



# WOOD FORUM

Newsletter of the Sonoma County Woodworkers Association

Volume 37, Issue 1

January 2017

## “Say Cheese” for Woodworkers

by Clyde Handford

Our first meeting of the year will be at 7pm on January 10, 2017, at the Cotati Cottages Clubhouse.

Tyler Chartier, a professional photographer as well as a woodworker and SCWA member, has been photographing the *Artistry in Wood* entries for several years. He will deliver a tutorial on photography as it pertains to woodworking.

He intends to bring a pared-down version of his kit for this purpose, and some examples of his work for demonstration purposes. The goal for the evening is to provide a basic understanding of what it takes to get an optimal quality photograph.



### Directions:

Cotati Cottages is a townhouse development located west of the H'wy 101 and H'wy 116 interchange. Take Highway 101 to Gravenstein Highway (116 West) exit. Head west in the direction of Sebastopol about ¼ mile to Alder Avenue. Turn right on Alder and then turn right on the first street, which is Ford Lane (Cotati Cottages sign). Proceed to the end of Ford Lane and park in the gravel parking spaces. The Clubhouse is the small building on the northeast corner of Ford Lane and Starr Court. There is limited parking near the clubhouse. If the gravel parking area is full, please park on the east side of Alder Avenue. The address is 8050 Starr Court, should you need it for a GPS.

Photo by Jose Cuervo







## A Note from the Chairman

Thomas Vogel

I am really looking forward to 2017, and metaphorically taking up the gavel from Bill Taft. The introductory board meetings we have had have shown me that I am taking up the chairmanship of a very robust organization. Think well ordered ducks and crossed t's.

While I am personally thankful to Bill and the 2016 Board, I believe we should collectively thank our outgoing board members: Bill Taft, Art Hofmann, Larry Stroud, Scott Clark, and Michael Wallace. I believe there is among them at least two decades of service to this organization, and they should have our deepest thanks for the yeoman's service they have provided.

We have five new board members and three hold overs. Thank you Lars, Judi, and Joe for staying with us and providing much needed continuity. I am filled with confidence and maybe a bit of pride to be included in such a competent group.

The 2017 meeting schedule is already almost filled with fascinating talks by, I'm sure, fascinating people, thanks to Art Hofmann. And *Artistry in Wood* will be here before you know it, so get making now.

I feel excitement with my new responsibility, and am filled with a feeling of boundless optimism while waiting for 2017 to show up. I will see you at the meetings.



*French Hen and Turtledove*  
by Meghan Scannell\*

## Holiday Party

About twenty members turned up for the annual Holiday Party at Don and Janet Naples' fine Victorian house in southern Healdsburg. It was a redux in many ways of last year's party, but with fewer people and less food.

But the potluck law was in full sway, namely, there was something for everyone and the table presented a fine array of food: Larry Stroud brought a quinoa, spinach and cheese strata, Don Kettman brought a spiral cut ham, and Joe Scannell brought his now world famous fruit salad. And there were lots of leftovers to take



*Lords a Leaping*  
by Meghan Scannell\*

home. Thanks to Anne and Bill Taft, things were presented and arranged in style. They also brought along a cake that looked like a board, thanking the retiring and newly installed board members. It was chocolate on the inside with a berry cream center filling. Yummy!

- Art Hofmann

## Guild News

Along with a significant refreshment in the list of officers spearheading our organization we also added one new Guild member. Joe Scannell was unanimously elected to our Guild of the Sonoma County Woodworkers Association, reflecting his significant contribution as editor of the *Wood Forum* and his mastery of woodworking skills demonstrated in recent *Artistry in Wood* shows. We welcome his expertise and perspective.

- Larry Stroud, Outgoing Guild Chair



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\* Meghan Scannell is the Proofreader of the *Wood Forum*





*Red Chinese Gourd Vessel* by Don Ajello



*Claro Walnut Bowl* by Hugh Buttrum




*Redwood Flame*  
by Ralph Carlson



*Items for Tea Ceremony* by Tom Vogel



*Display Box for Antique Flute* by Joshua Smith


  
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# Patternmaking 101

by Joe Scannell

One aspect of woodworking I have never heard discussed around the SCWA is that of patternmaking. With the exception of Don Ajello, I do not know of any member who is also involved in metalcasting. And yet that is exactly where I found myself recently. Let me start at the beginning.

