

San Fernando Valley Woodworkers since 1988 http://sfvw.org/

Meeting Minutes

by Eitan Ginsburg

SFVW – Minutes January 18, 2024 meeting

The club meeting began with a presentation via Zoom by Bob Behnke, the Tech Services Manager for Titebond Products. For future reference, you can ask questions about adhesives by calling the Titebond 800 number, which is on

every bottle of their glue.

Bob began by noting that wood is a natural product, mostly cellulose and water. These components of wood affect the ability of glue to bond and to last for a long time. You don't always need

to have the strongest bond to be effective. Most domestic hardwoods break between 1600 and 2800 PSI. The breaking point of Titebond I is 3000 PSI, Titebond II is 3700 PSI, and Titebond III is 4000 PSI. Thus, the strength of the glue is actually stronger than the wood itself.

The key attribute in getting a sucbond is the moisture content of the wood. When the moisture content is at 17% or higher, the glue won't dry. Wood glue works best when the moisture content of the wood is between 6 and 17%. If you have a higher moisture content, you need to keep your assembly in clamps longer. Titebond tests their glues at an 8% moisture content in the wood at 70°F and at 50% atmospheric humidity. Lower humidity in the air reduces the open time,

Dues are now Due!

If you haven't paid yet, it's time. Our dues are \$35 per year (\$15 for students), and our esteemed Treasurer, Jeff Bremer, can take your dues via check, cash or Venmo.

If you need to contact Jeff for any questions, his email and phone number or on the next page in the Club Officers.

cessful glue

ing? He was, without a doubt, one of our best outside speakers to date. I know the presentation was by Zoom, but when I scanned the meeting room, I had never seen the membership present so focused and engaged. We will surely have Mr. Behnke back for another presentation.

by Jim Baldridge

There is anticipation in the

air for our return to the Balboa Recreation Center in February. Everyone should make a note to remind themselves to arrive at See "President" on page 2

> February Presentation: Fuming White Oak

by Gary Coyne

When Gary started woodworking, he bought walnut stains for his walnut-like pieces and cherry stains for his cherry-like pieces. The problem was, neither looked like walnut or cherry — and he hated the staining process. When he started making Arts & Crafts furniture, he learned about fuming, which chemically darkens the wood with vapors — that seemed easier. However, information on how to do this safely was not readily available. Gary will show the process, and what's involved to get great results.

Here we are in 2024, with the first month of the year behind us.

Our first meeting of the year saw a FANTASTIC speaker!

Bob Behnke was truly a talented and informative speaker. Who

would have thought that the subject of glue would be so captivat-

Our President says...

Who We Are

The club was formed in 1988 for the purpose of enhancing skills, providing information and sharing the joys of working with wood. The membership reflects a cross section of woodworking interests and skill levels - both hobbyist and professionals. Annual dues are \$35. Full-time student dues are \$15.

From "Minutes" on page 1

and higher humidity increases the open time of the glue. Wood moves in all three dimensions as it dries, but the tangential movement is the most significant (tangential movement is what causes cupping in flat-sawn boards).



When you are gluing together different species, you need to remember they might have different shrinkage rates, which can result in stepped joints. Quarter-sawn and riftsawn boards are the most stable.

Glue is made up of microscopic plastic particles floating in water, so once it is dried, it doesn't move or shrink as the wood expands and contracts. This can result in a fine ridge

"President" from page 1

our "old stomping grounds" at 7 pm on the 15th. The Toy and Program Committees, as well as the Executive Board, have already met to plan out the year. I am looking forward to a great year of growth and participation by all!

As the days, weeks, and months pass, we spend our time planning and working on projects. For myself, I have begun building a special bench to place next to our backyard bocce court. Yes, we have a <u>bocce court</u>!

So, what is a bench? Basically, it is a board/plank supported at both ends to allow two or more people to sit in one place. They can be made from wood, stone, concrete, dug from dirt on the side of a hill, etc. There are Roman benches, picnic benches, Shaker benches, and bleachers made up of multiple benches, to name a few!

