and a heavier low angle #60½. They work as small smoothing planes, for cutting fine chamfers or wide bevels, shooting end grain edges, sizing parts, cleaning off dovetails, cutting simple moldings or fairing convex curves. For their size, no planes I own work as hard. If you are going to buy one block plane or treat yourself to a new tool, get the Lie Nielsen low angle #60½. You’ll love it instantly.

My two block planes work as a team. The bronze #102 has a fixed mouth opening wide enough to take aggressive cuts; hogging off amazing amounts of wood when needed. It’s what I pick up to rough out a shape, and only rarely for precise final cuts. The adjustable mouth on the #60½ makes it a highly precise tool for such difficult work as taking a final shaving smoothing an intricate inlay. With the mouth closed down to the barest slit I have yet to find a wood or situation that this plane doesn’t cut a wonderfully smooth surface.

Quite different and no less important than my essential bench planes is a shoulder rabbit plane, a tool for fitting many joints precisely no matter how you cut them. My favorite, an old Stanley #93, just hefty enough and an inch wide, is efficient for trueing the shoulders of tenons (and the cheeks if they are not too long), for smoothing and sizing the sides of a rabbet, or tapering the pin of a long sliding dovetail for easier assembly. Veritas makes well engineered shoulder planes, as does Lie Nielsen and Clifton. None of the Stanleys (#90, #92, #93, #94) are still made, but if you find one used, check that the sides are square with the sole or you will be cutting beveled shoulders. The sole must also be flat, the iron very sharp and projecting evenly above the sole.

All of my essential planes work well in efficient combinations. One example — smoothing a surface first with a #4 working somewhat coarsely and quickly, followed by a smoother taking just the finest of shavings and staying sharper longer for it. You too will be more efficient and do better work by exploring the range of these basic tools.

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PLANES – continued

ON-LINE – continued

wants to join. Once you set up your preferences, you’re ready to go. Visit the main Wood Central home page, then look for the Messageboards, then click on Turning. This site allows photos to be embedded within posts, so it’s a great place to post a photo for critique, or to illustrate a question you’d like answered. The Turning Messageboard is just a small part of Wood Central, which has a lot to offer woodworkers of every stripe. Wood Central is run by Ellis Walentine, a very talented fellow and former resident of the Upper Valley of New Hampshire and Vermont.

Another favorite is Herm DeVries’ World of Woodturners at myfamily.com. The World of Woodturners, or WoW, is an excellent example of a high-end, show & tell and critique site, and involves many professional and advanced amateur turners from all over the world. While there are sections for how-to files and other functions, the photo gallery is the real interest for me. This site features not only fine turnings by talented turners, but also straddles and blurs the line between craft and art. There’s no question that some pieces here are high art, while others are more utilitarian craft — you can decide for yourself where the line is, or if it exists, but there is inspiration and awe a-plenty here! Membership is by invitation only, though any member can send the invite. There is an expectation of high quality photography when photos are posted, and good information available about how to set up an excellent photo booth at home. While I don’t suggest that novices post questions and photos here, any serious or aspiring woodturner should check out the photo galleries for ideas and jaw-dropping inspiration. You can e-mail me if you want an invitation to the WoWs — brad@hollow-tree.net.

One benefit that comes from participation in sites like these is a real sense of community — you can make friends from near and far if you become a regular contributor, and after a while you get to know many of those who post often, so it really does function like large, world-wide family.

Three things to keep in mind when looking at turning web sites are archives, personal web pages, and links. Most of the interactive sites have searchable archives. If you have a question about a particular tool, or want assistance with a problem like tear out on bowls, please take the time to search the archives before posting a question that may have been asked — and answered — many times already. Personal web pages can be a great source of information, tips, tools and techniques. Quite a few personal web pages are linked at the Laymar Crafts site, and you’ll surely bump into many others. Most turners list links to their favorite turning sites, and by checking out these links, you can quickly build up a long list of places to play on-line, which you can “bookmark”, or save in your browser’s favorites folders. After a few sessions poking around the web, you will have plenty of ways to enjoy turning on the web, which may be the next-best thing to actually turning wood at the lathe.

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CARVING – continued

4. Modeling – This is the fun part of carving where we shaped the fish by changing planes, defining shapes in the design and undercutting.

5. Detailing – Fluting the fins and tail taught us how to merge cuts at the bottom of the flute. It was great practice in handling grain.

6. Background – Background details helped anchor the shape in space.

7. Finishing – We simply sealed the carving with clear shellac and thin beeswax. All done.

This workshop helped me develop an understanding of how the various carving tools worked as well as a new method of sharpening. Knowing more about relief design has allowed me to go the next step and create my first design. Learning Chris Pye’s seven step process has provided me with a solid foundation to build on as I continue to carve. I recommend his book Relief Carving in Wood, a Practical Introduction.
The Reverse Curve
How to Design, Visualize and Produce Complex Curves

In recent years, I have taken up playing pocket billiards, commonly known as pool. There are many reasons for this infatuation. For one, I am trying in some futile way to recapture my misspent youth, as I remember how much fun I had playing pool years ago. Pool is such a beautiful game which reveals many aspects of geometry and physics in a simple and elegant way. My enjoyment of the game is enhanced by playing with pool cues I made myself, and turning pool cues is possibly the only thing (or two) I can think of that is more fun than playing pool.

See What You Are Looking At
But a further reason is that I think my woodworking skills can be improved by playing pool, because pool teaches me to see what I am looking at. Years ago an old timer said to me, “To be a cabinetmaker, you got to have good eyes.” Back then I didn’t understand what he meant. But now, decades later, I think I do. You have to learn to see things because woodworking, like all sculptural arts, is intended to create a three dimensional visual impression.

A simple example of this occurs when we visit the lumber yard and sort through the boards in the rack. We are looking for warp, or other defects in the shape of a piece of lumber. We sight down the board for crook or twist. This is an acquired skill, but with some practice one can do it in seconds without thinking very much.

Seeing a bump in a straight line is one thing, but in this article I will teach you how to visualize complex curves. With this information you can design shapes which present the visual impression you want to project, locate errors in curves, and produce the curve at the lathe using only your eyes and a single caliper measurement as a guide.

The Vocabulary of Shapes
Spindle turnings are composed like music. The various elements are arranged in sequence along a line. Each one leads into the next, and must harmonize with its neighbors and to the whole form. None of the elements mean very much on their own, just as a single note played on a piano doesn’t make much of an impression. It is only the way they relate to each other that gives the turning elegance, grace, a sense of proportion, and finally the aforementioned sculptural visual impression we are seeking.

There are a small number of shapes which make up the vocabulary of the woodturner, but of course their variations and combinations are infinite. These are straight lines, simple curves and complex curves. Simple curves are either convex (beads and ball forms) or concave, (coves and hollows). But by far the most powerful shape used in woodturning is the reverse curve, or S-curve, because it is a combination of both convex and concave. This is sometimes referred to as the “vase form”, but it should be noted that it is equally effective upside down or on horizontal members such as stretchers.

Elements of the Reverse Curve
Figure 1 illustrates all five elements of the reverse curve:

1. Overall length
2. Location of the high point
3. Location of the low point
4. Location of the inflection point
5. End point angles

The overall length is labeled (L). It is measured parallel to the axis (axial length) and is not the length of the curved line itself which of course is slightly longer. When commencing to produce the curve at the lathe, the overall length is the first item to locate and mark out.

The high point is labeled in the figure. It is the distance from the end of the curve which is critical, that distance is...
These turnings do not look at all alike even though the length and diameter measurements are the same. This shows how important it is to pay attention to the location of the inflection point in designing and producing reverse curves.

