

WOODWORKERS

of Southwest Michigan

<http://www.woodguild.org> April 2017

Next meeting:

April 11, 2017 @ **6:30pm**

Kendall College of Art and Design
17 Fountain NW
Grand Rapids, MI 49503
Meet in the lobby

Parking is available in the city ramp at Fountain and Ionia. This ramp is just around the corner from Kendall's Lobby. Maps and direction on Page 5.

Agenda: Gayle DeBruyn, MM Chair, Collaborative Design Chair, Furniture Design Chair, MA in Design, Chief Sustainability Officer, Associate Professor, Design Studies will provide a tour of the school.

The tour will begin in the Furniture Gallery with a quick history of Kendall College of Art and Design {KCAD} featuring David Wolcott Kendall, the namesake of our school and furniture designer for Phoenix Furniture from 1879 - 1910. Furniture studios and student work as well as the wood and metal shops will be visited.

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Bob Behnke—5 steps for successful wood gluing

At the March meeting Bob Behnke returned to continue a discussion that he started last year on the 5 steps for successful wood gluing. Forty members and guests were attendance. Bob encouraged questions along the way in his discussion and our members obliged. There were lively discussion as Bob explained the steps. Bob is the Technical Service Manager for Franklin International. He utilized numerous service calls as examples of how glue going failed and what part of the five steps were not followed. The five steps are as follows:

5 Steps for Successful Gluing

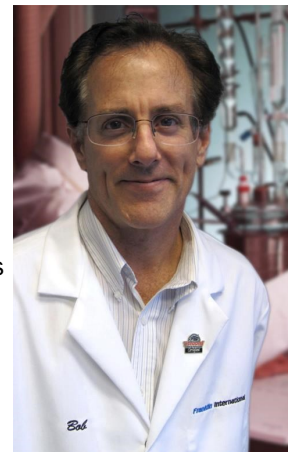
- Do a Dry Fit
- Prepare the Glue and Accessories
- Prepare Clean Up Items
- Glue up
- Allow to Dry/Cure

Fortunately for us, Bob provided copies of his power point presentation. Those will be included in the newsletter e-mail and are posted on our web page. His presentation will provide much more information than could be contained in this writing. Bob also had samples of Titebond II & III and a relatively new formula called Titebond Quick and Thick. The latter glue will set in as little as 15 seconds and requires little to no clamping. It's target market is the door and trim industry allowing fast application. The trade of is a short of open time, around 3~5 minutes.



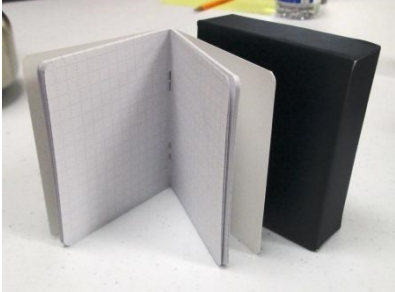
Bob Behnke Biography

Bob is Franklin International's Technical Service Manager for the Construction Division handling all technical aspects of the Titebond Branded product line of wood glues, construction adhesives, wood flooring adhesives and sealants. At Franklin Bob manages a group tasked with handling all calls to the company's 800 number along with technicians tasked with testing of competitive products and new substrates. Bob has worked for over 30 years in the adhesives and sealants industry with experience in the development of emulsion polymers, scale up from bench to production of a range of adhesive technologies and development of breathable technology for organic and inorganic fabrics.



March Show and Tell

Ralph Babcock brought in a box of small handy pocket sized note pads he ordered from Lee Valley



George Armstrong had a bowl and stoppers he had made using his rose engine lathe. Those not familiar with that lathe, think of a lathe built by Rube Goldberg. George builds the lathes himself and takes them during the summer to campgrounds for kids of all ages to try out.



Ron Prancing brought in an easel that was a work of art in of itself made from Ambrosia maple. He also had a hatchet he rehabbed by reshaping the head and a new poplar handle.

George Wade brought a larger version of the plywood mallets that he presented in March. He also had the unusual wood spheres he made using a hand held router in a rather simple jig. George got the idea from You tuber Izzy Swan. A quick google search will find Izzy's videos.



Doug Lynes had a very positive review for Bontrager Upholstery in Colon MI. They did some very detailed repairs on a couple of chairs in a reasonable time and price. Bontrager is an Amish shop.



Eastman 910 Adhesive

As a kid growing up in East Tennessee, my father worked for Eastman Kodak, now Eastman Chemical. I remember well my father bringing home tubes of the glue known then as Eastman 910. I thought I would share the story of Eastman 910 aka Super Glue.