President:	Jim Baldridge
Vice President:	Emily Lichtman
Secretary:	Eitan Ginsburg
Treasurer:	Jeff Bremer.
Photographer	Luke Wyatt
Publisher:	Gary Coyne
Librarian:	Grant Christensen
Web Master:	Ed Sheanin
Toy Chair:	Jim Kelly
Toy Distribution:	Sheila Rosenthal
Refreshments:	Open

Aul Ollicons

along the glue line, just a couple thousandths of an inch high (an exception to this is hide glue, which does move with the wood). Bob also noted that metal salts in wood can cause glue lines to turn black.

Glue adhesion

Glue adhesion is helped by wiping the wood surface with See "Minutes" on page 3

Well, my bench is going to be known as a diving board bench. You don't say. Here is the back story. Many years ago, I owned a home that had a small wood shop on the property. Once I moved in, I discovered that the prior owner had left me with a twelvefoot-long wooden diving board. The board was tucked away under a crawl space of the house. It turns out that the "old" pool on the property used to have a diving board. Having never used this board in any projects, I have moved it three times. Now, it sits on my workbench in my wood shop, ready to be converted into a bocce court bench in the yard.

I suppose the moral of my story is never to throw anything away that has the potential to become something useful. A life lesson taught to me by my parents, who both lived through the Great Depression.

Let the sawdust fly, Jim Baldridge



Balboa Recreation Center Location Map curtesy of Google Maps

From the Web

The Best Type of Screw for Woodworking <u>http://tinyurl.com/hhvehh87</u>

Screws & Fasteners <u>http://tinyurl.com/5mk8p9vv</u>

Wood Screw Size Comparisons/Wood Screw Size Chart with Applications <u>http://tinyurl.com/e4sk7p9m</u>

Square Drive Screw FAQ <u>http://tinyurl.com/2sa2esjv</u>

118 Vs 135 Drill Bits – Does It Matter? <u>http://tinyurl.com/4d5fsu4k</u>

Did You Know? Your Drill Doctor Machine Needs Some Maintenance <u>http://tinyurl.com/2sfzbnsv</u>

Drill Bit Tips and Tricks <u>http://tinyurl.com/y699ae9k</u>

The Most MISUNDERSTOOD Feature On Your Drill

http://tinyurl.com/3bmf9zhy

5 Drill Features Everyone Should Know <u>http://tinyurl.com/yns7jmcx</u>

How to Fix a Loose Chair Rung <u>http://tinyurl.com/4dsc2asc</u>

How Safe is a Sawstop Saw? - Never Before Seen 19,000 FPS HD Slow-Mo Video <u>http://tinyurl.com/2bhe6sju</u>

What's the big deal with end grain cutting boards? (and how to make cool looking ones) <u>http://tinyurl.com/njpt97ts</u>

I figured out why your polyurethane is bumpy! <u>http://tinyurl.com/bddwr3a9</u>

"Minutes" from page 2

acetone before gluing, especially with oily tropical woods. Oils prevent water-based glue from penetrating. You want to wipe with acetone, then wipe again until the rag comes off clean. This helps the glue bond to the cellulose in the wood rather than just sink into the open pores of the wood fibers.

Burnishing wood also inhibits glue adhesion. You don't want to rough up the surface with sandpaper, which damages the cellulose fibers and weakens the bond. Surface preparation should remove damage, some marks, and glazing. It is best to use a sharp hand plane or sand to 220 grit. Edge and face gluing create strong bonds because these are long-grain surfaces (the cellulose cell walls rather than the cut-off pores of end-grain) for the glue to adhere to.

The purpose of clamping is to hold parts in position. You want to arrange your clamps and cauls to create overlapping cones of force. Your assembly doesn't need to be clamped super tight, especially with denser wood. Overclamping starves the glue joint and leaves no place for the wood to absorb the glue. Just use enough force to pull the joints together.

See "Minutes" on page 4

Upcoming Wood-related Events & Important News

from Jim Kelly

The following items of potential interest were found in the November – December 2023 issue of Woodworker West.

Sadly, this was the last issue of Woodworker West. So please, if you hear of any wood-related events in Southern California, please pass them on to Plane Talk.

Upcoming Events

February 16 – 18: 37th National Arts and Crafts Conference will be held in the Grove Park Inn in Asheville, NC. More information at: Home - The 37th National Arts and Crafts Conference (<u>arts-craftsconference.com</u>).

