

WOODWORKERS NEWS



Northeastern
Woodworkers
Association

March 2011, Vol. 20, Number 3

March Meeting

Thursday, March 10, 2011, 7:00 pm

Shaker Heritage Society Meetinghouse, Albany-Shaker Road, Albany

Open Forum Techniques Session This Month at the Shaker House

by Ken Evans

There has been a change in plans for this month's previously scheduled topic and now we would like to make this time available in the form of a Techniques Session to discuss and answer as many ranging topics of woodworking as we can during the hour we have available.

We have the benefit of many talented and skilled woodworkers in our group and find this venue to be an excellent opportunity to learn from you, our skilled members.

Feel free to bring an example of an accented leg, scroll sawn technique, or even a turning technique you can share with a brief (no longer than 3-5min) in how it was done. There will be many members who will very much enjoy learning from you. We will even have a panel to address all kinds of woodworking!

Based on the number of items and techniques available, we will make every effort to provide a forum for us to learn from you.

See you there!



CALL FOR ENTRIES

Woodworkers Showcase 2011 is coming March 26 and 27, 2011.

Please submit your Exhibit Form soon. Website is www.nwawoodworkingshow.org

It is the entries in the exhibit area which makes our woodworking show so very unique among all woodworking shows.

REMEMBER, this is our 20th year and we will be celebrating by videotaping the show.
GET YOUR ENTRY IN THE CELEBRATION VIDEO

As this is written, only 20 items have been submitted for the exhibit hall.
Most years we have about 450 items.

We need your entry forms soon. This is especially important this year because we are using the new space in the City Center and we need to be able to plan how to arrange the items.

Your project does not have to be completed before sending in the form.
No matter what your skill level may be, please plan to show your work.

OFFICERS

President - Roger Holmes
roger.holmes@dewalt.com

Vice President - Dan Tipton
reallybigdan@verizon.net

Secretary - Kitty Scharl 765-3189
crowridge@nycap.rr.com

Treasurer - Austin Spang 393-2859
spang@nycap.rr.com

Past President - Owen Arkison
518 459-5348
owen.Arkison@earthlink.net

Historian - Wayne Diston 674-4171
wdistin@nycap.rr.com

Executive Secretary - Charlie Goddard
370-0388 Cgodd@aol.com



CHAIRPERSONS

Mid-Hudson Chapter
Pete Chast, President
pchast@francomm.com

Sacandaga Chapter
Co-Chairpersons

Clyde Cheney - 661-5138
Ray Laubenstein - 863-6071
RLAUB@Roadrunner.com

Education

Herm Finkbeiner - 371-9145
hfinkbei@nycap.rr.com

Youth Programs

Wayne Diston - 674-4171
wdistin@nycap.rr.com

Fiske Fund

Tom Osborne
TTomosborne@aol.com

Hospitality

Lew Hill
ssrhill@aol.com

Library

Darrel Welch - 477-8431
ydwelch@fairpoint.net

Membership

Joseph Bucci - 489-3719
josephbucci@nycap.rr.com

Programs

Dan Tipton
reallybigdan@verizon.net

Publications

Wally Carpenter - 434-1776
c.j.carpenter@earthlink.net

Publicity

Tony Barrera - 783-9133,
tntb1143@juno.com

Showcase Chair

Ken Evans - 753-7759
kevans1@nycap.rr.com



UNLESS OTHERWISE NOTED, PHONE
NUMBERS ARE IN AREA CODE 518

Basics of Saw Blade Selection

An introduction to the important characteristics of various saw blade types.

by Herm Finkbeiner

Adapted from an article provided by Rockler Woodworking

Making smooth, safe cuts with your table saw, radial arm saw, chop saw, or sliding compound miter saw depends on having the right blade for the tool and for the type of cut you want to make.

Saw blades look more or less simple but there are complexities that have to be considered. To put together a saw blade collection, you just need to know a little about what different types of saw blades do best and why. There are also manufacturing differences that are inherent in top-quality saw blades. To choose the blades that best suit your woodworking needs and budget a bit of background in both saw type and quality characteristics will help.

Most saw blades are designed to do their best work in a specific type of cutting operation. There are blades designed for ripping lumber, crosscutting lumber, cutting veneered plywood and panels, cutting laminates and plastics, cutting melamine, and cutting non-ferrous metals. There are also "general purpose" and "combination" blades, which are designed to work in two or more types of cut. What a blade does best is determined by the number of teeth, the type of gullet, the tooth configuration and the hook angle (angle of the tooth).

As a general rule, blades with more teeth yield a smoother cut, and blades with fewer teeth remove material faster. A 10' blade designed for ripping lumber, for example, usually has as few as 24 teeth, and is designed to quickly remove material along the length of the grain. A rip blade isn't designed to yield a mirror-smooth cut, but a good rip blade will move through hardwood with little effort and leave a clean cut with a minimum of scoring.

A crosscut blade, on the other hand, is designed to give you a smooth cut across the grain of the wood, without any splintering or tearing of the material. A crosscut blade will usually have from 60 to 80 teeth. More teeth mean that each tooth removes less material. A crosscut blade makes many more individual cuts as it moves through the stock than does a ripping blade. The result is a cleaner cut on edges and a smoother cut surface. With a top-quality crosscut blade, the cut surface will appear polished.

Gullet — The gullet is the space cut away from the blade plate in front of each tooth to allow for chip removal. In a ripping operation, the feed rate is faster than in crosscutting and the chip size is larger, so the gullet needs to be deep enough to have room for the large amount of material it has to handle. In a crosscutting blade the chips are smaller and fewer per tooth, so the gullet is much smaller. The gullets on some crosscutting blades are purposely sized small to inhibit a too-fast feed rate, which can be a problem, especially on radial arm and sliding miter saws. The gullets of a combination blade are designed to handle both ripping and crosscutting. The large gullets between the groups of teeth help clear out the larger amounts of material generated in ripping. The smaller gullets between the grouped teeth inhibit a too-fast feed rate in crosscutting.

Tooth Configuration — The shape of the saw blade tooth and the way the teeth are grouped also affect the way the blade cuts. The configuration of the teeth on a saw blade is a factor in whether the blade will work best for ripping, crosscutting, or laminates.

Flat Top (FT) Flat top teeth are used on blades made for ripping hard and soft woods. Since wood is much less likely to chip and splinter when it is being cut in the direction of the grain, the focus of a rip blade is to quickly and efficiently remove material. The flat top tooth is the most efficient design for cutting and raking material out of the cut.

Continued on Page 6

Volunteers

By Karen Arkison

Final Request:

The Woodworker's Showcase 2011, Saturday March 26th and Sunday March 27th is fast approaching. Our hope is that it will be as successful as in the past 19 years.

We depend completely on the NWA membership to volunteer their valuable time and skills to bring to the public an incredible weekend of lectures, demonstrations, vendor exhibits and our own members' work.

Our goal is to educate and inspire the public in the incredible hobby, and for some profession, of the art of woodworking. Whether your interests are in carving, turning, furniture making or musical instruments we hope that the men, women and children that enter through the doors of the 2011 Showcase will be amazed and inspired at the degree of talent that is present here in Northeastern New York.