The incredibly stable adhesive known as Super Glue™ was invented by accident in 1942 by Dr. Harry Coover. Today the substance is somewhat of a household necessity, with uses ranging from simple woodworking and appliance repair to industrial binding and medical applications.

During World War II, Coover was part of a team conducting research with chemicals known as cyanoacrylates in an effort to find a way to make a clear plastic that could be used for precision gunsights for soldiers. While working with the chemicals, the researchers discovered that they were extremely sticky, and this property made them very difficult to work with. Moisture causes the chemicals to polymerize, and since virtually all objects have a thin layer of moisture on them, bonding would occur in virtually every testing instance. They rejected cyanoacrylates as a feasible option and moved on with their research.

Six years later, in 1951, Coover was transferred to Kodak's chemical plant in Kingsport, Tennessee. That's when he re-discovered the cyanoacrylates and recognized new potential in them. He had been overseeing the work of a group of Kodak chemists who were researching heat-resistant polymers for jet airplane canopies. They tested cyanoacrylate monomers, and this time, Coover realized these sticky adhesives had unique properties in that they required no heat or pressure to bond. He and his team tried the substance on various items in the lab, and each time, the items became permanently bonded together.

Coover and his employer knew they were on to something. Coover received patent number 2,768,109 for his "Alcohol-Catalyzed Cyanoacrylate Adhesive Compositions/Superglue" and began refining the product for commercialization. His company packaged the adhesive as "Eastman 910" and began marketing it in 1958. Later, it became known as "Super Glue," and Coover became somewhat of a

(Continued on page 5)

Upcoming Events

Tillers International Classes:

April 7-8 FS Blacksmithing I \$250
 April 21-22 FS Coopering: Buckets \$290
 April 22 S Annual Plow Day Open House free
 April 22-23 SSu Tools for Timber Framers \$300
 April 23 Su Spoon Carving \$125

Plow Day Open House at Tillers on Saturday, April 22 from 1 to 4pm

1st annual Great Lakes Woodworking Festival, Adrian MI—May 7th

Local Woodturners meet second Saturday of each month at
 Portage Northern High School woodshop at 9:30am—<http://www.westmichturners.org/>

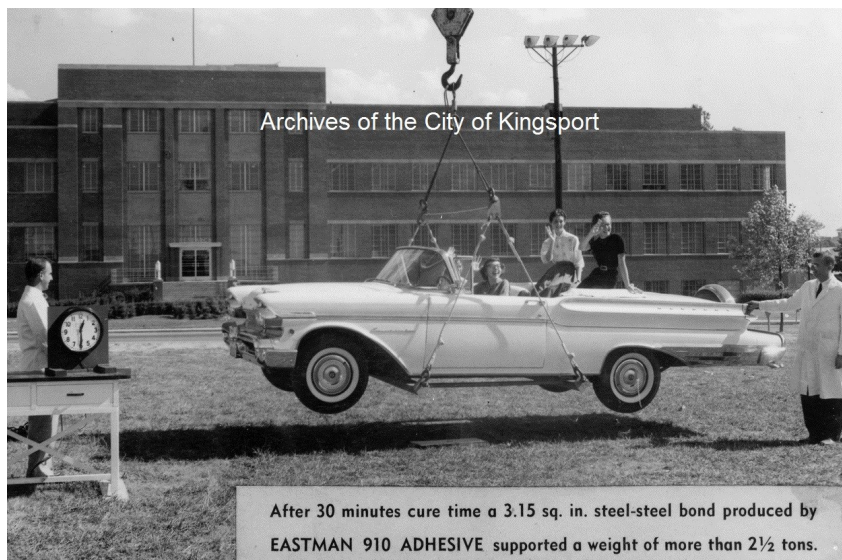
Kzoo Makers meet M-Tu-Th-Sa from 4:00pm—8:00pm —www.kzoomakers.org

Wood guild Classified

Tom McCormick will be harvesting several ash trees for lumber. He will be selling the lumber for ~ \$1.5/bf.

Contact Scott at

mcdavids3@charter.net at
 least a week prior to upcoming
 meeting for publication in the
 newsletter.



After 30 minutes cure time a 3.15 sq. in. steel-steel bond produced by EASTMAN 910 ADHESIVE supported a weight of more than 2½ tons.