Finally, the remaining element which defines the curve is the end point angle. Every curve has two end points. A line tangent to the curve at the end point forms an angle with the radial line and these are shown as $P^\circ$ and $Q^\circ$ in Figure 1. End point angles are critical to simple curves such as beads and coves as well as complex curves such as the reverse curve shown here.

The most common design error is end point angles that are too large. This results in features that are shallow, poorly defined, and do not make sharp lines at their end points – Figure 3. These sharp lines are formed at the intersection of the surfaces and are critical to making the details (with light and shadow) which set off the large features. As I will discuss further in future articles on design, it is the balance of the details to the large features which constitutes the most critical factor in good design. Therefore, curves should terminate in sharp lines, and these lines must not be blunted by careless sanding. The intersections do not have to be 90 degrees, but they should be near 90 most of the time. Therefore end point angles should rarely be more than 25 degrees.

Even something which seems complex, can be easily visualized by breaking it down into its individual elements. I hope this article has helped you understand what those elements are and how to see what you are looking at. Nine ball in the corner pocket!
I wouldn’t call myself a very prolific designer. I don’t tend to come up with a steady stream of new ideas on a weekly basis. Although I have been designing and making furniture for the past twenty-five years, most of my design work has been primarily an evolutionary process. By this I mean that if you were to view the total body of my work from the past twenty-five years, you would see a definite theme linking one piece to the other. Typically, I come up with a new idea and if it is a successful one, I will repeat certain aspects of the design, sometimes even extrapolating it into a series.

Some years ago, I designed a sideboard with bowed drawers in the center, a straight section on either side of the bow and a fluted leg set at a 45-degree angle at each corner. I found the original form pleasing, and later, I found that it was very versatile and adaptive. Over the years I have used this basic form, as well as various other details to create numerous table designs, sideboards, and even a matching pair of china cabinets. Although the original sideboard was designed in the early 90s, I still find myself revisiting this form. In fact my Console Table for this past year’s Furniture Masters auction was one of this series.

Like most designers, I inwardly shudder when someone approaches me with a photograph of someone else’s work and wants me to copy it. Even worse, is when a client brings a catalogue from a furniture factory that makes reinterpretations of reproductions, of a reproduction, of a copy, of an original piece from the 1700s, and politely asks me to make yet another reproduction of the piece. This type of request is usually the fastest way to a polite explanation of the type of work I actually make, and why the factory in the catalogue would be better suited to meet their current needs. I am not being a snob here, I stick to what I do best, and suggest other crafts people for the type of work I do not do.

Having said this, I find client participation in the design process can be inspiring and challenging. Usually, interaction begins with a specific brief, or requirement from the client. In the case of that afore mentioned sideboard, it had to fit the wall space under a set of stairs. The piece could not be more than 60” long. There was also a height restriction to consider because of the rise of the steps. All these restrictions became a challenge as I tried to create a pleasing piece of work that fit the client’s space requirements, and did not compromise the interplay of the proportions. Often, a simple observation or suggestion by a client as we are reviewing drawings can send me off in a completely new direction. If we are open to this designer/client interaction, but ever careful not to compromise our own design values, we can often be stretched and propelled in new directions.

I am currently in the process of making a set of twelve chairs that will complement a large round mahogany dining table I made last year. Chairs have two basic design elements to consider—they have to be comfortable and the form has to be pleasing to the client. Over the
years I have accumulated a number of prototype chair designs which I use to help show clients the different forms and visual elements, and how they affect the final product in both comfort and design. People usually mix and match elements from the different prototypes to come up with a variation on a theme. They may like the way one chair sits, but like the visual elements of another chair. Because of the way I engineered my chair construction way back in 1990, I can easily interchange various elements such as crest rail, back splat, or front leg form to create a variation on a theme to suit the client’s requirements.

However, this new client has a very keen eye, and was not content to simply mix and match. When we had decided on the seat height and its various proportions, she began picking out specific details from the table and suggesting that we incorporate these details into the chair design. There is always a very delicate diplomatic situation to work through if I, as the designer, do not like a particular suggestion. That’s where my Welsh accent and European diplomatic charm comes in handy. This happened in this situation. The client, picking up on the angular detail in the table base, suggested that we may try to use a similar angle for the crest rail.

My initial inward reaction was not a positive one. My previous crest rails had either been straight, or they had a convex or concave curve, but never a convex angle. Something inside me shied away from this detail. However, with an open mind, I returned to my studio and began to draw a chair that incorporated all the different elements of this new design. I was pleased by the resulting drawings, and set about making a prototype of this new chair design. I was delighted with how all the new curves and angles worked together to produce what I consider to be an exciting and elegant new chair design.

In conclusion, I would say that we as designer/makers, should never compromise our personal design sense – this defines who we are. But we should always be listening to our clients needs, and always be open to exploring their suggestions with a view to incorporate them into our designs. When we do this, we are sometimes able to reinterpret these client suggestions, filtering them through our own design aesthetic, making them our own unique design details. Who knows, maybe it could lead to a series of new work.

The REAL Power of our Guild

I used to be very pleased with the buying power of our Guild with group purchases of books, clamps, etc., but I just discovered the real power of this wonderful group. In my last article on tools, I explained how I wanted to buy a file sharpening dip I could no longer find, as well as the tool grinding jig which Terry Moore uses. Within days I had received many emails trying to help, and I am delighted to say that I now have both thanks to the help of Guild members!

Acid Dip – Our own Old Saw editor located the file dip from Moon’s Saw Shop Supplies www.moonsawandtool.com. At $19.00 a quart, this is as close to a miracle as I’ve experienced! It is phosphoric acid, and as simple to use as can be.

A dull file dipped into it for several hours comes out as sharp as new. The instructions encourage you to try most edge tools, and so I also tried a dull, rusty drill bit - and, yes, it is very sharp! I tried several old, dull files which I had found in a damp crawlspace, and without exception, they came out like new. Obviously, this will pay for itself with just one good rasp, and the instructions indicate it will do dozens.

Grinding Jig – Terry Moore’s grinding jig took a bit more sleuthing, but an email put me on to Plaza Machinery in Bethel, VT where Joe (email him at joe@plazamachinery.com) has an amazing collection of solid old tools. I went today and picked up a new, in the box jig which is probably 20 years old. The best news is that he has several more! This was originally a Baldor jig and then Delta/Rockwell picked it up. It is an “Edge Tool Grinding Attachment” #23-845. Tomorrow I’ll screw it on and give it a try!

I’d be happy to tell you more about either tool – just drop me an email! I’d love to share the information I have gathered in this process and keep the power of the Guild going! – Peter Breu

peterbreu@comcast.net
I always do full size drawings for each piece and as you can see, it does get a workout. It is part of the design process but just as important, it allows me to visualize each joint clearly.

I have two long time friends from the '50s. They have two daughters, both of whom were married within the past year. One lives in Cambridge, MA and the other in Brooklyn, NY, and I wanted to make a belated wedding gift for both of them. A pair of stools or benches for each sister seemed about right. And so I began designing and then producing four identical stools at the end of this past summer – four months and four stools.

Each was made from curly maple and finished in clear lacquer. They are chair height. All joinery is mortise and tenon. The joints are square and don't involve complex angles.

I use the shaper a lot to profile the various parts of a piece of furniture. In this particular case, I am making four stools which mean sixteen legs. There is a great advantage in having them all exactly the same. After profiling, they all fit exactly the same way in the router jig that does the complex joint at the top. Also, they all fit the same way in the jig for the tenon at the top and the mortise for the lower rail on the side.

Making a Shaper Jig

to produce multiple small stool legs

To begin the making of a shaper jig, use a piece of heavy vellum to trace the front and back lines of the leg. Use a piece of vellum 6” or 7” wide.