This past summer I rebuilt a wood deck off my kitchen, using a combination of 10" diameter wooden poles, heavy beams, and ipé lumber for the finished surface. The rails were also ipé, with posts of welded steel encased in an ipé sleeve. I wanted to cap the posts with finials, and in the past I have done this in wood, but it just doesn't hold up well in the elements (see photo below). So this time I wanted to try cast bronze.



The foundry I chose, East Bay Brass, is in Richmond, CA, and the owner, John Helfrich, introduced me to his patternmaker, Santa Rosa resident John Maiden. When they learned that I did woodworking, they encouraged me to make the pattern myself (and save a lot of money in the process). John hooked me up with a retired patternmaker and friend of his, Ted Henry, who guided me through the process.

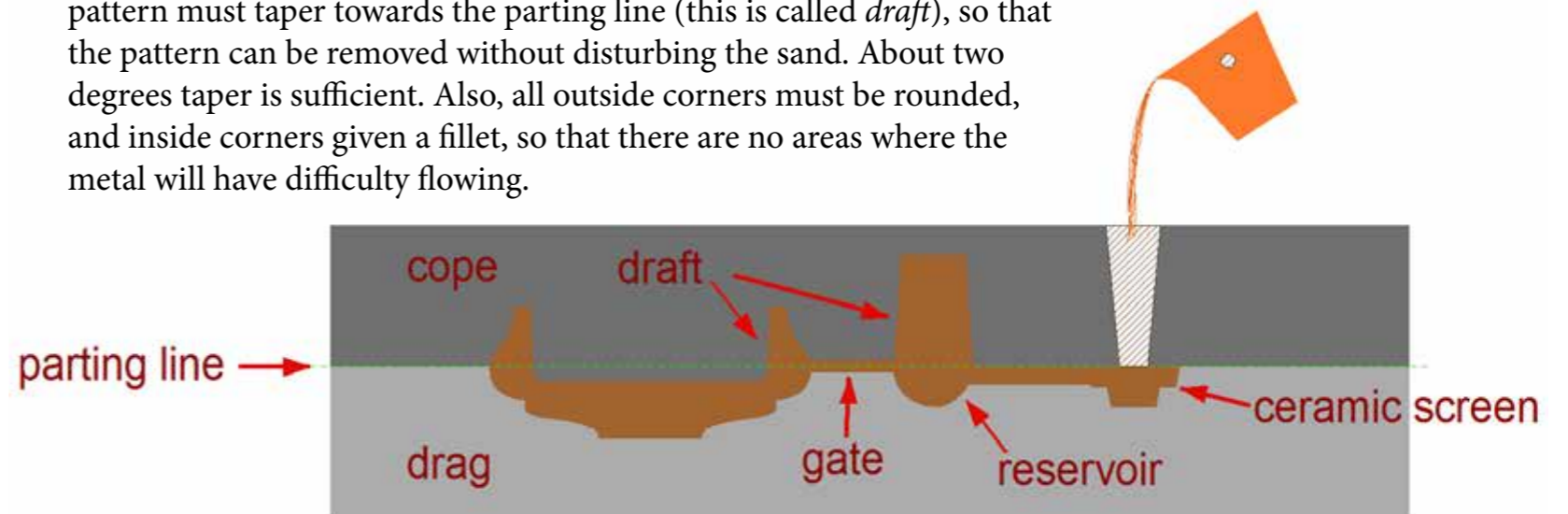
Before meeting with these gentlemen, I made the actual sized model (photo at right) of what I wanted. This made our discussions much easier, because we could speak in specific terms, and Helfrich made notations right on my model, leaving no ambiguity.