Woodworkers Guild of S.W. Michigan

7572 S. 10th St
Kalamazoo MI 49009

Guild Officers

President - Bill Crown	375-1594
Vice President - Al Collison	685-8428
Treasurer - Mike Cline	685-0535
Newsletter Ed. - Scott McDavid	544-2177
Secretary - Douglas Lyles	324-1449
Photographer - Neal Ferguson	624-6837

The Woodworks Guild of South West Michigan is a group of hobbyist and professional woodworkers of diverse woodworking interests that meet monthly to share knowledge and craftsmanship skills that serve the many facets of woodworking.

Meetings are held second Tuesday of each month from September through May. Meeting time is 7:00pm at a local shop or location of interest.

Annual member ship dues are \$25/year.

Find us on the web at www.woodguild.org

Guild Sponsors:

 <p>Primal Woods Hartford, MI <u>Portable and Alaskan</u> <u>Sawmill Services</u> Email: john@primalwoods.com Web: http://www.primalwoods.com www.facebook.com/primalwoods 269-222-0101 John @ X700</p>	 <p>Douglas & Son Inc. Everyone's Favorite Paint & Wallpaper Store. 231 West Cedar St. Kalamazoo MI 49007 (269) 344- 2860 www.douglas&son.com</p>	<p>Andy Jean's Sawmill 7616 W. Main Oshtemo, MI Cell 269-808-6230 Hardwood and Softwood Professional Milling and Kiln Drying</p>	<p>WOODCRAFT® 4265 28th St. SE Grand Rapids, MI 616-957-9663 woodcraftmich550@sbcglobal.net <i>Directions</i> New Hwy 6 E. off 131 to M-37, N. to 28th St., Right on 28th, One mile from M-37 North Just East of Paris Ave. Next to Design Quest on your left.</p>
<p>J&J Paint & Glass <i>Steve Klok Scott Miracle</i> Everything in Glass 509 East Vine St. Kalamazoo MI 49001 Ph 269-344-2834 Fax 269-344-0378 Serving SW MI since 1954</p>	<p>S E L E C T M I L L W O R K C O M P A N Y B I L L A D A M S P R E S I D E N T 960 I N D U S T R I A L P A R K W A Y P L A I N W E L L M I 49080 P H 269-685 2646</p>	<p>THE HERITAGE C O M P A N Y <i>Architectural Salvage and</i> <i>Supply Buy and Sell old wood-</i> <i>work, doors windows and all oth-</i> <i>er old house parts.</i> Open Wed - Sat 11-5 269-385-1004 150N. Edwards Kalamazoo, MI 49007</p>	<p>Ad space available.</p>

celebrity, appearing on television in the show "I've Got a Secret," where he lifted the host, Garry Moore, off the ground using a single drop of the substance. He also appeared in a TV commercial for the product.

During the Vietnam War, it became apparent that cyanoacrylates could be used to treat war wounds. Field surgeons began using the substance by spraying it over open wounds, which stopped bleeding instantly and allowed hurt soldiers to be transported to medical facilities for conventional treatment. This saved many lives during the war and led to the FDA's eventual approval of cyanoacrylates for certain medical uses. Some of these include rejoining veins and arteries during surgery, sealing bleeding ulcers, punctures, or lesions, stopping uncontrollable bleeding of some soft organs, and use during dental surgery.

Over the course of his career, Coover was awarded more than 460 patents, wrote at least 60 papers, and was responsible for many advances in his field, in areas ranging from graft polymerization to olefin polymerization and organophosphorus chemistry. After Coover retired as Vice President of Eastman Kodak and Director of Research and Development and New Venture Management at Eastman Chemical Division, he formed his own consulting firm for a time before being named president of new business development for Loctite Corporation in Newington, Connecticut in 1985. From there, he moved to the board of Reilly Industries in Indianapolis for nine years, while continuing to run his consulting business until his retirement in 2004.

Coover's numerous awards include the Industrial Research Institute Medal Achievement Award, the Maurice Holland Award, the ACS Earl B. Barnes Award, and the AIC Chemical Pioneers Award. In 2004, he was inducted into the National Inventor's Hall of Fame. He received 260 patents before his death on March 26, 2011.

The original Eastman 910 formula was sold to Permabond and is marketed as Permabond 910.

Directions to Kendall School of Design from Kalamazoo:

Take US-131 N

Take exit 84B toward US-131 BUS/Downtown –0.4mi

Turn right onto Cherry St SW –0.2mi

Turn left at the 3rd cross street onto Division Ave S -0.4mi

Turn left onto Fountain St NW—Kendall will be on your right.

Continue on to Ionia St., turn right to find parking ramp.

