LAKE CHARLES WOODWORKERS CLUB

John Marcon, President

Bob Ferguson, Treas. & Newsletter Editor

APRIL 1997

MEETING HIGHLIGHTS

The March meeting was held in the shop of **John Marcon** with 30 persons attending. The president expressed his appreciation for the excellent attendance and noted the continual growth of our membership. Six newly joined members were present.

The president also announced that **George Kuffel** will be joining the advisory committee to fill the vacancy created by the resignation of Dudley Harvey. We are also seeking candidates for the position of president-elect.

Whitney Derise, who is coordinating this year's Christmas toys effort, indicated that planning is underway. They are looking for small pieces of lumber (scraps, if you will) which can be used for the project. They need 1x4's, 2x4's, or boards 3-3 1/2" wide and 6" longer. Whitney will pick up. Call him at 477-0659.

SPECIAL OPPORTUNITY: At the next meeting at Bob Schmitt's there will be a <u>special workshop</u> between <u>8:00 - 9:00 a.m.</u>, prior to the regular meeting. John Perry and Aaron Andrepont will demonstrate the proper setup and use of scroll saws.

MAIN PRESENTATION

The main part of the meeting was a presentation by **Daryl Flynn** on the creation of furniture items from flexible plywood.

Daryl began his work in the area by creating an item of furniture using a stacked plywood technique. This procedure consists of gluing stack of plywood cutouts together to build up a particular body followed by extensive grinding and sanding to achieve a final shape. Labor is extensive and the furniture pieces are very heavy. A unique chair can be seen at the Artisan's Gallery at the Imperial Calcasieu museum.

Most of his recent work has been done with a special type of plywood, called flex-ply. This material is only 3/8" inch thick and comes in 4x8 sheets. There are only three plies: a very thin, continuous hardwood layer in the center (normally running in the long direction) and two

external layers of a softwood with the grain running across the sheet and at a right angle to the center layer. Daryl indicated that 4x8 sheet with grains running in the opposite direction (in respect to the length of the plywood sheet) is also available.

Daryl described the various steps in the process of creating a chair. These consisted of designing the chair in the desired shape through use of a special adjustable chair (described in an earlier issue of Fine Woodworking). A mold is created which will permit the plywood parts to be clamped in a particular configuration which the glue is curing. Sections are then assembled by laying, up in the mold, several layers of the flex-ply which are to be glued together using the System3 epoxy resins. After curing, the laminates are trimmed, sanded and painted to produce a particular effect.

We all learned something new this day.

TREASURER'S REPORT

Treasury Balance:

\$ 1,059.44

Membership:

72

NEXT MEETING

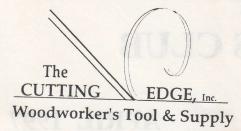
April 12 at 9:00 a.m. in the shop of Bob Schmitt 3548 W. Gauthier Road (See Locator) Lake Charles, LA

SUBJECT: Japanese Hand Tools by the owner of Houston's Cutting Edge

FUTURE MEETINGS

May 10 Metallurgy and Woodworking Tools by Rick Clark 32 35

ABOUT OUR GUEST SPEAKER



7123 SouthWest Fwy. Houston, TX 77074 phone 713/981-9228

Who we are:

The Cutting Edge is owned by my wife and me, Teri and Steve LeGrue. For 16 years I was on the faculty of The University of Texas Health Sciences Center, where I did cancer research and taught Biochemistry and Immunology. In September 1993 I resigned my tenured position at The University of Texas to open The Cutting Edge.

Like many of you, I came to woodwork as a release from my career. I discovered woodturning ten years ago, and I have never looked back. I have turned hundreds of objects and shown my work in galleries and fine art shows around Texas and the Southwest. I have been a member of the American Association of Woodturners and the Gulf Coast Woodturners Association for many years. I'm also a member of the National Wood Carvers Association and several local carvers clubs.

We opened our doors in November 1993 to serve our turning and carving friends. We hold evening classes in turning, carving, furniture and box making, and cabinetmaking. During our first 30 months of operation I have personally taught over 200 beginning & intermediate turners.

Our comittment is to carry only the finest in hand tools and power equipment. We have selected the best tool lines in the world and offer them to you at a fair price, and with the knowledge that we have experience with these tools and can help you to get the most from them. Feel free to call or write us and we will be happy to answer any of your questions. And thanks for supporting small businesses! We are what makes America great.

