



# NEWSLETTER

[www.emgw.org](http://www.emgw.org)  
February 2007

## Finding the Answer

By Chris Kovacs

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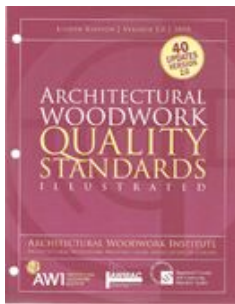
Where do you go when you have a woodworking questions? Who can you trust and how do you know the answer is correct? These are typical problems many of us face during the design and construction of a woodworking project. Do you head to the library, your own or the public variety? Do hit the keyboard and race around the web? Do you pick up the phone and call a fellow woodworker? Or do you sit by your growing stack of magazines flipping though the index positive you had once upon a time read about the problem you are having?

For me, it is a combination of all of the above and where I start depends on the question and time of day. At night, my first tendency is to hit the web. There are some very good web sites out there with searchable databases that let you quickly and with amazing accuracy find answers to some of the most bizarre woodworking problems. Start with google.com or yahoo.com and you may find your answer from one of their links. If not, try one of the many forums out there. I frequent woodweb.com, the Felder Owner's Group forum on yahoo (good for info beyond Felder tools), Fine Woodworking forum and several others. My favorite though, is the Cabinet Makers Association ([www.cabinetmakers.org](http://www.cabinetmakers.org)). This is a dedicated group of professional woodworkers who freely share their knowledge. From our Guild Bill Karp, Joe Aiello and myself are members of this organization and I know from seeing their postings that they are taking advantage of vast experience of this group. At \$250 per year it is a bit pricey, but the information gleaned from so many professionals easily pays for the annual membership.

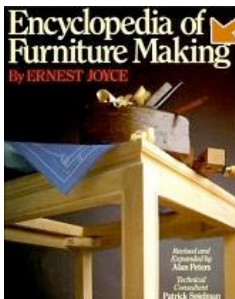
I also take advantage of the online indexes for the many magazines I subscribe to. Often I can remember some morsel of an article and cannot remember the issue. These indexes often cover the entire run of the magazine and are quick to search. I also have a pretty good library of books that I consult from time to time. There are also a number of reference manuals that are very good. The Architectural Woodwork Institute publishes a Quality Standards book that almost every architect knows and consults. This book provides the standards for building commercial work and covers everything from standard dimensions to grain patterns to door gap tolerances and so forth. For furniture questions,

Finally, my favorite way to get an answer is to pick up the phone and call a friend. This has several advantages over books and the web. One is the chance to talk shop during an otherwise lonely day in the shop. The other is that I will take a personal experience of a friend over anything written on the web most of the time. Like a word of mouth referral, I put a lot of weight on the personal experiences of my friends and woodworking colleagues.

So, next time you're in a bind, give call to someone in the Guild or hit your favorite forum or web site and you will be amazed to see that you are not the first person to have had that very same question and you will undoubtedly not be the last.



[AWI Quality Standards](#)  
reference book



[Ernest Joyce, Encyclopedia of Furniture Making](#)

## Square Peg, Round Hole

By Chris Kovacs



*Square peg holding in drawer sides*



*Oval pegs in table leg*



*Square peg locking a tenon on the back of a bookshelf.*

The lowly peg has many great uses in woodworking. From holding something on the wall (not for this article) to holding together a furniture joint, the peg has many uses in woodworking. Most commonly, we use round pegs to hold mortise and tenon joints together. However, pegs do not have to be round dowels, they can be square or oval or some other shape and they can hold together more than just a mortise and tenon joint. I have used them to lock sliding dovetails, secure dovetails in drawer boxes and to add decorative elements to a project. There are numerous ways to peg a joint and I will cover a few of those here.

As seen in the upper left photo, I pegged a dovetail joint together. In this particular case, the joint is intrinsically weak as I designed the drawer so the dovetails were visible on the front instead of the side. Every time the drawer is opened, the joint is being pulled apart. The pegs (one inch long with two on the top and two on the bottom) ensure the joint stays closed.