Cut the vellum carefully and trace the curves to make an exact ¼” thick pattern of the leg. Remember, you need the inside and outside lines, making a pattern that is the same as the full size drawing. There are a number of ways to do this transfer but I have stayed with this one after trying the others. You will need this ¼” thick pattern to make the shaper pattern itself and later for tracing around to get the leg blank ready for the shaper pattern.
This is a double shaper pattern about 6” or 7” wide. The width gives it stability on the shaper and gives mass if there is a tearout or kickback. Trace the $\frac{1}{4}”$ pattern and use it to give a good edge on the shaper pattern itself. I usually do this stage on my router table using a straight bit with an end bearing running on the masonite.

This is the completed shaper jig with stops and hold downs in place. The side marked “1st run” has the stops set back to accommodate the slightly oversize leg blank. The other side is exactly the same as the $\frac{1}{4}”$ thick pattern. The $\frac{1}{4}”$ pattern is traced on the 2” leg stock and then bandsawed leaving the pencil line – between $\frac{1}{32}”$ and 1mm – oversize. The bandsawed blank goes first in the side marked “1st run” and then shifts over to the other side which is the exact leg pattern.

I use an 85mm x 50mm (3¾” dia. x 2” high) straight cutter with a matching ball bearing. I don’t prefer it, but you can also use a router table setup to use the same jig. Use a $\frac{3}{4}”$ x 2” straight bit with the bearing on the $\frac{1}{2}”$ shank end. Bigger than $\frac{3}{4}”$ dia. bit is not safe in this case. If you do use a router table, remember to design the jig so the grain direction will be correct. I have made my shaper jig for counterclockwise rotation of the shaper. A router bit would be the same.
The Zen of Woodworking

When I retired a few years ago, one big question was how could I spend my remaining time well. Could woodworking fill the void left by leaving an all-absorbing world of high pressure, high stakes work?

To my delight, it has, and in a number of quite unexpected ways. Being of a philosophical turn of mind, I here share some thoughts on what has happened and what it reveals to me about the deeper mysteries of life. This, then, is not an article of tips on how to make this or that particular piece or finish. It is rather an article about how, through woodworking, I am striving to build and finish a life. The Guild has been an essential part of this project.

Please bear in mind that this is my method – it may or may not suit you. If you like what you read, give it a try. If not, don’t. Just as you would try building a particular style of furniture or not, depending on your preferences.

Western culture, particularly Western corporate culture, is results-oriented. The process is less important than the result. Even less important than the process is the quality of the individual’s experience who is carrying out the process. A sense of deep joy in what you do was almost completely absent in the corporate world that I was earlier a part of. Sort of a dull joylessness was the norm, punctuated by addictive hits when the quarterly results were good or the stock options were handed out. Occasionally I would meet, say, a sales person who took real pride in what they did and considered it an art, but that was rare. Even worse was when I worked as a labor-relations consultant in unionized factories in the mid-west. If you want to see real despair, spend some time on the floor of a fiberglass factory.

Several years ago, I had the privilege of attending Alan Mitchell’s ten week, full time woodworking course at the Homestead Woodworking School. It was a tremendous experience in many ways, one of which was the participation of various guest lecturers of world class accomplishment. Articles by these masters appear regularly on the pages of The Old Saw – Bruce Hamilton, Jon Siegel, Garrett Hack and David Lamb. Naturally, their presentations were rich with tips, secrets, and knowledge, which they shared generously.

Interesting as that was, I sensed something even more interesting. These people loved what they did and derived deep meaning and joy from it – not that they all would express it in those terms. So I made a point of asking them, not so much how do you do this or that, but rather how do you make the whole process fun? Garrett Hack, in particular, was receptive to this question and as a result I had the opportunity to visit his shop and write an article about how he has integrated his craft with his life (“Woodworking, Life, and Happiness”, The Old Saw, June 2005)

I had done woodworking for decades but, in retrospect, failed to realize its potential. My approach was centered around getting to the end result as quickly as possible. The steps to get there, especially sanding, felt, usually, an onerous obstacle. The work was somehow a hurdle to be overcome, in order to get to the goal, which was the finished piece. The point of tools, I thought, was to speed things up.

Some years ago, I tried a shift of focus. It is easily stated by a metaphorical example. The idea is to make each nail the most perfectly driven nail that one is capable of, to devote one’s entire attention to that single nail, at least for the moment that one is driving it, so that it, so to speak, and maybe just for an instant, fills one entire mind. Nails may not be the best example since few of them are used in fine furniture; a better example may be hand-cut dovetails. When Alan taught us how to make these, I was fascinated. They require absolute attention. Their geometry and precision are deeply fascinating. Alan allowed us to try out different types of saws. I immediately developed a preference for the Japanese saws. Cutting on the pull stroke seems an inspired piece of design. Why overpower the work with a heavy, thick, stiff mass? Using the ultra-thin, ultra-light Japanese saws seems like a kind of judo where you apply minimal force, precisely applied. I find that one needn’t apply pressure at all, the weight of the saw - minimal as it is - does all the work, leaving me to focus on an accurate cut.

To this day I find cutting dovetails the most satisfying activity in woodworking - along with making mortises and tenons. Something about them invites the total focus that I spoke about above. For the moment it doesn’t matter that the dovetail one is working on is one of five on that board which then have soon to be mated to five pins on a second board and that even then that is only one of four joints to make the drawer which is only one of five that the project requires. That single dovetail is meaningful, absorbing, and completely worth doing just for its own sake.

So I learned to focus on the steps of the work for their own sake – zeroing in with attention and presence on each strike of mallet to chisel. Over time, a surprising transformation occurred.

The apprentice Zen monk approached the Abbot

“Oh, master, how do I attain enlightenment?”

“Yes, master”

“Then wash out your bowl!”

On this the apprentice awakened…
The work, every step of it, even the mistakes, became a joy. Now I work without pushing for the end. The point of building a piece is the building of it. Eventually, it is complete, at which point I am happy to give it away, or sell it or use it myself. Surprisingly, word has gotten around and I even have, although this was not necessarily a goal, customers who appreciate the value of something built with care, built to last, and who are happy to wait for as long as it takes for me to produce the piece.

This perspective may sound simple (maybe even simple-minded) but it has curious consequences. For one thing, you become less interested in the final outcome – the finished piece – and more interested in whether or not it is rewarding to build on a moment-to-moment basis. Imagine a contest where the prize goes to the person who had the most fun making the piece, rather than to the best piece. And yet, isn’t that the contest we are all, in truth, engaged in? All we have is this moment, this particular instant, this particular act of paring off a shaving from the tenon cheek. If we don’t enjoy that, we have nothing.

After several years of endeavoring to pay rapt attention to the activity of the moment, as opposed to leaping ahead in my mind to the finished piece, or mentally resenting the fact that I am sanding, waiting for glue to dry, or even sweeping the floor, I have noticed that the whole process of woodworking has become deeply satisfying. I have also noticed that the quality of my work has become better than I would have ever thought possible. This is not meant to be boastful; not for a moment can my work be compared to that of the masters whose writings grace these pages. But it pleases me, I get better all the time, I get better all the time, I get better all the time. The other result is that I have noticed that the quality of my work has gotten around and I even have, although this was not necessarily a goal, customers who appreciate the value of something built with care, built to last, and who are happy to wait for as long as it takes for me to produce the piece.