May 23 – 26: 38th Annual Symposium of the American Association of Woodturners will take place in Portland, OR. More information at: <u>www.woodturner.org/</u>

I don't worry about woodworking clamps anymore <u>http://tinyurl.com/3s6hsbas</u>

Are radial arm saws too dangerous for today's shops? <u>http://tinyurl.com/4w4xmuz3</u>

3 Chisel Mortise Method | Paul Sellers <u>http://tinyurl.com/2zd7khka</u>

5 Simple Steps For A Perfectly Tuned Bandsaw <u>http://tinyurl.com/mr4ybzj8</u>

1 Finished Tricking Out My New DC

by Gary Coyne

In last month's issue, I explained how I lifted my new dust collector up so I could swap out the back two wheels with fully pivoting wheels. But I was not done with tricking out this thing.

When I first paid attention to the Harvey G700, I noticed four eye-bolts on the top of the unit. Their purpose is to let forklifts or engine block lifters lift up the G700 to move it around or place it on top of things. At just over 400 pounds, they are handy.



But I saw a different potential: to create horizontal space. Here's the deal: the horizontal space of this thing is not huge, but big enough in the average hobby shop to be in the way. However, if that could space be altered by

placing a shelf on top, that makes that space functional. I talked with the Harvey folks about this and they said that the eyebolts are attached to the frame, so it should be fine to do what I was planning.

The threads of the eyebolts is M8, 1.25 (eight millimeters with a 1.25 pitch), which I could get from McMaster-Carr. I bought four 300 mm threaded rods. Around the time that I was planning this out, one of our members, Jonathan Nail, was advertising a free table top on our SFVW FaceBook page. The size was just about perfect, so I raised my hand — "I'll take it!!"

To attach it to the dust collector, I screwed an 8 mm nut on the threaded rod and placed a 3/8" fender washer and a lock washer, then screwed them into the four respective holes.

To provide extra strength for support, I bought some metal conduit (and I thank Chuck for suggesting conduit, much better than what I was planning), and with Calvin Sov's help, cut them at the right length and final assembly.

I had drilled holes in the table and then drilled wider holes so that the washers, lock-washers, and nuts. All would be "just" below the surface of the table top.

I also added an I-beam shaped filler between the top and the rear raised section of the G700. This was both glued and screwed onto the top's underside. I used double-sided tape on the bottom against the G700. This was added to limit swaying of the top when moved around.

Once I tightened the nuts, the top was very firmly attached and didn't have any play side-to-side. The last thing I did was to add two rails to cover the top's sides since I needed to cut off the width of the top. Now, as I work on any project, I have a dedicated surface of about 26" x 47" to hold pre-cut and post-cut pieces.



"Minutes" from page 3

As glue dries to the "putty point," it no longer bonds because the plastic micro-particles can't slide in the solvent



and adhere to the cellulose. As soon as glue is applied to a surface, it begins to dry or set, and you want it to keep flowing/ moist until your parts are clamped together. Adding moisture can extend glue open-time but also adds moisture to the wood. As you place clamps, the pieces can slide, so clamp carefully.

You can use single-sided gluing to have smaller glue lines, but the glue will set much faster. Applying glue to both surfaces provides a longer open time, but you also have a thicker glue line, and the pieces are more likely to slip out of position. The bond strength for single or double-sided

"Minutes" from page 4

glue-ups is the same. However, single-sided glue-ups set much faster, but double-sided glue-ups waste glue, drip more glue, but give you more time to work. In addition, there may be a thicker glue line that may affect how your piece looks.

Gluing joints

Mortise & tenon joints are the hardest because the water in the glue will swell the wood fibers. If the joint is too tight, it is hard to close, and the glue squeezes away. These joints need to fit together just a little bit loosely. If there are gaps



in the joint, you can either glue new "cheeks" onto the tenon and cut again or use epoxy for gluing, which won't swell the wood fibers. but

epoxy can be finicky.

Dovetails have a similar problem as mortise & tenon joints, and with so many surfaces, the glue can set before you assemble the joint. Since a dovetail is a mechanical joint, it doesn't need glue on every surface of each pin and each tail. You can just use enough glue to keep it in place.