Volunteer sign ups will be at all future meetings. If you know what you would like to volunteer for and cannot make it to a meeting, please call or send me an email. Please volunteer for as many shifts as you can. Perhaps you could consider volunteering with a friend or spouse. Working with other members, whether old friends or new, is a very rewarding part of volunteering. When you sign up please include your email address so that we can limit the amount of mailing to be done thus keeping our costs down.

It is my pleasure to do my part as the coordinator but as you all know it will depend on the members to make this, our 20th year, a year that we can be proud of.

Sincerely,
Karen Arkison
nydivergirl@earthlink.net

Cedarlands Scout Reservation Long Lake, NY

By Ken Evans

Cedarlands is looking for woodworkers and woodcarvers to do various projects around camp. Your charge would be to bring a rustic Adirondack "flavor" to the grounds and buildings of Cedarlands. Whether you have a day, a week, or a summer to help out at camp, all are welcome.

Sit around and carve a totem pole or a sign or whatever you choose, while scouts of all ages watch. Teach if you'd like to, or tell lies (I mean stories) about your wood working expediencies. Want to be on staff teaching scouts your craft, from June 25th until August 13th, this is your opportunity. It's a small salary with room and board, lots of fun, and a chance to influence the next generation of woodworkers and woodcarvers.

Whether you come for a day or the summer we will feed you and give you a place to sleep. We need signs and log lean-tos built along with a myriad of other projects.

We are also looking for help June 3-4-5 for our "Beaver Weekend". No special skills required, any special skills appreciated. We have a long list of precamp projects. Visit the website at www.scoutingcny.org/Cedarlands.cfm

For an application or questions contact:
Camp Director Bill Laymon – Home Office 518-483-0721
bill.laymon@scouting.org

WOODWORKERS NEWS is published by the Northeastern Woodworkers Association for its members. The Association's aim is to provide a common meeting ground for lovers of woodworking who want to know more about wood and the techniques for forming it. The newsletter is published monthly. It is assembled in QuarkXPress 5.0 on an iMac G5, duplicated by Shipmates, and mailed to more than 1,000 addresses.



Your next issue of
Woodworkers News
will be published
in early April
Copy deadline: March 15
Wally Carpenter, Editor
(518) 434-1776
c.j.carpenter@earthlink.net
Elizabeth Keays Graphic Artist
Designer



WEBSITE(S)
www.woodworker.org
www.nwawoodworkingshow.org



NWA maintains two websites, the first noted here operates continuously. We also offer selected links to other sites of interest to our membership.
Webmaster - Kurt Hertzog
kurt@kurthertzog.com

The second site operates from January 1 to May 30 and carries specific information about SHOWCASE.



**NORTHEASTERN
WOODWORKERS ASSOCIATION**
P.O. BOX 246
Rexford, New York 12148



SHAKER FOOT BRIDGE COMES HOME

By Wayne Distin

In early summer 2010, the Shaker Heritage Society talked to our Executive Secretary Charlie Goddard about a project at the Shaker Site. Now over the years NWA has worked on many projects at the site for use of the Shaker Barn for storage and the Annual Lumber and Tool Auction. Projects like benches, quilt racks, meeting house peg racks, building cleaning, etc. have been done.

This project was to be the largest yet. Build a foot bridge over a stream. The original plan was to fix the existing foot bridge. After Charlie inspected the bridge it was clear the bridge could not be used or repaired. The Society hired an architect and secured funds for a new foot bridge at a location near where one had been many, many decades ago.

Our job was to clad the two twenty eight foot steel beams, each weighing 800 lb., in wood and after installation on unique foundation posts, install joists, decking, and railings. On 5 days between October and December 2010 a dedicated crew of NWA volunteers completed the job. Thanks to Charlie Goddard, Wayne Distin, Dave Mobley, Dave Parkis, Pete Lawler, Pete Cowie, Bill Storz, Greg Miller-Kramer, Tony Barrera, Ed Horn, Dick Flanders, Dave Ellison, John Hodgson, and Stan Blandchard for their hard work.

The Shaker Heritage Society has scheduled May 19, 2011 at 2 pm for a dedication ceremony for the bridge. Albany County Executive Michael Breslin and NYS Assemblyman Bob Reilly are expected to attend. 🐾



IT WAS a BRIGHT Day.

By Ken Evans

The shining of the gold leaf in the Giles Gilson Gilding class BRIGHTENED the winter day at the NWA SHOP at Mustang Drive on February 12, 2011.

Twenty students watched and asked many questions as Giles Gilson showed them how to gild everything to make it artistically bright and shiny. Giles gilded wood, plastic, foam board, and finished pieces of artwork. He gilded everything but the “lily”! It was a fun day.

Flatboarders, woodturners, scrollsawers, miniaturists, and carvers alike were in attendance to learn the process of

applying metal foil to various surfaces. Many foils including 24 k gold, German Gold, aluminum, and copper foils were used by Giles in his demo.

The history of gold leafing, the various processes of application, the many ways to prepare the surface, the means of burnishing the foil, engine turning, and top-coating the finished surface were discussed in detail in this full day demonstration. I suspect the woodworking of NWA will soon display a brighter side as a result of this demonstration. Many of those in attendance were eagerly looking forward to the accompanying hands-on session which was to follow in the near future.



Chasing to Clean Rusty Threads

By Ken Miller

Often, restoration of old tools, especially hand planes, requires cleaning the adjustment screws and bolts to free them up. Using a wire brush to clean rusty threads is not adequate because the wire bristles do not penetrate deep into the v-groves, and dirt and rust remain to thwart the mechanism. Standard threads are 60 degrees, and many can be cleaned with a die, however if you do not want to ruin a good die or one is not available, there is another technique. Grind the teeth of a hacksaw blade along the kerf parallel to the blade to under 60 degrees. If you can mount the object, screw, etc. in a chuck on a lathe or drill press and run it very slowly (60 to 200 rpm), follow (chase) the thread with a gentle saw like motion. This will remove the corrosion and dirt from the depths of the “V” in the thread. Although it will not restore the corroded metal, the final shape will not be oversize, and the mechanism should work freely again.

Another approach is to use Evapo-rust, by Harris International Lab., Inc. It is an environmentally-safe water-based product that removes rust in minutes, without scrubbing. I have not tried this product but a machinist confirms the claims.



Basics of Saw Blade Selection

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Alternate Top Bevel (ATB) “Alternate top bevel” means that the saw blade teeth alternate between a right and left hand bevel. This tooth configuration gives a smoother cut when crosscutting natural woods and veneered plywood. The alternating beveled teeth form a knife-like edge on either side of the blade and make a cleaner cut than flat top teeth.

Combination Tooth (Comb.) The combination (4&1) configuration is used for “combination” blades -- blades designed to do both crosscutting and ripping. The teeth are arranged in groups of five - four ATB teeth and one FT -- with a large gullet in between the groups.

Triple Chip Grind (TCG) The TCG configuration excels at cutting hard materials like laminates, MDF, and plastics. Teeth alternate between a flat raking tooth and a higher “trapeze” tooth. The TCG configuration is also used for non-ferrous metal cutting blades.