Jim Blauveldt – Last year the Guild sponsored a wonderful joinery symposium with dozens of sessions. I made it a point to attend one on Japanese joinery given by Jim Blauveldt, and was so fascinated that I later arranged to visit him in his shop in Connecticut. Jim is one of the few woodworkers in the country who specializes in Japanese carpentry. If you want a traditional Japanese interior, a shoji screen, a classical Japanese garden-viewing pavilion, or a ceremonial tea house, you call Jim. He and his team will travel anywhere in the country to build what you want. Check out www.bluefieldjoiners.com to learn more about Jim and his work.

The start of Jim’s woodworking career seems conventional. After studying industrial arts, he worked in a cabinet shop making doors and windows, eventually moving on to higher end mill work, interspersed with more education at the School for American Craftsmen in Rochester, New York. Along the way something life changing happened. Almost by accident, he was exposed to Japanese tools and techniques and found himself apprenticed to a master Japanese tea house builder, Makoto Imai. There he developed an overwhelming love of craft and a radically different perspective on woodworking.

Jim Blauveldt

The philosophical ideas I am struggling to express here are second nature to Jim. He smiles and nods when I speak of the importance of approaching the task in an end in itself. “I just wish you could get my customers to see it that way”, he says! Jim’s apprenticeship sounds like something few of us would have the patience for. Imai-san would not explain or demonstrate things. Instead you were supposed to learn by watching and eventually would be given a task to do. The idea is that the task teaches itself; it cannot really be explained. It’s not a question of mastering a technique in a mechanical way; you have to internalize it – it has to become a part of you.

Two of the ways in which Japanese woodworking differs from Western are that it doesn’t use sandpaper and almost never uses finish. Take two pieces of pine. Plane one smooth with your sharpest plane. Sand the other. Now compare the two. You will see that the planed surface gleams and shines whilst the sanded one is flat and dull. You are looking at the difference between a Japanese and a Western philosophy and aesthetic. If you had used a Japanese favorite wood, such as Port Orford cedar, the difference would be even more dramatic. The shiny, planed surface is basically done. It would not have finish applied. The sanded surface might be oiled or varnished. But, you object, what about wear? Isn’t the raw wood going to get dirty? Well, yes, and this is where the Japanese aesthetic of wabi sabi comes in. According to this, new things are supposed to look new and old things are supposed to look old. One appreciates a piece of furniture at all stages of wear during its natural life cycle, appreciates each stage, for what it is, at that moment. When the piece eventually becomes too worn out, one builds a new one.

A curious Western adaptation of this view can be seen in the demand for antiqued and pre-distressed pieces. Of course, one could simply wait and the piece would become distressed naturally, but it appears most people are too impatient for that.

Jim speaks today in terms of having an overwhelming love of his craft, of being a carpenter to the very core of his soul. Meeting him and seeing his work, it is very clear that he has attained the state of mind that I am searching for. So I ask for the secret to finding joy in woodworking. “Focus on the action, focus on the minutia, treat every step as important, more desirable versus less desirable tasks. Tuning and sharpening the tools is not a distraction, an onerous “in order to”. It is an end in itself. Sweeping up is not a chore; done with attention it becomes deeply gratifying.”

Continued on Page 22
A picture frame is such a trivial thing – very basic joinery, a little glass … and so you get started and it starts to take on a life of its own. What dimensions? How much to allow for glass? What else goes into it? Is it going to be too heavy for a mitered corner glue joint? What about mats? It starts out so simple but it always seems to get complicated. I hope to summarize what I consider the key points of each phase. There are plenty of books at the library if you want more details. So, put another log on the fire, grab a glass of wine, pull up a chair and settle in.

Picture Frame Basics – A framed picture is made up of a frame, glass, mat, your artwork, backing board, a dust cover, nails and hangers. Everything contributes to appearance and style — wood, shape, colors, balance. Beyond that, the frame provides the structure for the package. The mat holds the picture away from contact with the glass. The mat colors complement the picture. The artwork is fastened to a back support to hold it flat. The dust cover on the back protects everything from insects.

The width of the frame and mat don’t want to dominate the picture. The mat width can typically be about the same as the frame width. A double mat provides additional quality to the image. You would typically only use a double if the artwork has special significance. The colors of the mat and frame complement the picture.

So look at the combination of choices…
- Choice of wood – oak, maple, walnut or one of five exotic hardwoods.
- Frame thickness: ¾”, 1” or something special.
- Frame width: 2” or something else.
- Frame shape – flat, sloped or beveled.
- Frame reinforcing – plain miter, biscuit, spline, key or pegged.
- Mat – none, single or double.
- Mat color – both inner and outer.
- Picture hangers – wire, hangers or keyholes.
- Frame trim – router design inside, outside or both.

No wonder we can’t get started. So many choices. That’s the frustration of woodworking. No, wait, that’s the joy of woodworking. Every project has so many turns, so many choices that when you are finished, it is a representation of your work, your artistry, your choices. So let’s try to make some of these choices easier.

Choosing Dimensions – The frame width should be 1” to 3” – a good place to start is with a 2” width. The mat in today’s framing world is from 2” to 4” wide with 3” being pretty normal. The top and sides do not have to be the same and often will vary a bit to properly frame the picture. There is a concept, called loading the picture, where you make the bottom of the mat slightly wider than the top and sides. Not by much but it compensates for the way the eye sees dimensions. A picture that has equal mat all the way around tends to look top heavy.

The Frame – Frames come in three basic styles – flat, sloped and beveled. Flat is your basic 1x2 (or so), a straightforward and yet attractive frame in its own right. If you want the art to stand out, to project from the wall, a sloped frame pushes the picture out from the wall. The outside of the frame is lower than the inside. If you want to draw attention to a picture, you used a beveled frame. Its outside edges are higher than the center and your eye is drawn more to the center, to the art.

Start with a flat frame. Become comfortable with the rest of the process and you’ll find your imagination moving ahead before long. Look at more complex router bits and shaper cuts to add style to your frame.

Cut the frame out of one continuous
piece of stock flowing from top to side to bottom to side. Then mark the parts so they can be assembled later in order to match the grain around the corners. This is especially true if there is a lot of grain figure.

**Rabbet** – The rabbet on the back is invisible. Oversize the rabbet. A tight fit makes the mat and glass dimensions critical. A shallow cut leaves inadequate staple room after the material stack-up.

The dimensions here are dictated by the need and that’s pretty much the way it is.

For depth, allow 3/8” each for glass, mat 1, mat 2, art & backing, and double for a backup board. Then an 3/16” for nails for a total rabbet depth of 1/2”. The width of the rabbet should be at least 1/4”, but 3/8” is more comfortable. Once you accept these as the right dimensions, every picture is done quickly and the same way, unless you’re framing oil on canvas or getting fancy.

Then you need to calculate the depth for your application. It’s quick to set up the router table with a large straight bit or a rabbet cutter and blast away.

**Trim & Styling** – Plan your first frame to be a simple square stock ‘flat’ frame. It will get you started, looks nice and guarantees the success that will make you want to do more and be more creative. A few simple features can really dress up a frame. For example, bead bits, fluting, an inlaid strip of a contrasting color. Be sure when adding any trim detail that you run the stock through the router before you glue it up and ideally before you cut it to length and miter it.

**The Miter** – The miter jig is probably the single most important part of this whole process in that it guarantees perfect corners and makes you want to finish the project. The jig is all ¾” stock. The bases are plywood and the fences are scraps of hardwood. I counter-bored all the holes to recess the self-tapping hex head screws. A 1/2” Forstner bit is fast and makes the result look very polished.

The finished jig is shown in use with a stop block clamped to the fence. It’s critical to use a stop block. Each “A” length and each “B” length must be precisely the same length. Mark “A” and “B” on the jig and adhere strictly to it.