Miter joints are acceptable joints to use in low-stress assemblies. Bob said glue sizing (diluted glue applied to the miter surfaces) doesn't really help strengthen the joint but actually makes joints about 20% weaker. It is better to use a product like Titebond Quick & Thick glue or push glue into the pores, then, before it dries, put an extra layer of glue on the miter surface, and then clamp — but not too hard.

Dowels, Domino's, and biscuits don't help strengthen long-grain to long-grain joints but can help align boards, which can be helpful. However, you do need to be careful when cutting these to avoid reducing the effective glue surface and wood thickness. The forms of "loose tenons" can help strengthen long-to-end grain or end-to-end grain joints.

Temperature

Temperature affects the shelf life of glue less than humidity, but Titebond II and III can gel prematurely in high temperatures. It's best to store glue in an indoor, temperature-controlled environment. You can add up to 5% water by volume to re-thin glue that has thickened up. Or you can scrape off the glue once it putties up. A drinking straw cut at a diagonal or a sharp chisel works well for this. Scrape off dried glue with a sharp chisel.

Successful Gluing

There are five steps for a successful glue-up: (1) do a dry fit, (2) prepare glue and accessories, (3) prepare clean-up items, (4) do the glue up, (5) allow to dry and cure.

Breaking glue joints can be done through heat, moisture, or shock. It depends on the type of glue and joint for which method to use. CA glue is brittle and can break with shock. Traditional wood glue, as mentioned before, can be loosened by heating to 280°. Hide glue can be softened by heat and moisture.

Bob said you can make wood putty mix by mixing sawdust and glue with a ratio of 80% wood fiber to 10-20% glue. This makes an OK filler putty, but it doesn't take stain well. He said Timbermate Wood Filler works well, as well as coloring the repair with scratch repair markers.

The Club Meeting started at about 8:45.

Club president Jim Baldridge welcomed new members, Barbara and Bob Bilyeu.

Announcements

Jim Baldridge reminded members that future monthly club meetings will take place at the Balboa Park Recreation Center, where the club used to meet before COVID. He

thanked Highland Hall for having us meet here this past year and said we hope to continue a relationship with them, their students, and their parents.

Emily Lichtman announced that we will be sending out a survey to members in a couple of weeks to ask about future



programs, including presentations and field trips. If you haven't done the survey yet, here's the link <<u>http://tinyurl.</u> <u>com/48kt8xc7</u>>. Please remember, we cannot provide what you want to see if you do not tell us.

Ginger Gibson announced that she brought a couple of boxes of tools to give away.

Barbara and Bob Bilyeu announced that they had slabbed

For cleanup, wipe away wet glue right away with a wet rag.

"Minutes" from page 5

an oak tree. They are selling some of it and will donate some to raise money for the club. [See Page 7 for more de-

tails.]



he is selling some equipment to make room in his shop. He is selling a Delta midilathe and accessories, which is brand new, for \$400 to a club member or \$500 to

a non-club member.

Calvin Sov said that

He is also selling an Inca bandsaw and extra blades for \$600, or \$700, to non-club members. The saw has a 20-inch throat, and 8-inch resaw capacity.

Mike Wells is selling an old Delta-Rockwell 13-inch planer, which is very heavy. Anyone who is interested should talk to him.

Q&A

Mike Wells asked if it is a good idea to soften or round over the square back of a spoon carving knife. He has found that the sharp corners are irritating his thumb. The general consensus was that it would not harm the tool's functioning.

Show & Tell

Gary Coyne demonstrated an air inflator that can be used to raise heavy objects up to 500 lbs. It is available on Amazon. It is usually used to level doors and cabinets, but Gary used it to lift a heavy (400 lb) dust collector to change out

two of the wheels. He did it one side after the other by lifting it $\frac{1}{2}$ " to $\frac{3}{4}$ " at a time until he got it 7-1/2" off the ground. He demonstrated this by lifting up the side of one of the workbenches about an inch off the ground with little effort.



Carrie Rollings Meynet showed a pyrography piece that she made of a chickadee bird. She used fine tips. She sketched it out first and then used fine tips to burn it in. Calvin Sov



showed some engraved pieces he made on a CO₂ laser. He showed a silverware caddy on which the corners were cut to be bendable. The machine can do pieces up to 48" x 30".