I have also secured table legs and aprons using oval and square pegs. I find the typical round peg to be a bit boring and I like the added interest that an oval or square peg adds to a piece of furniture.

So how do you get that square peg into the round hole? Well, there are number of ways. After laying out the location of the peg, I start by drilling a 1/4" hole with a brad point bit. The brad point makes a much cleaner hole and has a flat bottom. A Forstner bit is also a good choice. Using a very sharp 1/4" chisel I begin to make the hole square. Make sure you do not make the hole too big. Do not worry about making the hole square its entire depth. It is more important that the surface of the hole be clean and chiseled square. Try to clean any chips out of the hole before driving the peg into it.

To make the peg stock, I usually use a contrasting wood and prefer exotic woods; ebony, rose wood and blood wood are favorites. Exotic woods are often an interesting color and they are often harder than the domestic woods we typically build with. If you have chiseled a nice 1/4" square hole, start with a square piece of peg stock that is about 12" long. It should be just over 1/4" square or more precisely, it should just fail fitting into your chiseled hole.

I find that 1/4" square stock fits into my pencil sharpener which does a real nice job rounding one end of my peg stock. If your pencil sharpener does not work, use a knife to round the end of stock. The rounded and tapered portion of the peg should be about three-quarters of the depth of your hole. With a little dab of glue on the peg stock, use a metal hammer to drive it into the hole. Listen to the hammer taps and when the pitch changes, you know you have bottomed out in the hole. If you whittled just the right amount of the peg, and chose a very hard wood, the peg should have done even more work squaring and cleaning up the hole. Using a Japanese flush saw, trim the peg close to the surface and then use a chisel to pare it flush. DO NOT USE A SANDER. Remember, your peg material is harder than the surrounding material and it has end grain showing which is even harder to sand. If you use a random orbit sander with a relatively soft pad, you will end up sanding off a lot of the surrounding material and the peg will still stand proud.

This does bring up one style option. If you are building Craftsman style furniture, you may well want the peg to stand proud of the surface by an 1/8" or so. Use a sharp chisel to shape the peg into a traditional craftsman style peg.

The oval peg seen on the previous page is just a round dowel that looks oval in the finished product. To accomplish this look, I drilled a 1/4" hole in a block of wood at some long forgotten angle; let's say 30 degrees you can try different



*Square peg and sliding dovetail*

angles to achieve the effect you want. This block then became my guide block for drilling holes into the table leg and through the tenon using a portable drill and 1/4" drill bit. A round dowel is merely glued and driven into this angled hole. When it is cut and chiseled flush you have your peculiar oval peg.

If you want to use an exotic wood or some other wood species that you cannot find in readily made dowels, then you have to make your own. I have a couple of ways to make these. If the peg is more decorative than functional, I will often use a plug cutter to make the dowel. These are short, but you only see the surface. You can make end grain or flat grain plugs this way.

If you need the strength of a real peg, you have to make your own dowels. To make a 1/4" dowel for instance, start with a 12" long piece of square stock that is a bit more than 1/4" square slightly. Using either a metal drill bit sizing gauge (cheap Yankee-ingenuity way) or a special dowel plate (Lie-Nielsen plate at right) begin driving the stock through holes in the plate. Start large and slowly work your way down to the size you want. You can make endless amounts of dowel in any species this way.

As a last bit of advise, remember not to put glue into the hole, instead put glue on your peg. If you fill the hole with glue and begin driving the peg, the glue has nowhere to go and you may inadvertently crack your piece of furniture.



*Lie-Nielsen dowel plate*

## For Trade

I am still trying to find a nice home for my 52" commercial Biesemeyer rip fence. If anyone is interested in upgrading their smaller rip fence for a larger one, I would be willing to swap. I no longer need nor want a large rip capacity on my table saw. If there are no takers by the next meeting, my fence will have a date with the grinder. If you are interested, please email or call me.