**Glue & Clamps** – Proper clamp pressure is vital to a good glue joint. There are many corner clamps on the market that are pretty much worthless, in my opinion, because of the fiddling you have to do and the uncontrolled pressure on the joint.

Two systems I like are the band clamp and Lee Valley’s Quick Clamp. The band clamp uses home made corner blocks. The Quick Clamp uses threaded rods and corner brackets. They slip fit together around the frame. The uniquely designed brass knobs slide down the rod. Just press them flat against the corner bracket and tighten. Incredibly fast and strong.

**The Joint** – For small pictures, simply gluing the miter joint is enough. It is a weak joint because of the end grain. However, at some point, the weight of the frame with glass becomes important. My rule of thumb at the moment is that if it makes you nervous, reinforce the joint. I’m doing a 30”x40” picture that will definitely have reinforcement. You have visible as well as invisible choices.

For non-visible reinforcement, use biscuits or splines set into the ends of the miter.

The visible option is to feature rather than hide the use of splines, keys or pegs. Cutting the slot for a spline or a key requires a simple jig. If you adjust the fence so the blade takes a 1/16” cut off the face of the frame, you have a flat key surface. A variation on the flat key is an inset square strip angled across the joint. Also, you can drill pegs in from the sides and sand them flush or leave them proud.

The spline jig is used vertically against the rip fence to cut a slot. It is a simple but indispensable jig to make for this. The stock is ¾”.

**Finish** – You decide. Of course you’ll sand it down to 220 grit and dust it well. I like a wipe on varnish finish using several coats with Gavin’s wiping and polishing process along the way. But it is your choice.

**Glass** – Glass is typically single strength. For large frames, perhaps beyond 3 to 4 feet on a side, double strength would be better. Be sure to beef up the corners and provide adequate hangers. Non-glare (picture grade)
Picture Frame – continued
glass is definitely a plus. UV protection matters if you have a $1,000 original you want to protect. I don’t. The non-glare is an etched surface and is a good investment on better pictures. Glass supply houses will know what you’re talking about.

Do you know how to cut glass? It’s not hard, but then it’s not intuitive either. I do it pretty well but can’t attempt to teach you here. NEVER run a glass cutter over the cut a second time and always cut completely off the edge, don’t stop short. But many (most? all?) shops cut to finish dimension for no extra charge. Buying a big sheet to cut yourself later actually costs more since a shop charges by the square foot. So when you cut your own sheet, you assume the cost of the waste. And his edges were sanded, the glass wrapped, and the dimensions were perfect. Just wash it with soap and water, dry it and drop it in the frame. I prefer to use soap instead of the glass cleaner by the way. It always comes out clean without streaks.

Normal single strength glass is about ¼” and costs $3 – $5 per square foot. Anti-glare glass typically has to be ordered and is about double the price. I think it’s worth it on a really nice piece of art.

The Mat – Why? What kind? What Size? What color? Single or double or triple? This seems like a whole art in itself, but it’s not really that bad.

Mats do two things. The most obvious is they add significantly to the appearance. They also space the art away from the glass, allowing air circulation and preventing mold and the art sticking to the glass. Here are a couple of quick rules of thumb, although in the end, you’ll have to decide what you like.

First, if the picture has warm tones – red-brown-yellow – the mat should be warm colors also. If the picture is colder – blues and grays – of course the mat should be too.

Second, the main mat is typically wide and the second mat only shows about ¼”. The main mat should match a color in the print that you want to highlight, typically the object you want to specifically draw attention to. The second mat should pick some other dominant color in the picture and be a complementary and contrasting color to the main mat. I think the primary mat would probably not be the color of the background. It takes away from the picture.

Dedicate a clean, spacious work area to mat and final assembly. You know how to handle the woodworking part. But the mat and final stages go so much easier if you have a large, clutter free table. Working on the living room floor just doesn’t work well.

Matting requires a system of some kind. The mat board has a colored surface and white interior. Mats are traditionally cut at a 45 degree angle and that exposes the white interior, adding dramatically to the presentation. But you just can’t cut those 45s on all four mat edges freehand.

The mat process is pretty basic. Mark the frame (rabbet) dimensions on the back of the mat. Use a length of scrap cardboard to protect the surface of the table. With a new, sharp utility knife – snap off blades are great – cut the mat square. Then use the mat system. I won’t go into it here but once you do one, it’s a snap and the results are awesome. A frame shop will cut your mat too, but it’s about $25 per mat, double for a double. Make three double mat frames and you’ve paid for your own mat cutter.

A rule of thumb is to make the mat about the same as the frame width. Obviously you can vary from this in a thousand ways, but it’s an easy place to start. A double mat means that you put two mats back to back with the outside one revealing about ¼” of the inside mat. You pay for the whole inner mat only to see a small border. But it adds a high degree of class to the finished piece. It will cost twice as much for a ¼” border, but is often well worth the added appearance. The inner mat is cut to the artwork size and the outer is cut about ¼” larger. The outer mat, the most visible one, picks up some dominant color in the art. The inner or bottom mat color picks up another color in the art and should be complementary in color – do you know the color wheel? – to the outer mat.

You hear the term acid-free. It’s real. If you have an expensive piece of art, an original, something that you would have a hard time replacing, invest in the best mat you can get. The acid in the wood frame and a lot of wood fiber products will turn a piece of art paper black over time. For the photo of your high school buddy that you could reprint from an emailed JPG file, you can use pretty basic mat stock and will probably never know the difference.

On color, the best bet is to take your print with you to the store. Usually the folks that work at the craft stores have some ideas and can help you with color selection. Just remember that your object is to draw attention to the artwork, not the mat or the frame. One of the best ways to do this is to choose a mat color that matches the predominant color of
the art. Then the eye flows with the art rather than competes with it.

Water colors tend to want a subtle mat, not white but a light shade. Oils typically don't have a mat.

A large mat can make a small picture look important. A small mat can make a large picture look important.

Check out www.dickblick.com for very good prices on art supplies, particularly the Alto mat system.

**Hanging Hardware** – Wire is the most traditional method. It is also probably best for heavy pictures. And it’s certainly the easiest system to use for leveling the picture. Locate the screw eyes about one quarter of the way down from the top. Thread the wire into the first eye and wrap it about five times. Insert the wire into the second eye and adjust the length so the wire comes to just below the top of the frame. Then it won’t be visible when it’s hanging on the wall.

Sawtooth devices are very easy to install. I center the middle notch in the center of the frame. All the extra notches are there if you just hammer it on without thought of centering. The curious thing is that vibration does exist in a house – the furnace if nothing else. So if the picture is not well centered but you get it level by the friction of the frame bottom against the wall, over time it will work its way to a neutral, non-level position.

Making a keyhole is the woodworker showing through – no ugly metal hardware. A keyhole bit on your router works well. It is necessary to use guides on all three sides – for me anyway – to assure that the keyhole doesn’t skitter out from under you and that you cut it only as deep as you want it to be. The only downside is that there is no freedom to level once you locate the hole.

**Lighting** – For the real up-town look, add a brass light fixture to top of your picture. Craft stores like JoAnn’s sell battery or cord lamp assemblies that attach to the top of your frame and illuminate the artwork – very elegant. Consider it before cutting the frame stock. See www.joannart.com for ideas.

**Mounting** – The picture is typically fastened to a mounting board to hold it flat.

There are two approaches, permanent and reversible. Permanent means using spray adhesive to attach the picture to the backing. This is not done with an expensive piece. Reversible attachment methods include corner tabs or a couple of strips of linen or poster tape. Reversible uses high quality tape that will not pull fibers from the picture if you remove it years later. Ask for the right materials at an art supply store if you have expensive art to frame. Avoid normal Scotch tape. Remember how yellow and brittle that tape was on something you made twenty years ago?