High Alternate Top Bevel (HiATB) The HiATB configuration is used for extra-fine crosscutting and to cut materials surfaced with melamine, which is prone to chipping. The high bevel angle increases the knife-like action at the edge of the blade.

Hook Angle — On most saw blades, the tooth faces are tipped either toward or away from the direction of rotation of the blade, rather than being perfectly in line with the center of the blade. Hook angle is the angle formed between the tooth face and a line drawn from the center of the blade across the tip of the tooth. On a blade with a positive hook angle, the teeth are tipped toward the direction of the blade's rotation. A negative hook angle means that teeth tip away from the direction of rotation, and a zero degree hook angle means that the teeth are in line with the center of the blade.

Hook angle affects blade operation in very important ways. A blade with high positive hook angle (+ 20 degrees is a high hook angle) will have a very aggressive cut and a fast feed rate. A low or negative hook angle will slow the feed rate and will also inhibit the blade's tendency to “climb” the material being cut. A blade for ripping lumber on a table saw will generally have a high hook angle, where an aggressive, fast cut is usually what you want. Radial arms saws and sliding compound miter saws, on the other hand, require a blade with a very low or negative hook angle, to inhibit overly fast feed rate, binding, and the blade's tendency to try to “climb” the material.

Kerf Width and Plate Thickness — The width of the “kerf” - the slot the blade cuts in the material - is another important consideration. Most obviously, the kerf width determines the amount of material that is removed in the cutting process. But kerf width isn't just a matter of economics. The size of the kerf is determined in part by the thickness of the blade plate, and a solid, reliable blade plate is one of the features of a good saw blade.

Thin Kerf Blades — A saw blade's teeth have to make a wide enough cut to allow the blade plate to pass through the kerf. For the blade to operate smoothly and

make a true cut without a lot of scoring on the face of the cut, the blade plate has to be substantial enough to absorb vibration and to handle the heat generated during the cut. For full kerf saw blade, a kerf width of around 1/8" is standard. But for so called “underpowered” saws -- under 3 HP for a table saw -- a full 1/8" kerf has another effect: drawing too much power. The saw slows down causing excessive friction. The blade heats up and can become distorted or burn the cut surface.

Fortunately for woodworkers who work with smaller saws technological advances in blade design has led to “thin kerf” blades that rival the best industrial quality full kerf saw blades. Thin kerf saw blades are extremely helpful for the simple reason that the blade has to cut through less material, and therefore doesn't have to work as hard as a blade with wider teeth. The best thin kerf blades employ laser cut dampening systems to inhibit vibration, and are made out of the best quality hardened steel to help them stay true in the face of high rotation speeds and stress generated in cutting.

Quality Makes a Difference — How a saw blade performs depends on both manufacturing techniques and the quality of the material that go into making the blade.

The Best Saw Blade Teeth — One of the most important things to look for in a saw blade is a good set of teeth. How long the blade will stay sharp, how clean it will cut, and how many re-sharpenings it will take all depend on the quality of the cutting tips. These days, carbide has just about replaced steel as the material for cutting tips of saw blade teeth. But not all carbide is created alike. On some of the best premium blades, the carbide is formulated specifically for the application of the blade. At minimum, look for a blade with C3 grade micro-grain carbide teeth, which are thick enough to allow a number of re-sharpenings. C4 carbide is the most durable grade for saw blade teeth, and is usually found only on premium blades.

A Quality Blade Plate — For a saw blade to make a true cut, the teeth must be held rigidly in line with one another. The blade plate needs to be as close to perfectly flat as possible, and it needs to stay that way during the cut. The blade plate should be made of quality, hardened steel. The arbor hole also needs to be sized and placed with extreme precision. The best blade manufacturers like Freud and Forrest laser cut their blade plates to insure that the blade will fit the saw's arbor precisely and the teeth will maintain as close to a perfectly consistent path through the material as possible.

The blade plate also has to be “tensioned” for it to remain straight and rigid when it comes up to speed. On a high quality blade, correct tensioning keeps the blade becoming “floppy” as result of the centrifugal force generated in operation. Blade Plates can also be treated to make their surface resistant to picking up resin and adhesives from the materials they cut. Many Freud LU series blades have a permanent red Teflon coating to reduce friction and help them resist corrosion and resin build up.



EXHIBIT ENTRY FORM

NWA SHOWCASE MARCH 26 – 27, 2011

NAME: _____ PHONE: _____ Member: Yes _____ No _____

ADDRESS: _____ City _____ State _____ Zip _____

EMAIL: _____

Check here if you would like this information to be available for inquiries about your work..

**PLEASE COMPLETE THE ENTRY FORM AND SEND IT TO:
NORTHEASTERN WOODWORKERS ASSOCIATION
P.O. Box 246, Rexford, NY 12148**

ENTRY DEADLINE IS MONDAY, MARCH 21st
Any entry received after that date will not be entered for judging, but for display only.

***NOTE:** Display labels are made in advance using the information provided below. The labels will be waiting when you bring your entry on Friday, March 25th. No exhibit items accepted after 7:00PM.*

<i>ENTRY CATEGORY AND DESCRIPTION</i> <i>(State category; give brief description of your item, list types of woods and finish used. Example: Furniture 3: Windsor chair, tiger maple, honey oak stain, lacquer finish)</i>	<i>DISPLAY or JUDGING (only one per category)</i>	<i>AMATEUR or PRO</i>
#1		
#2		
#3		
#4		
#5		
#6		

Additional notes:

WHAT: NWA SHOWCASE 2011 (www.nwawoodworkingshow.org)

WHERE; Saratoga Springs City Center & The Saratoga Hilton

WHEN: Saturday and Sunday, March 26 - 27, 2011, 10 AM – 5 PM

EXHIBIT HALL ENTRY CATEGORIES

1. Adirondack furniture and accessories
2. Furniture 1: Tables, beds
3. Furniture 2: Cases, cabinets, desks
4. Furniture 3: Chairs
5. Accessories: Clocks, boxes, desk top pieces
6. Toys/Miniatures: Play things, models
7. Turning 1: Segmented
8. Turning 2: Bowls, platters, plates, vessels
9. Turning 3: Pens, finials, spindles, ornaments
10. Beginner Turner: Over 16 and new to turning in the last 12 months
11. Beginner Woodworker: Over 16 and new to woodworking in the last 12 months
12. Youth: 16 and under.
13. Carving: Representational, conceptual, decorative
14. Inlay, Intarsia, Marquetry
15. Scroll sawing
16. Musical instruments
17. Other: Shop equipment, boats, or any piece not fitting into the above categories

ENTRY RULES FOR EXHIBIT HALL

- Any woodworker may exhibit his/her work.. There is no entry fee.
- Entry forms must be received by March 21st to be eligible for judging. Late entries will be entered for display only.
- All exhibit items must be delivered to the City Center no later than 7:00 PM, Friday March 25th. No exceptions.
- Exhibits are not to be removed from the floor before 5PM Sunday.
- You may exhibit any number of pieces in more than one category, but only one piece per category for judging.
- Award winning pieces from a previous Showcase event are not eligible for competition, but may be entered for display.
- There must be at least three entrants in a category for an entry to be judged.
- The judges reserve the right to re-categorize an item for judging.
- The exhibit hall is not a commercial area. No price tags or literature other than small business cards will be allowed.
- The decisions of the judges are final. At the discretion of the judges, some awards may not be given.