Thanks,

Chris Kovacs  
978-448-2567  
cdkovacs@charter.net

## Membership

If you would like further information about the Eastern Massachusetts Guild of Woodworkers, please email Phyllis Jaffee at [pgjaffee@29designs.com](mailto:pgjaffee@29designs.com). Yearly dues are \$40 and payable each September.

## The Next Meeting



*Marquetry by Julie Godfrey*

Our next meeting will be at Jack Murphy's newly built shop on February 10, 2007. The first portion of the meeting will cover some of Jack's decisions regarding position tools and equipping a new shop. The main focus of the meeting will be on marquetry presented by Julie Godfrey. Julie is a graduate of the College of the Redwoods and is currently working with Silas Kopf in western Massachusetts. (<http://users.crocker.com/~jgodfrey/about.html>) As usual, the meeting will start at 9am and run till about noon.

Directions to Jack Murphy's shop  
64 Coventry Wood Road  
Bolton MA 01740  
978-779-0547

From 495 in Bolton, go east about two miles.  
Turn left onto Eastend Road. Go about 0.3 miles.  
Turn left onto Sugar Road. Go about 0.4 miles.  
Turn left onto Coventry Wood Road.  
Jack's House is about 0.2 miles on the left



## Officers and Board Members

|                          |                |  |
|--------------------------|----------------|--|
| <b>President:</b>        | Bill Karp      | <a href="mailto:karpwoodworks@verizon.net">karpwoodworks@verizon.net</a>           |
| <b>Vice President</b>    | Frank Woolley  | <a href="mailto:frankwoolley@hotmail.com">frankwoolley@hotmail.com</a>             |
| <b>Secretary</b>         | Jack Murphy    | <a href="mailto:Jack.Murphy@Monotypemaging.com">Jack.Murphy@Monotypemaging.com</a> |
| <b>Treasurer</b>         | Peter Wilcox   | <a href="mailto:snowmole@yahoo.com">snowmole@yahoo.com</a>                         |
| <b>Board</b>             | Chris Kovacs   | <a href="mailto:cdkovacs@charter.net">cdkovacs@charter.net</a>                     |
|                          | Phyllis Jaffee | <a href="mailto:pgjaffee@29designs.com">pgjaffee@29designs.com</a>                 |
|                          | John Nitzsche  | <a href="mailto:jknitz@comcast.net">jknitz@comcast.net</a>                         |
| <b>Membership</b>        | Phyllis Jaffee | <a href="mailto:pgjaffee@29designs.com">pgjaffee@29designs.com</a>                 |
| <b>Webmaster:</b>        | John Nitzsche  | <a href="mailto:jknitz@comcast.net">jknitz@comcast.net</a>                         |
| <b>Newsletter editor</b> | Chris Kovacs   | <a href="mailto:cdkovacs@charter.net">cdkovacs@charter.net</a>                     |

## Schedule

**What:**

Furniture repair and restoration  
Hosted by Bob Judd  
Early American Furniture Tour  
Details coming soon.  
Picture Framing techniques

**Where:**

25 Cliff Way  
Dedham, MA  
Newport, RI  
Maggie Wood  
Maynard, MA  
Pat Everett  
Everett, MA  
Jack Murphy  
Bolton, MA  
Chris Kovacs  
Groton, MA  
530 Essex Street  
Lawrence, MA  
Nathan Hawkes  
23 Noel Street Unit 4A  
Amesbury, MA  
4 Deerslayer Lane  
Westborough, MA

**When:**

September 9  
October 14  
November 11  
January 13  
February 10  
March 10  
April 14  
May 12  
June 9

Jigs and pattern routing

Shop Layout and marquetry

Machine tuning  
Hosted by Will Neptune and  
Frank Woolley

Machinery adaptations  
Hosted by Joe Aiello  
CNC machining demonstration

Annual meeting and BBQ at  
Phyllis Jaffee's house

### FEBRUARY 2007

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| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 21 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 |    |    |    |

### MARCH 2007

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### APRIL 2007

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| 29 | 30 |    |    |    |    |    |

### MAY 2007

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| 27 | 28 | 29 | 30 | 31 |    |    |