Eitan Ginsburg showed a pair of Persian exercise clubs called "meels" that he made for his son's karate master. He made three pairs total, one from poplar and two from cherry. He thanked club member John Fisher for the use of his full-size lathe and his guidance and assistance on this project. He also showed a marking knife he turned the handle for.

Reports

Finance: The Finance Report will be presented at the next meeting. Please remember to send in your dues checks to Jeff Bremer or pay him via Venmo. Dues are \$35 for the year.

Toy Committee: Jim Kelly said that we need a new lead for the whiteboards to take over from Jack Robbins, who will be moving to Northern California in a few months. We also need a new lead to take over the treasure chest builds from Jeff Bremer, who can provide di-



rection and has all of the jigs. Jim Cabernoch will not be able to make push toys as he had done before. We also need a coordinator for the dolls for the doll cradles. The coordinators do not have to make all the pieces but will be the leads in developing the teams and coordinating the pieces and assembly of each toy.

If anyone is interested in becoming a coordinator for any of these toys, contact Jim Kelly. His contact information is shown on page 2 of this newsletter.

Urban Logging for the Club

By Bob and Barbara Bilyeu

Bob and Barbara Bilyeu (returning members) were able to harvest some California Oak wood from family property in Big Bear. The slabs vary in size and are live edge on both sides. The sizes are 1 inch, 1-1/2", and 2" thick. They vary from about 6' - 8' long and about 12"-18" wide. A few have parts where the trunk branches out, so they are about 24 inches wide at one end.



We would like to provide some of these slabs to club members with any money received going to the toy project. I am happy to let you come to my house to look at the slabs and make an offer. All funds would go to the club's toy project. I have about 40 slabs, but most of them will be at a friend's house in Lancaster. They have an unused barn where the wood will air dry. But I will keep some at my house.

Please note that these are newly cut slabs and will not be ready for use until "about" summer (for the thinner boards), pending their moisture content.

I can be reached at <u>BBILYEU@earthlink.net</u>. My email gets TONS of spam and junk mail, so please include "WoodWorking" in the subject! If I do not get back to you, feel free to email me again.



Urban Logging is a Thing!

By Bob and Barbara Bilyeu

And it can be a source of wood for us woodworkers!

The way I stumbled into it was when I contracted a tree removal service to cut down 2 trees and asked about cutting the wood into slabs. Luckily, the company I called knew of a guy who did the millwork. I was able to coordinate things so that the tree service cut the main trunks into 6-10-foot lengths. They transported the logs to the other company and cut them into slabs.

The tree removal was the most expensive part for us because the trees were so close to buildings that they needed to use a crane to get the wood down. A tree in an open field would have cost much less. The tree service transported the logs to the mill for me, so that was nice. The logs were not that big, perhaps 18" in diameter at most; the milling was about \$100.00 per log. Getting the logs to my house in Northridge from Big Bear involved 4 trips in my Toyota Tacoma. A professional delivery would likely have cost several hundred dollars. These are just my expenses; yours will almost certainly be different than mine!

Once you get the slabs to your house (or friend's barn!) You need to sticker them. This involves placing the slabs on 4X4s (or cinder blocks) and then putting sticks between the slabs. The 4X4s need to form a level surface, and the sticks need to be a consistent size so that the wood can stack even. I used ¾" shelving (the cheapest I could get) cut into 1-1/8" widths. (I made them wider than they were thick so I could tell which was the ¾" direction) Then, paint* the ends to minimize the splitting of the slabs at the end.

Finally, wait for 6 to 12 months** before using the wood! Without a kiln, you should try to achieve an air-dry moisture content of 15-20 percent***. Further moisture reduction occurs when you move the boards indoors, where they'll eventually reach their equilibrium moisture content (EMC).

There is much more information available on the internet from people with more experience than I have, so if you are inspired to do this, please watch a lot of videos.

*I just got some generic exterior paint. All it needs to do is stop or slow down moisture loss at the ends. And the green color will differentiate my slabs from other slabs at my friend's barn.

** The thin boards (1 inch) should take 6 months, the thick ones (2 inches) should take 12 months, and the 1 1/2 inch boards about 9 months. But I did not get them stacked until recently, so the clock starts ticking when I sticker them.

***I did some online research and opted for a moisture meter with pins. A good pin-less model would cost upwards of \$100! So, I was influenced by cost.