AWARDS

1. Best of Show: One from any entry
2. Professional Excellence: Each category except for 10, 11 and 12.*
3. First Place: One each category
4. Second Place: One each category
5. Third Place: One each category
6. Honorable Mention: One each category
7. Richard Pagano Memorial Award for turning (new)

* Professionals: You are a professional if half or more of your livelihood is derived from woodworking. You may submit an entry in any category except 10, 11 and 12. Professional entries displayed in the Professional Gallery will be judged.

For questions: Ken Evans, Showcase Chair (518) 753-7759, kevans1@nycap.rr.com
Roger Holmes, Judging Chair (518) 817-0660, bmwbikes2@yahoo.com

An Introduction to Jigs and Fixtures

By George Rutledge

Jigs and fixtures serve several purposes. They extend the range and utility of our tools enabling us to achieve accurate and repeatable results when shaping parts, machining joints and installing hardware. Most importantly, when made and used properly, they provide a measure of safety without which many tasks would be inadvisable if not impossible. While there is a difference between jigs and fixtures, for our purposes their commonalities are more significant. Technically, jigs are used to guide the work or the tool and fixtures hold the work in place but many devices such as dovetail jigs do both. In this article when I refer to jigs you may assume the point applies to fixtures as well. Some jigs are commercially available (think expensive), but most can be made quickly and economically in the shop as needed. Any good text on woodworking with machinery will include information and designs for making and using jigs. The book that I refer to is "Cabinetmaking and Millwork" by John L. Feirer but there are many others. These are invaluable resources and should be part of your library but we are concerned here with understanding how to design and build jigs as needed on the bench. Following are some salient points to bear in mind when engaged in this process.

The first step is to analyze the task and the equipment on hand. Do you need to drill, cut or route a part? Hand drill or drill press, table saw or band saw, plunge or trim router, which is best suited to your need? Can it be done safely, accurately and efficiently with the tools and setups already in place? If not, a jig or fixture may be the answer. Do you need to make multiples of some part for a complicated piece or a short production run? What are the tolerances? Will it be a "one off" or a process with broader applicability? A jig that gets used frequently needs to be well made.

Having determined the best tool for the job, think about its cutting action and how it will be brought to bear. Does the tool have any features that can be adapted to your jig or vice versa such as fences, miter gages or a plunge base? For example, jigs can be built to fit over the rip fence of a table saw and thereby make use of the fence's ability to be adjusted and locked. Jigs of this type are very stable and minimize the possibility of operator error. Another important consideration is the size and nature of the work piece. Rabbeting the edge of a board with a dado saw and a rip fence is safe enough. Running the narrow end of the same board over that dado head to create a stub tenon might be fool hardy without a jig to guide and secure the work piece.

Now for some practical points. Use good quality materials. CDX plywood and lathing do not make for good jigs. I typically assemble my jigs with screws or use a pneumatic brad gun. I will also use glue especially on jigs that I intend to keep around but it's a good idea to build and test a jig without gluing all its parts in case you

need to adjust or modify something. Once you're satisfied that it's right, you can take it apart, add glue and reassemble. It's critical to place the fasteners such that they are never in the line of cut. If this isn't possible, you will definitely need to use glue so that the fasteners can be removed once the glue sets. Much of jig making involves setting blocking to position the work and limit movement. To ensure a snug fit I set one block in place and then put the work piece against that block and set the remaining blocking around the work. This can sometimes result in too snug a fit and you may find it worthwhile to use a paper shim alongside the work to give a little clearance. Another consideration when working with multiple parts is the ease of loading and unloading the jig. In some cases hand pressure or a simple shop made toggle button is all that's required to hold the work in the jig but many times you will need to clamp the work securely. Toggle clamps are especially helpful here as they can be incorporated into the jig itself and are easily actuated by throwing a lever.

The ability to make accurate measurements and transfer them to your work is critical to success in woodworking and no less so when making jigs. Whether you're measuring the distance between the cutting edge of a router bit and the outer edge of a rub collar or the angle of a taper, extra care here will pay big dividends. That being said I tend to work quickly when constructing jigs, fully expecting they will need to be adjusted and tuned. To that end one should always prepare extra stock to be used in this process. It is also a good idea to give some thought to the design of the jig before milling your work pieces to final size. It may be that some additional length or width is necessary to be able to hold the piece in the jig.

Here's one final tip. Label your jigs unless their function is obvious at a glance and even then it may be wise to make note of which router and bit you used with a given jig. I've dusted off more than one old jig only to find myself at a loss for knowing what I used it for.

Woodturners at Showcase

By Ken Evans

Regardless of your experience level, you can and should place items into the Exhibit area of Showcase. This is the 20th year celebration and videos will be made.

Be in the show! Help us celebrate!



Showcase Parking

By Larry Zinn

There may still be some construction vehicles, etc. around the City Center this year, but it should be better than last year. We have to hope the snow banks will be gone.

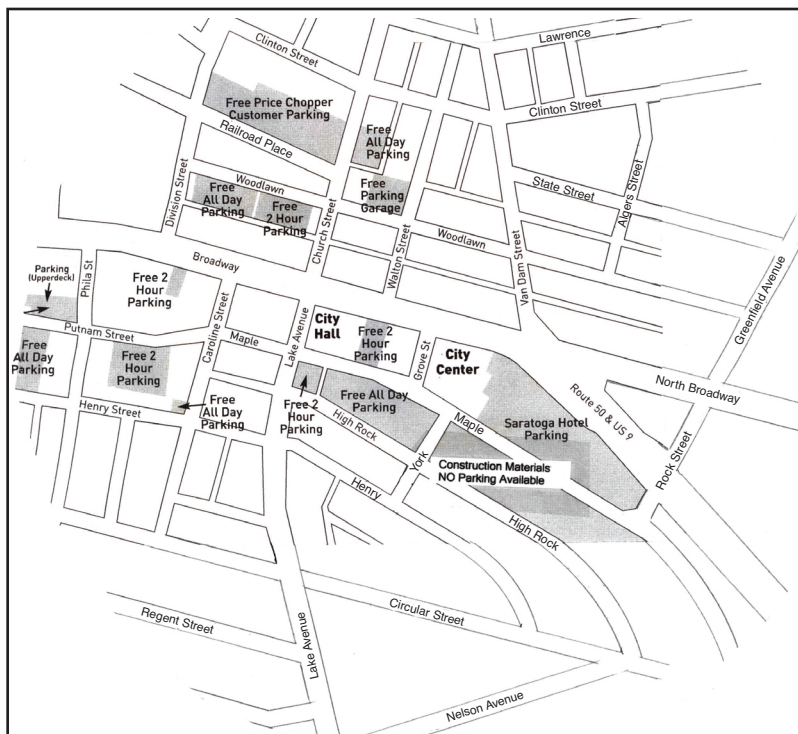
So, this notice is twofold. One purpose is to suggest where you might find a place to park; the other is to encourage you to keep in mind the fact that we need convenient parking locations for our patrons.