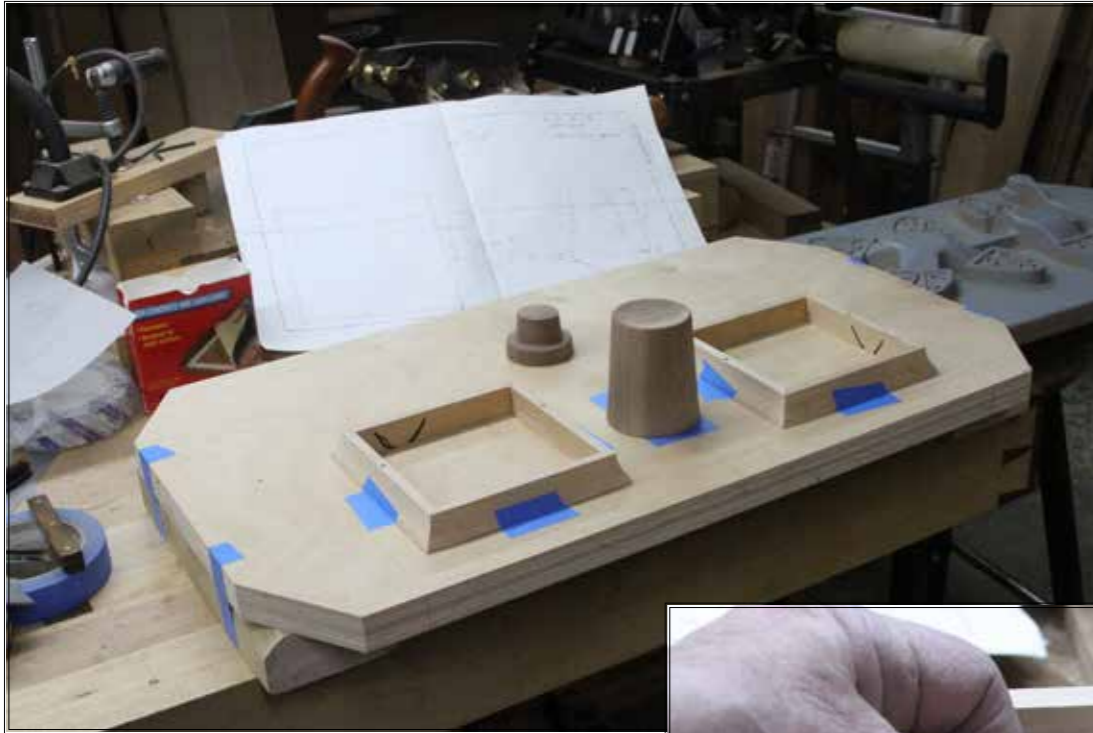


Since I needed twenty of these castings, the best approach was to use a split pattern, and to make two patterns on one board, which meant ten pours instead of twenty.

In simplest terms, the wood patterns are used to create a void inside a box of sand. The void is then filled with molten metal. In order to remove the pattern from the box of sand, the box must be split into two parts (called the *cope* and *drag*). After compacting the sand, the box (called a *flask*) is taken apart, the pattern is removed, and a channel is hand carved in the sand to pour the metal into. The flask is then reassembled, and the process is repeated in another flask, in this case nine more times. When all the flasks are ready, the metal is melted and poured.

That's the short version. But there are many steps along the way. For starters, there is shrinkage to be considered. All molten metal shrinks as it cools, some types more than others. So the pattern must be proportionately bigger to compensate for this. Then there is the *parting line*, which is the plane along which the two halves of the flask come apart. All the surfaces of the pattern must taper towards the parting line (this is called *draft*), so that the pattern can be removed without disturbing the sand. About two degrees taper is sufficient. Also, all outside corners must be rounded, and inside corners given a fillet, so that there are no areas where the metal will have difficulty flowing.





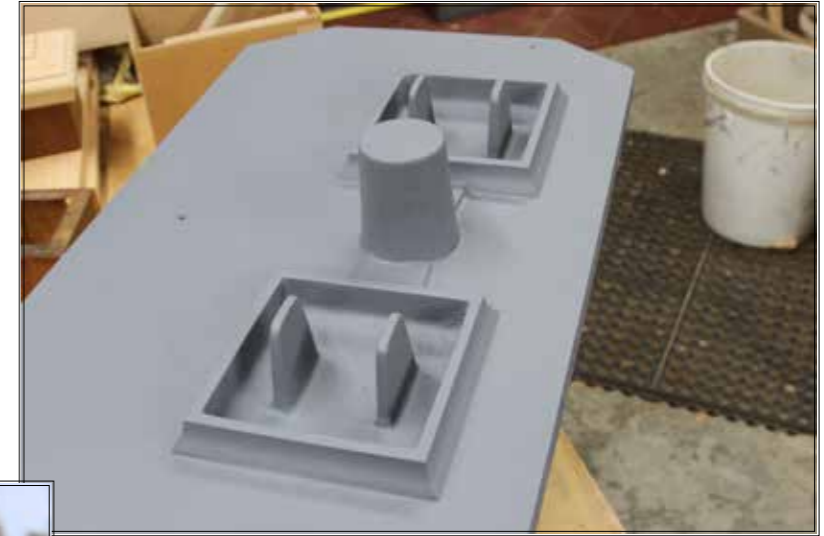
A split pattern is built on a sheet of 1" plywood, with the plywood being the parting line. The upper part of the finished casting is patterned on one side of the plywood, and the lower part is on the other side. These two halves must be in perfect registry, or your casting will be off center. Alignment is achieved by using pins through both halves and the plywood.