There are several different ways to mount your picture. A book I think does a good job is *Perfect Picture Framing* by Katie DuMont – $14.95 at the craft stores.

The backing board can be acid free poster board or foam core.

**Assembly** – When you stack up the glass, double mat, art/mount and backing board, you should have about ⅛ inch remaining in the rabbet. There are three common fastening methods. Wooden strips, brads and point staples. The wood strip typically uses brads to make it removable. It’s elegant but fussy and probably not time well spent. Brads are cheap and most common. Drive them in horizontally just barely in contact with the picture backing. A brad hammer is available at art supply stores with a 90 degree anvil face that rests flat against the picture. Lee Valley has a very inexpensive stapler that shoots horizontal points spaced ¾” above the backing. Be sure to order staples too!

Add the dust cover to give the picture a very finished look. It’s just brown Kraft paper that is either glued on or attached with double adhesive tape.

**Cost** – After you’re comfortable with the process, I think it’s about an hour to rip, surface, cut and glue the frame with a sanding treatment to 220 grit. Then another hour of finishing, mat cutting and assembly. Out of pocket expense for a 15” x 20” artwork with a 2” frame and a 2” single mat is about $30. Compare it to $150-300 if done commercially.

So for a simple woodworking project, there are a lot of factors to consider. Once you make one frame, they are very easy to produce. Make two or three quickly after your first one and the process will feel much more automatic. Then when a year goes by before you need another one, you’ll have a bit of a experience to draw on. Frame on.

This article was brought to life through the kind efforts of George DuBois in teaching me about jigs one afternoon. The miter frame jig launched this project.

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**Newly Published Book by Steve A. Olesin**

This practical handbook presents detailed instructions for making twenty essential hand tools for joinery and general woodworking. All the tools can be made with common workshop tools and techniques. Included are instructions for measuring, marking, cutting, holding, and striking tools — everything needed to cut the frame and case joints that are at the heart of all furniture and interior woodworking.

Books signed and inscribed by the author may be purchased by accessing the author’s web site at www.creatiere.com. Discounted books may be bought on various web sites including Amazon.com. Published by Cambium Press. Steve teaches woodworking and builds custom stringed instruments and furnishings in New England. He lives in Acton, Massachusetts.

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Steve has been a GNHW member for 3 yrs … congratulations Steve!
March 18th, 2006

Small Meetings – Big Day

Entertainment Centers
Brooks Tanner in Manchester, NH
Time ... 9:30 –12:00
Capacity ... 20

Brooks Tanner has been operating a custom cabinet and furniture shop in Manchester, NH for a number of years. He wrote an article for Fine Woodworking, How to Make an Entertainment Center, and is in the process of writing a book on the subject. He has graciously offered to the Guild members a preview of what his book will be about.

Contact Dave Emerson at 603-783-4403 or efurnitr@tiac.net

Making a Spoke Shave
Dave Anderson at The Homestead School in Newmarket, NH
Time ... 9:00 – 3:00
Capacity ... 12

Hands-on with a material cost of $33.00
Dave Anderson started Chester Tool Works about 20 months ago. Dave designs and manufactures his handmade tools that he sells to catalogue companies. Dave has offered to do a hands-on class on making a Lee Valley Spoke Shave kit. If you wish to make a Spoke Shave with Dave, you must contact Dave on or before March 8, 2006 so that he may order the kits from Lee Valley. Dave will give you a list of tools to bring to his class. This is a great opportunity to go home with a tool you can use.

Contact Dave Anderson at 603-887-6267 or dsachester@siinet.net. You must register with Dave by March 8, 2006 so that he can order your spoke shave kit.

Staining and Coloring Wood
Bruce Hamilton in West Newbury, MA
Time ... 1:00 – 3:00
Capacity ... 10

Bruce Hamilton has been in the furniture restoration business for 30 years. Bruce uses conservation methods in his approach to refinishing furniture. Bruce has developed a method of refinishing furniture without removing the original finish or patina on lacquer and shellac pieces.

Bruce will show us his method of staining and coloring wood and if time permits how to make shellac with a question and answer session on any finishing tips.

Contact Bruce Hamilton at 978-363-2638 or rbruce.hamilton@verizon.net

Making Carved Molding
Bob LaCivita in Nottingham, NH
Time ... 9:30 to 12:00
Capacity ... 20

Bob LaCivita has been doing architectural millwork for over 30 years. For the past nine years, he has had his own business doing historical restoration of homes in New England. Bob also teaches a variety of subjects at the Homestead School.

Bob will be demonstrating How to Make Carved Architectural Molding, such as Egg and Dart, and Peas and Sausage. So bring your appetite and let Bob fill your mind with some interesting information.

Contact Brian Sargent at 603-483-0622 or BLSDesigns126@earthlink.net

Production Joinery with a Router Table
Dave Emerson in Canterbury, NH
Time ... 10:00 –12:00
Capacity ... 20

Dave Emerson designs and builds shaker style furniture and items for home decorating in Canterbury, NH. Dave will share with us his organized method for making mortise and tenon joints with his shop made jigs which he uses in conjunction with a router table. Dave does small production runs of his pieces. This is a unique opportunity to see how to make multiple parts in an organized manner.

Contact Dave Emerson at 603-783-4403 or efurnitr@tiac.net

OAK BOARDS …
Planted and ship lapped 5” -11” wide and lengths 3’-10’, about 300 bd ft — $500 or best reasonable offer - Gilmanton, NH.
Lisa Hasler:
603-267-7227, lisahasler@prodigy.net

MACHINERY …

Thickness Sander – 12” Woodmaster, ¼ HP 115/230 VAC motor, rolls of 80, 100, 150, 240 grit velcro backed belts & spare velcro web included. This is the “Belsaw” design with four corner feed screws & rubber infeed & outfeed rollers. Very stable, a real work horse — $350.

Shaper – ½” Delta Homecraft, ¼ HP 115/230 VAC motor, 10 cutters & bushing set, cabinet door cutter set & cove raised panel cutter included — $150.

Pete Boorum:
603-669-4185, smalllife@rcn.com

DUST COLLECTOR …
Jet DC 1182 – 2 HP, 2 bag model, 5” inlet that wyes to two 4” inlets — $150.
Tony Immorlica: 603-673-9629

ZEN – continued
been trying this. Jim is right, discipline about a schedule is a key to joy.

My mind reeling with Zen-inspired, ethereal thoughts about woodworking, I went back to Garrett Hack to see what sense he could make of my discoveries. He said much the same thing but in a more down-to-earth way that may have more appeal to us western minded-readers.

I know that bringing consciousness to each phase of a project, or for that matter to whatever you are doing, elevates it to a level of importance, even if it might not really be – such as sweeping the floor. So you pay attention, maybe make fewer mistakes. Quality is additive so to speak, in that each step compounds potential problems.
Twenty-five people attended the January meeting of the Period Furniture Group at John Whiteside’s shop in Fremont, NH. Included were five first time attendees.

The first topic of all PFG meetings is a safety topic and today we had two. Bill Newbold suggested if you have kids, it is a very good idea to get in the habit of always disconnecting power from your machines when they are not being used. It is also an especially good idea to kill the power on your machines when your shop is left unattended.

Harvey Best had an unusual bit of information – animals find the taste of polyurethane glues such as Gorilla glue very attractive. This substance can be very harmful to them as it does not pass through the body. If enough is ingested, surgery will be required to remove it.

John Whiteside presented two projects. The first was his recently upholstered Queen Ann wing back chair. It had taken two years for John to find the right person to upholster the chair. With the help of Geoff Ames, John selected JoAnne Gilbert from Gilmanton, NH to do the job. Of particular importance was her adherence to traditional methods used with period chairs. The chair looks beautiful. She did an excellent job of matching the fabric pattern across the various parts of the chair.