To the extent that you are able and willing, we ask that you consider parking at some of the more distant parking locations (see map of dedicated parking lots in the area). Please note, also, that there are many street side parking spaces along streets to the north of the City Center in the residential areas and along the extension of N. Broadway. If you are concerned for the convenience of our patrons, there is a CDTA bus (# 472) that you could get on at the Wilton Mall right by the back entrance to Bon Ton store. It stops there 27 mins. after the hour every hour of the day on Saturday and 22 mins. after each hour on Sunday. Just think, your significant other would be delighted to spend his/her time shopping while you are looking for new “playthings” at the Show. Now, while you are thinking about this option, you could also consider parking out at the Raceway Casino and taking the bus (#473) in from there. That way, your significant other could win enough money to pay for the goodies you buy at the show—maybe even a high end hand plane or battery powered drill. Good luck!!!

If we find enough volunteers willing to be outside, regardless of the weather, we will have people along the streets that go past the City Center to point the way to parking possibilities and/ or hand you a map. They will have on a green “safety” vest with NWA on it in big letters. If it is raining, their umbrella will be similarly embellished.

Hope to see all of you there!

Larry Zinn



Downtown Saratoga Springs Parking Map

Sketch Class Report

By Larry Zinn

You all know about “happy campers” versus the disgruntled kind. I and ten other happy campers recently completed three 4 hour sessions with Owen Arkinson in the new NWA classroom at 1 Mustang Drive, learning how to depict our ideas about a project in 3-D graphic computer images. We all used a program called SketchUp, which can be downloaded to your computer free.

Wow! What a program! A few of you very high tech folks may be able to download it and be on your way. I think it is safe to say that the vast majority of us need to be introduced to it more methodically and gradually. Owen does this with class. He is extremely knowledgeable, very well prepared, and very patient with “seniors”. He also rigs his computer to project the lessons onto a big screen. I think our class was the third group that he has taught, so there are a number of our members already use this magical way of twisting and turning a project up, down, around, upside down, blown up and “blown apart”. You even end up with a parts list, with precise dimensions; you can take to your supplier.

This fine SketchUp class is an example of dozens of classes our “School Master”, Herm Finkbeiner, plans and programs for us. There have been many such classes held during the past several years, and there are many, many more to come. You can learn, hands on, the best and safest ways to use: a table saw, a band saw, lathe, router, planes and chisels, etc. Many of you have already learned, often from professionals in their field, how to make shaker boxes, dovetails, intarsia, mortise/tenons, wonderful turnings, etc. Some will have even learned about gold leafing by the time this Newsletter reaches you.

If the concept of 3-D drawings excites you, one of the classes at SHOWCASE features a presenter who will hold two sessions on SketchUP. Get there early! I expect that these sessions will fill up quickly. You will also find that you can pull down info on SketchUp from the [Fine Woodworking](#) website. Maybe you are already “there”. Maybe we will see 3-D sketches along side of some of the projects on display at SHOWCASE, March 26th and 27th. 🐘

CHAPTER NEWS

Mid-Hudson Chapter

By Wally Cook

Augury: Chuck Walker addressed the chapter on dressing auger bits which are meant to be used with a hand brace. Chuck described several types of auger bits, which included:

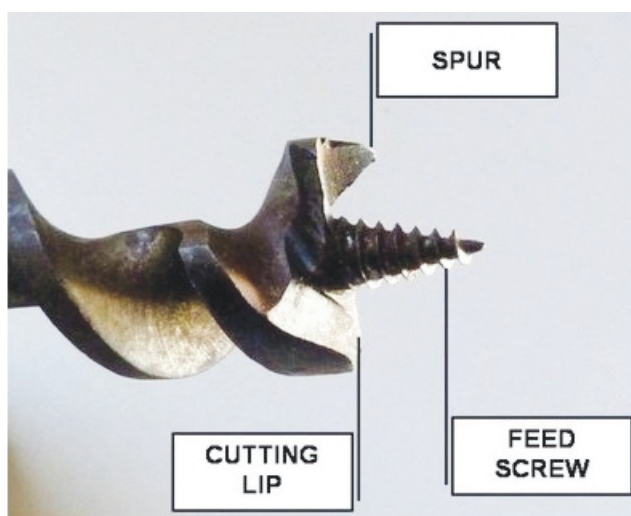
Solid center bit with spiral formed around the shank

Single lip, single spur design

Single fluted ship auger

Twisted flat steel

These bits are made of mild steel and designed to be hand-sharpened. Typically, the bits are composed of



Cutting edges of an auger

a shank and tang, a cutting lip, and generally sport a cutting spur or two, as well as a lead screw to pull the bit into the wood. The tang may be stamped with a number which signifies the diameter of the cutting edge in 1/16" (e.g., '4' equals 4/16").

Some auger bits are sought after; familiar brands are Keen Kutter, Russell Jennings, and James Swann.

Sharpening the bits first involves checking for true-ness. Roll the bit on a flat surface; if it is bent, it is possible to sandwich the bit between 2x4"s and rough straighten.

The lips and spurs may be dressed with a special file, like a Swiss pattern makers file. This file has two cutting ends: one end has teeth on the edges and a smooth face; the other end has teeth on the face and smooth edges. It is important to sharpen only the inside of the spur and the upper side of the cutting lip, in order to maintain the proper diameter of the bit.

The lead screw may be dressed with a screwhead file, which is typically scaled to particular slot sizes. The screwhead file is tapered to each parallel edge; smooth sided to cut only on the edge. A carver's sharpening slip

or even a Japanese pull saw may be used in a pinch.

Auger bits are not particularly effective on end grain, but work well on side grain, because the lead screw pulls the bit into the wood with little effort. Proper methodology is to drill through the board until the lead screw just protrudes from the opposite side. The board is turned over and the hole is completed by drilling from the opposing side.

A neat aspect of Chuck's presentation was that David Bird and he connected a video camera to the digital projector to present a screen-sized live feed of the action. As Chuck demonstrated the filing technique, the details were crystal clear for all the audience to see. Well done!

More Augury: We celebrated Dap Cole's 85th birthday at the meeting. Dap was asked for his sage advice in woodworking. His reply:

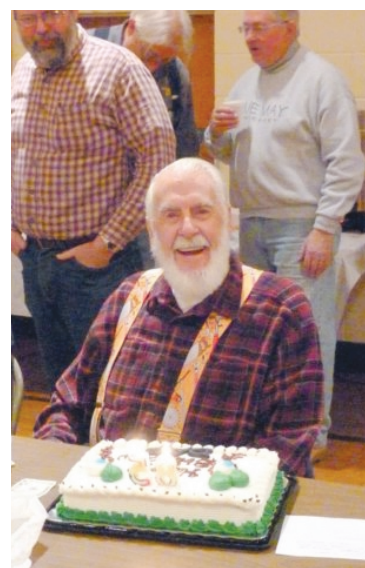
"Buy quality tools, cry once. Buy cheap tools, cry every day!"



David Bird and Chuck Walker set up the live feed.



Chuck's collection of tools for the sharpening demo.