There are channels (*gates*) through which the various voids are connected, and a ceramic filter to catch slag in the molten metal. And, because the metal shrinks as it cools, and thinner areas cool first, drawing metal away from thicker areas of the casting, the thick parts can become starved for metal and wind up with defects. The solution is to add a reservoir to store extra molten metal, which can be drawn into the casting as it cools.





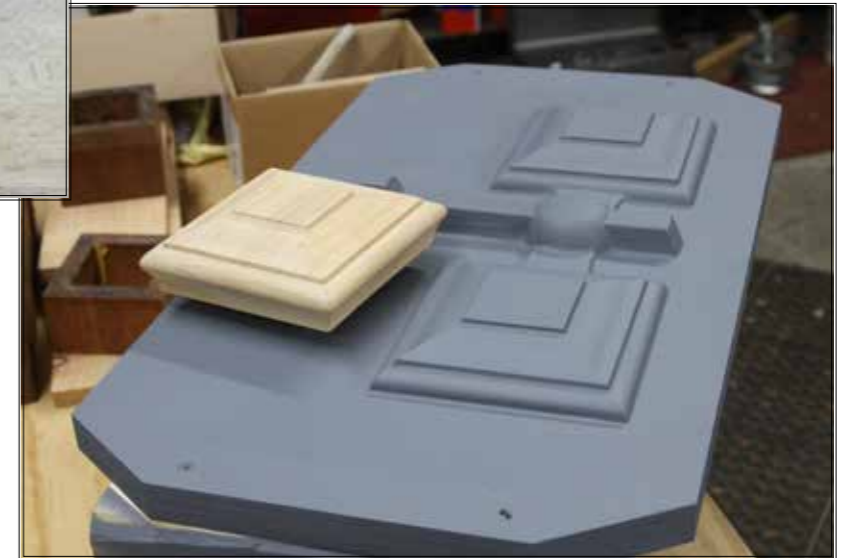


A couple of coats of paint, and it's ready to fly.

I built the patterns with alder, which is an easily worked hardwood. Ted Henry offered me the advice that "Bondo is your friend," which I took to heart, as you can see. It fills in all the trouble areas, creating fillets and smoothing the way for the molten bronze.



Now the real work begins, grinding and polishing all those rough edges to make it something you'd want to run your hand over. Then do it 19 more times.



## Officers of the Association

|                      |                |                    |                 |
|----------------------|----------------|--------------------|-----------------|
| <u>Chairman</u>      | Tom Vogel      | <u>Secretary</u>   | Lars Andersen   |
| <u>Program Chair</u> | Clyde Handford | <u>Guild Chair</u> | Mark Tindley    |
| <u>Treasurer</u>     | Judith Garland | <u>Show Chair</u>  | Don Jereb       |
| <u>Editor</u>        | Joe Scannell   | <u>Web Master</u>  | Steve Greenberg |

*Wood Forum* is the monthly newsletter of the Sonoma County Woodworkers Association. Please feel free to submit articles and photographs for inclusion in the publication. You can send your submissions to the Wood Forum Editor at [SCWAEditor@gmail.com](mailto:SCWAEditor@gmail.com). Advertisements are also accepted with a nominal cost for paid members.

## Membership Application

I would like to join the SCWA to meet other people interested in the craft, the art and the business of fine wood-working. Enclosed is my check in the amount of \$35 for the annual dues. I understand that this fee entitles me to attend monthly meetings and to receive the Wood Forum newsletter by email or via the SCWA's website.

Name \_\_\_\_\_ Email \_\_\_\_\_

Address \_\_\_\_\_

City, Zip \_\_\_\_\_ Home Phone \_\_\_\_\_

Cell Phone \_\_\_\_\_ Work Phone \_\_\_\_\_

What can you do to help further the organizational goals of our volunteer-run association? Please tell us how you would like to help:

\_\_\_\_\_

\_\_\_\_\_

Please send check and completed application to:

Sonoma County Woodworkers Association, PO Box 4176, Santa Rosa, CA 95402