NEW MEMBERS

We are pleased to welcome into membership

Amy Berg 1671 Wright Road Vinton, LA

Brent Evans 1141 Cheyenne Dr. Lake Charles, LA

Pat Corbello 1544 Hwy 109 South Vinton, LA Daryl Flynn 325 Jeannine St. Lake Charles, LA

Horace Gradney 512 N. Lyons St. Lake Charles, LA Wil Graybill 980 Terry Lane Lake Charles, LA

Larry Trahan 739 Broussard Rd. Sulphur, LA

CLUB LIBRARY

At the end of last year when it was decided to increase our dues from \$10 to \$20 one of the stated objectives was to begin a club library. We have begun by purchasing a copy of **Woodshop Dust Control** by Sandor Nagyszalanczy which provides an excellent introduction to the subject. If you would like to borrow the book, please contact Bob Ferguson.

Why Do I Get Bubbles and Brush Marks In My Varnish and Polyurethane?

By Sal Marino Edited by Barry Humphus shumphus@stuartsys.com

What Causes the Problems

It is very frustrating when one spends hours and hours building a project, making sure that all the joints fit properly, the wood grain matches from board to board, removing any glue squeeze out, etc. only to wind up with brush marks and or bubbles in the finish they have brushed on. Most people immediately blame the brand of finish they have used and swear never to use that inferior product again. In truth, the problems are not with the brand of finish. Most popular brands of varnishes and polyurethanes will give you excellent results if you know how to properly brush on that finish and a little about how finishes flow out and their set up time.

There are two main factors that cause a finish to bubble and show brush marks after it has dried. The first has to do directly with the way you apply the finish, (your brushing method). Many people assume that if they brush out the finish well, it will level and stay smooth. This is absolutely incorrect. When you apply a finish by brush, you are basically agitating (moving the finish around) Brushing introduces air into the finish, thus creating air bubbles. Even if one is careful, one cannot completely avoid the development of some bubbles, but if you brush too much, you will wind up with a whole surface full. Secondly, the more you brush out a finish, the quicker the solvent in that finish will evaporate, thus the quicker it will set up. If the finish sets up too quickly, it will not have enough time to level itself. The bubbles will not have enough time to pop and any brush marks will not have enough time to flow out.

How To Prevent the Problems

Thinning the finish will make it flow out better so brush marks will level and air bubbles will have enough time to burst before the finish sets up. First, make sure the finish has enough solvent in it. Most oil based varnishes can be thinned with pure gum turpentine or a good quality mineral spirits, but it is always a good idea to check the label on the can to make sure. I usually like to thin out the finish about 20 to 25 percent with solvent. This breaks down to 1 part solvent to 4 parts finish or 1 part solvent to 3 parts finish. Thinning this much may not be necessary when the can is brand new and it's the first time you have opened it, but each time you use the finish, it will get thicker because as the amount of finish gets lower in the can, the more air stays in the can and this will make the solvent evaporate much quicker. If you are not in the business, I do not recommend buying these finishes in large cans like gallon sizes. Purchase in smaller sizes or when first purchased, transfer the finish from the larger can to smaller ones and make sure the lid is placed on tightly. This will keep the finish from thickening too quickly.

Reducing the finish with solvent will not make it weaker or effect the way the finish performs. The only drawback is that when the finish dries and all the solvent has evaporated, less of the resin (finish itself) will be left on the surface. Therefore, you will have to apply a few more coats than you would have if you used the finish without thinning it. I believe this is well worth the extra time, considering the results you will obtain.

Proper brushing technique will reduce the amount of air bubbles that develop in the finish. When brushing on the finish, make sure to load the brush enough so you can apply a liberal amount of finish without having to press down on the brush to get more out. Lightly touch the surface with the loaded brush and then start to move the brush across the surface. As soon as the brush stops applying a continuos flow of finish, re-load the brush, in this way you will prevent over-brushing. Try not to overload the brush, because if you do, you will wind up with drips or too much material on the surface. Some practice is required here. Run tests on scrap panels until you get the feel. Once the whole surface has been covered with finish, then you must perform a method called tipping off the finish. Do not reload the brush. Using the very tips of the brush, take light passes just slightly overlapping each brush stroke. This should burst the majority of bubbles. This will not burst all the bubbles, but don't worry, the remaining bubbles will burst and level because of the extra solvent you added to the finish. Remember, sand lightly between coats with 320 grit paper.