Dap Cole celebrates his 85th

CHAPTER NEWS

Sacandaga Chapter

By Gary Spencer

Our program for February featured Laura Ginter of Northville. Her Program was about the specialized art of: "Making Cedar Strip Pack Baskets Adirondack Style." She demonstrated the process from starting to finishing these unique baskets. She showed many different tools that had evolved from the Indians of the area and showed different styles of baskets for different purposes. This was a highly interesting program that was well attended, Thanks Laura for a fine presentation.

Our March 9th program will feature two teams from the Sacandaga Chapter. Each team is doing a collaborative project which they are building for NWA to raffle off at the Showcase next week. The teams will each describe the design, the process, the wood and finish along with describing any problems and the solutions to other Chapter members.

Team one will be constructing a large compartmentalized wall Shadow Box of cherry wood while Team two will be making a Colonial Hutch and Base.

Our regular monthly meetings are the second Wednesday of each month and begin at 7:00 P.M. at Mayfield High School woodshop. Our next regular meeting will be March 9th, 2011. Come on out!

Remember we have door prizes and light refreshments are served.

For Directions or information contact:

Clyde Cheney - 661-5138 • Ray Laubenstein - 863-6071 • Gary Spencer - 863-6433

Jigs and Fixtures Class

By Kitty Scharl

One of the region's best woodworking resources (who just happens to be an NWA member) is George Rutledge. George has been teaching the basics and much more to area students and woodworking enthusiasts for 12 years. I was lucky enough to be in his first class and have since taken many others with him. Again I was impressed by his creativity, ingenuity and expertise—this time in his approach to jigs and fixtures. The class met on Saturday afternoon January 22nd at NWA's new Learning and Training Center.

We discussed the difference between a jig and a fixture, their commonality and their purposes—to extend the range of our tools, safety, repeatable results and accuracy. George shared a pattern for what he considers the most basic jig, the push stick.

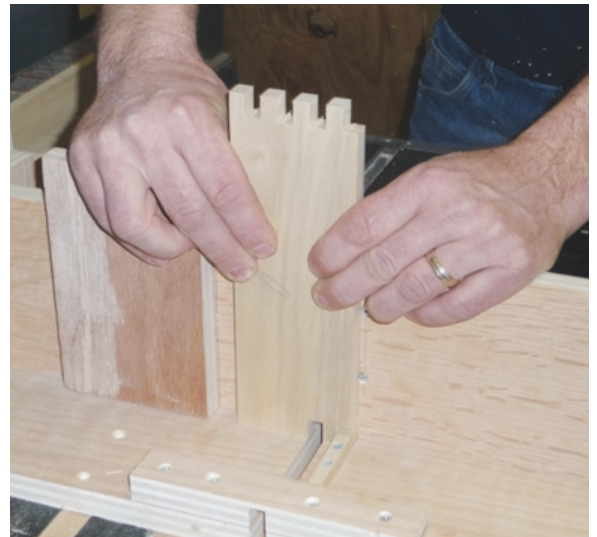
It appears that the majority of the most common jigs and fixtures are made for the table saw, and George brought and explained, among many others, a box joint jig, one for cutting slots for splines, one for tapering chopsticks, and one for cutting one member of a bird's mouth joint (used in the construction of a pair of saw horses he donated to the Christmas Party auction). He also constructed and demonstrated a fixture to fit over a the fence of a table saw for making tenons.

A handy jig for the drill press allows drilling holes at an angle, and a more specialized jig allows for cutting a slot in a plexi-glass tube.

There are many widely used jigs and fixtures, but George also showed us those he had invented for very specific projects like routing a groove and a depression in a sushi board and one for routing the raised criss cross pattern on a turkey carving platter, encouraging us to create unique jigs and fixtures for our own projects.

We were asked to bring in jigs and fixtures for show and tell, the most elaborate being The Ultimate Dado Guide for the router constructed by Dick Flanders from plans he has since unfortunately lost track of.

All in all it was a very worthwhile, informative and enjoyable afternoon for the 13 congenial class members who had their woodworking horizons expanded and who will undoubtedly approach their next woodworking conundrum with a bit more optimism and imagination. 🐼



Boxjoint

Silky Smooth Drawers with Garrett Hack

By Brian Walsh

The Northeastern Woodworker Association recently sponsored a workshop, "Silky Smooth Drawers", taught by the internationally known master wood worker, Garrett Hack. The workshop, January 14, 15, and 16, from 9 AM to 5 PM was held at NWA's spacious new Mustang Drive shop.

Prior to the workshop the participants had to prepare a drawer sleeve and roughly dimensioned drawer parts. The sleeve, a plywood facsimile of a cabinet drawer opening, was open at both ends: the front opening received the drawer front and the back opening provided access to the rear of the draw in case it got stuck during trial fittings. The drawer parts included a hardwood front, the most popular choice being cherry or mahogany; two sides and a back made of poplar or basswood and a glued up pine panel for the drawer bottom. The objective during the three day workshop was to construct a drawer and make a "silky smooth" fit in the sleeve. Which, I am pleased to report, everyone did, thanks to Garrett.

The joinery was done under the guidance and watchful eye of Garrett who provided everyone with informal, one-on-one assistance, and personalized attention many times during the weekend, making for a thoroughly rewarding and enjoyable three days. The sides of the drawer were joined to the face by half blind dovetails. The back was attached to the sides with sliding dovetails. And finally, the bottom slid into grooves that had been cut into the front and sides. Garrett urged using only small dabs of glue in the joints. No squeeze out allowed! The bottom was held in place by two small screws through the underside of the bottom into the bottom of the back. Garrett insists that the inside of a drawer be neat and clean and otherwise aesthetically pleasing. He does not apply finish to the inside of a drawer, except sometimes to dovetail pins. Finish is not necessary says Garrett, since the drawer parts are fitted using hand planes and thereby are smooth, dust resistant surfaces, unlike sanded surfaces which build up dust and dirt over the years.

During the more formal group instruction sessions, Garrett emphasized the necessity of preparing and working from scale drawings as well as marking parts in a consistent manner to increase efficiency and avoid errors during assembly. Garrett shared his method of marking which indeed was a great aid during drawer assembly and fitting.

Garrett also carefully and thoroughly explained his method of creating elegant drawers. The secret to the process is the work sequence. He begins by fitting the drawer face to the actual drawer opening (the sleeve for the workshop) using smoothing and block planes. He selects the face side, its top and bottom; and, he virtually "discovers" the grain direction during preliminary hand planing. Garrett then marks the bottom edge of the piece with a long dash and the face with red crayon orientation marks (left, right, up, and down) and applies a penciled arrow showing grain direction for future use. Finally, he planes the back of the face to a finished surface because it can't be well cleaned and smoothed after

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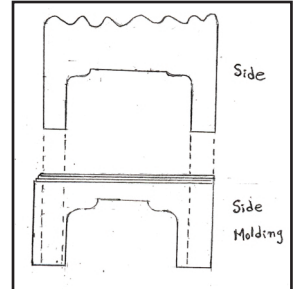
Making Cabinets with Base Moldings

By Dale M. Brown

Introduction

The usual way, as described in *Fine Woodworking* magazine, is to make the base including the base's moldings and bottom shelf.

Then make the upper case composed of the sides and all the frames or shelves. This assembly is then joined to the base using, for instance, a rabbit in the bottom edge of the sides that go into long grooves in the base.