John mentioned if you are interested in getting JoAnne to do an upholstery job, you have to contact her in the spring as she teaches in the winter and only does upholstery during the summer. John said that the most valuable lesson he learned was the value of making full size drawings. This helped him think through the design, especially the three dimensional aspects of its construction.

John’s second project was a large kitchen island with pine frame and panel construction. The four corners have decorative turned maple columns inset in them. At a size of five by six feet and two inches thick, the pine top is expected to move over 3/4” with the changes in humidity and temperature. He has approximately ninety hours into the development of the plans.

In addition to drawings on this project, he also built prototypes. The drawers and slides however, ended up on his workbench. John was especially happy with the Blum tandem concealed draw slides he selected for the project. Marty Milkovits also said that they were his preference. John showed us the fixture he made to mill the raised panels using a vertical panel router bit on his shaper. According to John the most enjoyable aspects of this project has been the interaction with the clients and their involvement with the design process. They are keeping a log of all the communications, drawings and pictures which will be stored in the finished cabinet. John is definitely making this an enjoyable experience for his clients.

Sal Morgani brought a pair of adjustable brackets he made to support a drawing board on his workbench for design work. The motivation for these was the fact that his shop is too small to allow for a dedicated drafting station. The adjustments allow him to set the height and angle so that he can work sitting or standing.

Less Huckins showed an innovative magazine rack end table that he designed. The wood was from a butternut tree that had died on his property. The joinery was rather complex with compound angles and the fact that he used no metal fasteners in the construction. There will be a drawer that can be opened from either end of the table.

Marty Milkovits brought the full size plans for a corner cupboard that he is designing and building for a client. The wood will be painted poplar on the inside and stained curly maple on the outside. The large arched glass light doors will use antique glass that Marty had previously reclaimed. He talked about the details of constructing the glass light frame. He is aiming for about ¼” clearance at the peak humidity of summer on the doors.

Ed Jones showed the bench hold down he made from a vise grip style drill press hold down. Using a piece of aluminum tubing with an outside diameter of ¾” with a threaded wooden insert, he can use this either on the drill press or in the dog holes on his bench.
Bob Coleman was both the host and presenter for the November Granite State Woodturners meeting in Hollis, NH. The topic was appropriately Christmas Tree Ornaments.

Bob obtains his stock from multiple free sources and cuts his own blanks from native wood. The green wood is dried in a microwave oven to avoid checking, but he sometimes still has warping. Six to eight blocks are microwaved for two minutes at 50% power, followed by wiping out the moisture, a two hour delay and an additional six to eight cycles. Caution was issued that full power causes cracking and cherry microwaves poorly.

A template is used for the central globe portion of the ornament which takes the shape of an oblate spheroid with proportions of approximately 2½” diameter and 1¾” axial length. After the spheroid is turned, a 1½” deep ½” diameter hole is drilled with a Forstner bit as the starting point for hollowing the spheroid. Two tools are used for hollowing the spheroid interior front – a straight cutter and another cutter with a small bend. The back half interior is removed with a straight scraper taking small delicate cuts since the tool is extended 2” over the tool rest. During the interior work, the shavings are removed with an air gun. The wall is cut down to ¼” thickness.

After sanding to 400 grit, three coats of Minwax Fast Drying Polyurethane are applied with a foam brush with 320 grit sanding between coats. Jaw alignment marks are made before removing from the chuck for subsequent sanding.

After the last finish is dry, a ¾” Forstner bit in the tailstock drills through the globe and separates it from the mounting block by intersecting the neck which is smaller than ¾”. The globes are then buffed.

Bob strongly recommends a long nosed Nova chuck for turning icicles. A screw eye is attached to one end of the icicle stock for finishing before roughing to a 1⅛” outer diameter. The three icicle segments are turned to minor diameters of ½”, ⅝” and ¼”. A ¾” tenon is cut at the icicle top with a small undercut to fit tightly on the globe. After turning, Bob sands to 400 grit and then cuts the icicle off and sands the point.

After the icicle is finished, the ¾” hole in the globe is sanded so the icicle has a friction fit followed by permanently attaching with Titebond glue. The top finial is also installed in the other ¾” hole.

One of Bob’s trademarks is his very precise, freehand block letter signature that is burned using a fine tip woodburning tool.

For marketing, Bob has made contacts at the Sunapee fair and sells through the League, but he also has good luck with word of mouth, or as Bob says “Door Trade”. One unknown customer came knocking and ordered 21 ornaments turned from customer provided buckthorn. Ornament prices range from $75 to $95 and take approximately two hours to turn and finish.

On the GSWT business side, Jon Siegel reminded everyone that the Fifth New England Woodturning Symposium is scheduled for May 13th, 2006. Volunteers are still being recruited. Contact Jack Grube if you are interested in volunteering. In addition, hosts are also needed for the traveling presenters.
Janet Collins of Ryegate Vermont, who runs several programs at the North Bennett Street School, gave a truly outstanding demonstration on how to make a shaded and inlaid Federal style quarter fan. In my ten-plus years in the guild, I have never heard anywhere near as many positive comments and raves about a demonstration or had as many people come up to me afterward to offer compliments. If you were not able to attend this meeting, remember that it is available on DVD from the Guild library and I personally recommend you borrow it.

After the morning’s normal business meeting, announcements were made, and member Steve Olesin was recognized and congratulated on having his new book Tool-Making Projects for Joinery and Woodworking published by Cambium Press. If you are interested in making some of your own woodworking tools, this is a great place to start.

For Janet’s presentation, an enhancement was added to the normal videotaping process. A second camera was set up and its output was projected onto a screen with an LCD projector so that folks would be able to see some of the fine hand work she was doing on the workbench.

Janet started by showing us the technique of cutting the veneer into oversized rectangles to be placed into the hot sand and then how to insert the pieces in at an angle to taper the shading. She explained in detail how to use a pot of sand on a hotplate to scorch the segments of the fan and suggested strongly that folks make extra pieces so that only the best and most consistent pieces end up in the final result. After shading, the blanks were cut into pie shaped wedges, were arranged in order, and then taped together.

We were then shown how to layout the overall fan shape, cut the ends of the rays with a carving tool, and cut and add the pieces of black dyed veneer to the rays. Janet demonstrated the application of the veneer tape to the back side of the fan and the addition of a cross grain backer strip to the fan to enhance its strength. Of particular interest was how few and simple the tools are that are required to produce such a project enhancing result.

Afterwards, we were free to look at samples of many types of inlaid decorative elements. Janet’s good natured commentary during her talk added greatly to the day’s event.

New Scholarship Application Deadlines

During the process of applying for a guild scholarship, I became interested in the scholarship program and how it works. I told Jack Grube of my interest and volunteered to become a member of the committee. Jack told me that I could do just about everything I needed to do electronically. It sounded like a good way for me to stay involved with the guild which just happened to have its initial meeting in my old workshop in Warner many years ago.

I now find myself the scholarship committee chair and I want to encourage guild members to apply for scholarship grants. There are a lot of good schools out there. In New Hampshire, there is the Homestead Woodworking School, McLaughlin Woods, The Breed School and The Windsor Institute. Bruce Hamilton has the Wood Finishing School in Massachusetts. Near where I live in Maine is The Center for Furniture Craftsmanship and further downeast for the more artistic members among us there is the Haystack Mountain School of Crafts. There are many others out there too.

In order for guild members to take advantage of summer workshops that are typically announced in January, we have moved the spring application deadline from May 1st to March 1st. The fall application deadline of November 1st remains the same. Applications must be submitted prior to the start of the activity.