A Simpler Way

Very simple cases extend their sides right down to the floor with no base moldings. Moldings can be added to the bottom by cutting a molding pattern in the top edges of wide boards; then mitering and fastening them to the sides and front of the case. The front molding can be glued to the front edge of the bottom shelf or frame since both parts have their grain running in the same direction. The side molding should only be glued in the front unless the sides are plywood. A solid side with grain running vertically will expand sideways with changes in humidity which could crack the side if constrained by the side's base molding. The simplest way of fastening the tail of the molding to the side is to use a screw that passes through a short slit in the side. A round head screw over a washer works well for this.

Adding Leg Forms to the Base Molding

If one wishes to simulate legs at the base of the cabinet, this can be accomplished by using the wide boards containing the base molding on their upper edges. This is easily added to the front, because the front below the bottom shelf or frame is open. However, for the sides, the bottom needs to be opened for leg simulation. Therefore before the sides and frames or shelves are assembled, the bottom of the sides are cut away using a hand held jig saw in a pattern that mirrors the leg pattern in the molding boards. The top edge of this cut needs to be only slightly higher than the bottom edge of the highest section of the leg pattern and one inch or so below the lowest edge of the dado in the side that will hold the lowest frame or shelf. The vertical cuts in the sides need to be 1/2 to 3/4 of an inch shy of the molding's vertical leg pattern edges so that the sides are not visible behind the leg pattern in the molding. Front and side moldings with simulated legs are fastened to the front and sides as described above. Most of my smaller cabinets were made this way. I have never experienced a structural failure even though the bottom shelf was heavily loaded with books.

Drills and skills

Why some educators are putting a new emphasis on woodworking class

From the Boston Globe, Jan. 9, 2011

By Linda Matchan

Teachers like Ben Kellman were always in the school basement. Kellman is still down there.

He's the woodshop instructor at Marshall Middle School in Billerica. At 63, he's a relic from the days when most junior high schools had woodshops, those cavernous subterranean classrooms filled with table saws and lathes and sawdust where kids learned how to make birdhouses, napkin holders, and end tables. Most of these classrooms were dismantled by the 1990s as schools prepared students for a technology-based age.

But a few of those teachers refused to go away, and now there is a renewed call from a variety of corners for students to learn woodworking in the classroom. Some are becoming increasingly vocal about the need to reintroduce this kind of training. One Boston public school principal this year even made woodworking mandatory for middle schoolers, convinced it's the key to improving grades.

"This is what public school should look like," said Traci Walker Griffith, principal at Eliot School in the North End, surrounded by eighth-graders using coping saws to cut spoons out of pieces of walnut. "It's really important for students to feel they are the drivers rather than the passengers of their own learning."

It's been a discouraging time for teachers. Recently they got the news that 15-year-olds in the United States are lagging seriously behind their global counterparts: An international assessment found they ranked 25th among peers from 34 countries in math and just average in science and reading.

While there's no quick fix, many woodworking teachers are convinced that getting students to work with their hands and not just their heads would help. They believe that shuttering the shops was irresponsible and shortsighted, a mistake that has helped create a dependent generation of young people who don't know how to fix things and lack even the most basic manual competence. They say it's also alienated students whose intelligence and gifts do not lie in traditional classroom learning.

"Does working with your hands make you smarter? Woodworking teachers have observed that effect for years," said Doug Stowe, an Arkansas woodworker and teacher who writes a blog called "Wisdom of the Hands," which advances the concept that hands are essential to learning.

There's no research to support the idea that learning woodworking can help students in other academic areas. But a 2009 Purdue University study funded by the National Science Foundation showed that eighth-graders using hands-on techniques in engineering and technology learned more than students who were taught with books and lectures. And in 2007 the Little Hoover Commission, a

California state agency, concluded that vocational and shop programs had a positive effect on students: They stayed in school and graduated at rates higher than their peers, and were more likely to pass the high school exit exam and pursue post-secondary education.

The idea that there's a connection between hands-on learning and academics has been gathering steam, notably with last year's best-seller "Shop Class As Soulcraft," by philosopher and mechanic Matthew Crawford.

"I think the main effect of shop classes is to motivate an interest in math," Crawford said in an interview. "If you are building, say, a tube frame chassis for a race car, suddenly trigonometry becomes very interesting, because you need it."

"Shop reinforces math and science and social studies and problem-solving skills," said Kellman, head of the 60-member New England Association of Woodworking Teachers, an impassioned organization with no dues and two meetings a year. "Everyone talks about No Child Left Behind, but what we've left behind is the hands-on training that kids absolutely need."

Woodshop classes "are where they pull everything together, all the stuff they learned in math and science like how metal contracts or wood expands and dries," said Kellman, who is writing a master's thesis at Salem State University on the demise of hands-on technology education.

Kellman speaks loudly, so he can be heard above a Bob Dylan song playing; next to the wall he keeps a stack of old LPs by such groups as Jefferson Airplane and Iron Butterfly. He strides through the woodshop, fielding questions from students about sanding techniques and polyurethane. One girl is turning a pen on a lathe, one of three Kellman purchased with his own money. He rushes over to her because the machine isn't sounding quite right.

"What did you have for breakfast?" he asks.

"Toast?" she said.

"No protein? I can tell," he said, strapping safety goggles on top of his bifocals and adjusting the lathe. "An old man like me has to tighten this for you."



Ben Kellman, woodshop instructor at Marshall Middle School in Billerica, gives Nick Barbas pointers on wood lathe technique. (Mark Wilson for The Boston Globe)

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Drills and skills

Continued from Page 14

But it's not just woodworking teachers who believe in the value of lessons learned in the workshop.

Walker Griffith, the Eliot School principal, launched an experimental program this year with the North Bennet Street School, which teaches carpentry, furniture making, and other manual arts. All sixth-, seventh-, and eighth-grade students at the Eliot School now spend one period a week a block away at the North Bennet Street School, where they build a project under the guidance of master craftsmen.

"It's more than just learning how to make a spoon or create a box," Walker Griffith said. "Working with your hands teaches math and science concepts to show how the real world connects to your classroom."

Now she and Miguel Gómez-Ibáñez, North Bennet's president, hope the program will spread to other Boston public schools.

"The program got started because we see people coming to our school without having had hand-skill training in the lower grades," Gómez-Ibáñez said. "They lack three-dimensional abilities and even curiosity about how things work. I'm constantly aware of people here who floundered in traditional academic schools but are truly gifted spatially."

According to the Massachusetts Department of Elementary and Secondary Education, 53 out of nearly 400 school districts in Massachusetts have woodworking courses, though some of them are elective programs in high schools. Here and there, though, there are schools where students are still required to learn basic woodworking skills. One of them is Wellesley Middle School.

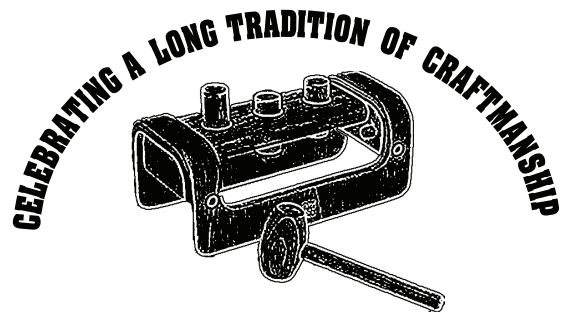
"When I first interviewed at Wellesley 15 years ago, I was amazed that they still had this really strong program going in woodworking," said Brian Kelly, who teaches woodworking as part of the school's technology and engineering program. "Watching a kid working at the bench with a coping saw, seeing that degree of concentration and engagement, it still amazes me 15 years later."

One domain where woodworking programs still thrive is in private schools. At the Belmont Hill School, a coat-and-tie boys' school, all seniors are required to hand-carve an elaborate mahogany panel in order to graduate. The school has a state-of-the-art workshop where students are expected to learn not only the skills that underline fine craftsmanship — how a tenon joint fits into a mortise, for example — but to develop their personal "voice," said Steven Kaplan, chairman of the arts department and a woodworking teacher. Senior James Neissa, 18, is crafting a replica of an antique octagonal drum table.

At Buckingham, Browne & Nichols, a private school in Cambridge, Paul Ruhlmann has been teaching woodworking for 33 years and is a strong advocate of its value as an educational tool. The school has the latest lathes, band saws, jigsaws, and routers in a 1,500-square-foot woodworking shop.

"Culturally, we reward people who are very good in mathematics and writing, and we also value athletes," he said. "But there are a lot of kids in the world who are extremely talented experiencing the world through their hands. And I think we should support them and help them."

Linda Matchan can be reached at matchan@globe.com.



Northeastern Woodworkers Association

Showcase

**March 26 & 27, 2011
Saratoga, New York**

Silky Smooth Drawers

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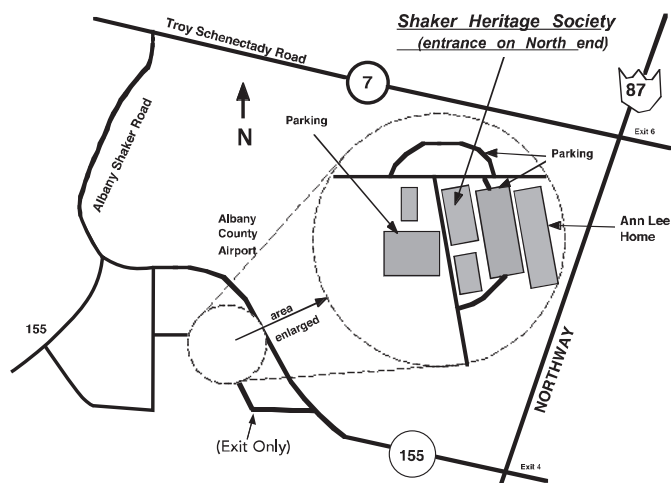
the drawer is assembled. Garrett uses the same approach to marking and smoothing the other drawer parts. As a result, during assembly, it's easy to keep the parts correctly orientated by keeping track of the red markings and feeling for the smooth surfaces of the interior faces. After the drawer is assembled, all the exterior surfaces are planed smooth, removing assembly markings, and all edges are eased. The result is a fine looking drawer.

Interestingly, Garrett advises against using rulers and tape measures for final assembly work and he warns about the futility of cutting all the pieces of a project to final dimensions all at the same time. When the time comes, the measured or uniform pieces just will not fit the reality created by the already assembled parts. His mantra is to fit pieces to "reality" by which he means using one piece as the source of measure for the next piece by making a story stick or by holding the two pieces together and marking the one to be cut in place. True to his philosophy, Garrett did not bring a ruler or a tape measure to the workshop. And none of the workshop participants needed either: Yet they got silky smooth results.

If you ever have the chance to work with Garrett Hack, you simply must do it. Working with him will be one of the most memorable of your woodworking experiences. He is a great guy and a master craftsman. 🐼



Northeastern Woodworkers Association
P.O. Box 246
Rexford, New York 12148-0246



March Meeting

Thursday, March 10, 2011, 7:00 pm
Shaker Heritage Society Meeting House
Albany-Shaker Road, Albany

GENERAL MEETINGS
AND SPECIAL EVENTS

For meeting cancellation
information,
call Ken Evans 753-7759
or Charlie Goddard 370-0388

NWA 2011 General Meetings

April 2011
Woodies - Wooden Cars
Presenter's Name Needed
Steve Schoenberg

May 2011
Mid-Hudson Turners
Peter Ghast / Tony Barrara

July 2011
Picnic
Dan Tipton / new VP

SPECIAL INTEREST GROUPS

SPECIAL INTEREST GROUPS (SIGs)

Adirondack Woodturners Association - The AWA is active throughout the year. Meetings are every first Wednesday of the month (except in January and July when it is the second Wednesday), and are held at the Curtis Lumber conference room on Route 67, Ballston Spa. Beginners' sessions begin at 6 pm; the main program at 6:30 pm. Wednesday "Learn and Turn" sessions in the NWA shop, 1 Mustang Dr, are scheduled from 6pm-9pm except on AWA member meeting nights. www.adirondackwoodturners.org Contact Ken Evans, 753-7759 or Kevans1@nycap.rr.com

Scroller's Guild - Meets on the third Wednesday of the month at The New Sop on Mustang Drive, Latham. A beginner's session starts at 6:30 PM followed by a general meeting at 7:00 PM. Contact: Jeanne Aldous at AMJAMtat2 or Barbara Nottke at scroller87@aol.com or 869-6268.

Kaatskill Woodturners - Meets the second Wednesday of each month at 7 p.m. at the Opdahl property in Hurley. Contact Matt Clark, (845) 454-9387.

Jim's "Hole in the Woods Gang" - Meets every Saturday and Tuesday, from 9:00 am until noon at NWA Shop at 1 Mustang Dr. Our general purpose is public service work for various charitable organizations, including the Double H Hole in the Woods camp for children and recently the GE Elfuns toy mods group. We strive to foster a learning environment for our members through the projects we work on and the informal training/learning sessions given by and for our members. Sharing fellowship and relating experiences are a major part of our sessions. Contact Pete Howe (518) 885-9331 (phowe1@nycap.rr.com), Ed Buell (518) 384-0413 (KC2NMY-eab@nycap.rr.com) or Dick Flanders (518) 393-5215 (rflander@nycap.rr.com) for more information.

NWA Wood Carvers - Meets Thursdays at 6 p.m. until 9 p.m every month except the 2nd Thursday of each month at the new NWA shop located at 1 Mustang Dr. Our programs are determined at the previous weekly sessions. Our goals are to promote the art of Wood Carving. We assist with all carving matters. Contact Ray Gannon 664-2229 or LoRayG@Gmail.com

CHAPTERS

NWA Mid-Hudson -The chapter meets at 7:30 p.m. on the third Thursday, except July and August, at the Hurley Reformed Church. The Church is just off the the Hurley exit from Rte. 209. Right at the exit, right at the stop sign and left into the Church parking area. Contact Pete Chast, pchast@francomm.com.

NWA Sacandaga - The chapter meets at 7 p.m. on the second Wednesday of each month at Mayfield High School in the woodworking shop. Park by the section of the building that protrudes further into the parking lot and enter the nearest of the (5) doors. Contact Gary Spencer, 863-6433.