I look forward to seeing those applications come in the new year. —

John McAlevey: johnmcalevey@adelphia.net
Nov 12th, 2005

Period Furniture Group

The November meeting of the Period Furniture Group was hosted by Dave Anderson at the Chester Toolworks factory. Dave Macrae started things off with some information on electrical safety. He had a handout on the peak short circuit currents that can occur before your circuit breaker can trip or fuse blows. The paper also covered protection schemes based on wire sizes and the use of current limiting fuses.

Dave Anderson spoke about his experience with acquiring high quality tools for bargain prices at local auctions and flea markets. There was a short discussion where people shared their favorite places to find old tools in the area.

Dave Anderson’s main topic was his latest work in progress, a Queen Anne corner table from Norm Vandal’s book *Queen Anne Furniture: History, Design and Construction*. Dave is using tiger maple bought from Goosebay Lumber. He spoke about the difficulties of making the 45° mortises and showed us the fixtures he made to deal with these. Dave had several sample boards he used to test finishes for use on the table. The formula that he selected was aniline dye followed by oil to pop the grain and a final coat of glaze. He showed us the Auriou patternmaker’s rasps that he used for the final shaping of the legs. These eliminated the tear out that he was getting using his Nicholson #50 on the soft parts of the tiger maple.

Paul Miller brought a sack back Windsor chair that was ready for finishing. This chair was different than the earlier sack backs that Paul made. Instead of seven spindles on the back he used nine, both for comfort and esthetics. The leg and arm turnings were done in the New York style, one that is usually only found on continuous arm Windsor chairs. These two changes along with Paul’s fine craftsmanship makes for a very nice looking chair. Another difference was the use of poplar for the seat, Paul feels that this wood will be less likely to crack than the more traditional pine. Because of the additional hardness of the Poplar and in an effort to speed up the seat shaping process, he now uses an Arbortech grinder instead of a gutter adz for the initial hollowing. Paul shared quite a bit of detail on the process of shaping the spindles including using the steamer to straighten out any that showed a tendency to bow after shaping. Final smoothing of the spindles was done with a scraper called a chair makers devil. He also detailed the multi-step process he uses to reduce the tendency of the oak to crack when bending the bow and arm.

Sal Morgani gave an excellent talk about the process he uses to select wood for a project. He stressed how important it is to fully visualize what you want from the wood in your project before you purchase. He goes to many places and looks at a large selection of boards before he purchases anything for a project. He brings a drawing with grain information detailed on it along with his cut list. He brings a spoke shave so that he can actually see what the grain looks like. A block plane would also work for this. If the vendor won’t let him shave he won’t purchase wood there. The careful selection of your materials is the foundation for the final expression of your effort and craftsmanship.

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Dec 3rd, 2005

Beginner & Intermediate Group

The GNHW BIG met on Saturday December 3, 2005 at Bob LaCivita’s shop in Nottingham, NH. This was the start of a multiple meeting series on making frame and panel cabinet doors.

Bob started out by saying that when building a cabinet you must select and know what hardware you will use first. This is because so much of the construction depends upon it. He recommended *Encyclopedia of Furniture Construction* by Ernest Joyce as a good basic text. We were then shown the basic parts of a frame and panel door with the various types of joinery used along with their strengths and weaknesses. Panel construction was discussed along with diagrams showing ten ways to lock a panel into a frame.

Then Bob got down to the construction of a cope and stick door frame using slip or loose tenon joinery. Bob is a very thorough teacher, not only does he demonstrate the method that he uses but he covers the other standard ways to accomplish each step. Any jigs or fixtures used are described in detail along with any safety issues.

A second type of door frame used traditional mortise and tenon construction. He showed us several methods to use for clamping and aligning the frame. Lastly he showed how to apply a bolection molding to the inside of the frame. Bob opined that it would be nice if he had a Lion miter trimmer to make quick clean trims on the molding joints.

Throughout his demonstration he is constantly mentioning the little things that make using individual tools easy and letting us know which operations need special care. Workers with his level of expertise tend to gloss over these details because they have become unconscious habits from years of practice.
Downsized Magazine Subscriptions

Once again, we are offering subscriptions to Taunton magazines available at special group rates. Discounts are available on any magazine Taunton offers, and are applicable to both new and renewal subscriptions. Since we do this only once a year (right after the February Guild Meeting), you may wish to renew now, even if your magazine expires mid-year. Taunton will simply add to your current term.

If you wish to take advantage of this opportunity, send your name and address, the magazine(s) and term(s) you want (specify if this is a new or renewal subscription). I do not need your current label for renewals. Taunton will search their database using your name. Make a check out to the Guild for the appropriate amount to ...

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6 Purgatory Road
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603-6763-9629 (evenings) or
annette_and_tony@peoplepc.com

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Treasurer’s Report

Our five year 501(C)(3) IRS certificate expired this year. This required filing many pages of forms and reviewing our financials for the past five years. I worked on this over a period of three months this fall and the filing was completed in November. I received word back from the IRS late in December that our status as a public charity is still in effect.

Our cash flow situation continues to improve due mostly to our ever-increasing membership – currently approaching 400. There are plans to update some of our video taping equipment before the Turning Symposium. This will require an expenditure of several hundred dollars. Also, our insurance carrier has informed us that the premium will be more than doubling because of an increase in the minimum premium level. Other expenses are level at this point.

At this point in our fiscal year, the income pretty much stops and the expenses keep coming, so continued good management by the steering committee is necessary to maintain our good financial condition – Peter James.

Wood Days

Time to plan for Wood Days again – June 24 & 25 at Canterbury Shaker Village. What will you be working on that you can bring and share? Do you know someone who should be invited to participate? Do you have new ideas for Wood Days? How about work that can be shown for sale or to encourage orders?

There will be no mailing to the full Guild list so this is your first notice. Outdoor space is unlimited but tent and indoor is not. So please email me or phone ASAP so I can get you on the mailing list for information and an application.

Dave Emerson
603-783-4403 evenings or efurnitr@tiac.net

Wood Week

Some time slots are still free for The League of NH Craftsmen Fair August 5-13 – set up is Aug 4. Call or write to help with or donate to the raffle.

Dave Anderson – 603-887-6267, dsachester@gsinet.net

Beginner & Intermediate Group

The next BIG meeting will be part 2 of frame and panel doors – fitting and hanging. The next meeting is Feb 1 at Bob LaCivita’s shop at 365 Stage Road (Rt 152) Nottingham, NH from 9:30am to 12:00 noon. Please e-mail or telephone (before 9 pm) if you plan to attend.

Bob LaCivita
603-942-1240 or rlacivita@comcast.net

Granite State Woodturners

Meetings are 9:00am to 1:00pm on the fourth Saturday of the odd numbered months. The next meeting is March 25. The meeting place changes each time. Contact Jon Siegel to be added to the e-mail notification list.

Jon Siegel – big@proctornet.com

Period Furniture

Bimonthly meetings take place in small workshops throughout NH. To get on the group e-mail list contact ...

John Whiteside
603-679-5443 or johninfremont@comcast.net

The Millwork Shop

at Trumbull-Nelson Construction Co., Inc.
Rt. 120 - Hanover, New Hampshire
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Fiction and Fact from Peter’s Almanac

Did you know that there is a safety recall notice on almost every Sears Craftsman Radial Arm Saw ever sold? On some of the newer models, they will send you some replacement parts to update and correct the unsafe conditions. On the older models, they will pay you $100.00 for the return of the motor and carriage assembly. For those saws, they will send you a UPS box with prepaid return label and instructions on how to remove, pack, and return the parts. – Peter James
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