

WOODWORKERS

CLUB OF HOUSTON

VOL. 4, NO. 9

SEPTEMBER, 1988

Officers

Sharon Buckley - President
Kent Moore - Vice President
Don Richardson - Sec./Treasurer
Steve Procter - Newsletter Editor

Andy Anderson - Board of Directors
Jimmie Harp - Board of Directors
Ron Kuenning - Board of Directors
Hebert Wilbourn - Board of Directors

AUGUST MEETING

Our speakers were Steve and Vickki Procter. They have been building full size rocking horses for several years.

Rocking horses are distinct from Carousel horses and sculptures. Carousel horses are made light but strong to withstand the centrifugal force of the merry-go-round and are usually supported by a pole. They are heavily carved, gaudily painted and sometimes have glass jewels adorning them. A sculpture, on the other hand, is a realistic depiction of a horse's anatomy, and is not intended to be used, just looked at. A rocking horse is a toy, used by children (and adults) to give pleasure by gently rocking. Rocking horses have been made since at least the 1600's, usually by folk craftsmen, and often have real horse hair manes and tails. They are often painted.

The Procters seek to build fine wood rocking horses that are lightly carved, slightly stylized horses using different woods to achieve the look of a real horse. All joints are exposed, and thus care is taken in matching grain direction.

The horse head is tilted on the neck, and the neck turned on the shoulder to give an effect of the head being tossed. This is more life like than most manufactured rocking horses. Glass taxidermist eyes, real horse hair and leather bridle are used to add realism.

Vickki sketches the design, first on 8 1/2 x 11 paper, then full size. Card board templates are made from the drawing, each with grain direction and cutting instructions marked. The templates are laid on the massive 2 inch thick slabs of hardwood. The pieces are bandsawed to rough shape. The head pieces are glued up separately from the body. The head may contain 10 separate pieces.

The legs and head are carved prior to assembly. This permits easier carving, and in the event of a mistake, does not ruin the entire horse.

Gluing and assembly are very tricky. Many

pieces must be glued rapidly. Each piece is marked in chalk to prevent the carefully chosen grain from being reversed. A clamping knoggin on the horse head allows a clamp to hold the otherwise curved head on the body.

Carving is accomplished by a large number of tools--from auto body grinders to delicate palm held knives and chisels. The grinder removes excess stock rapidly, while small chisels are used to delineate features like the ears and nostrils.

The rockers are 8 feet long, and are made of two sections for each bow, connected by wood slats. The joint is pinned with a wood dowel, and reinforced with a broad support glued and screwed to the bows hidden beneath the slots.

The horse can weigh up to 100 pounds, and accept over 300 lbs. of riders. It is very important to properly locate the horse on the rockers. It must be perpendicular both at rest, and under load in order to rock gently. Because the horse is "Nose" heavy, it is located off center on the rockers. The exact balance must be achieved by trial and error, and varies between horses of different woods.

After much research, Vickki found a source for horse hair, and developed a method of holding the tail hank in place by using two-part epoxy plastic. She glues and sews the mane to a leather strip, which is then inserted into a narrow slot in the neck. Some owners braid the horse hair.

A completed horse weighs about 100 lbs., is 4 feet tall, sits on bows 8 feet long, and contains over 90 lbs. of fine woods, 3 lbs. of horse hair, 1 lbs. of leather, dozens of brass screws, 4 bolts, 2 glass eyes and 150 man hours of sweat, a little blood, and love.

CLUB BUSINESS

TREASURER'S REPORT by DON RICHARDSON

We currently have \$2116 in the bank.

We currently spend almost 100 cents out of every dues dollar for the newsletter. This is because the postal rate increased significantly. We are also fortunate that the printing cost are very low, due to the generous pricing from members John and Barbara Arnett. These expenditures leave little room for additions to the library--either books or videos, and no money at all for outside speakers.

The board also resolved that our previous practice of rounding down to the nearest \$500 on the Charity donation would not be done in the future. The purpose of the rounding was to allow the club a cushion for unexpected expenses including bounced checks. However 5 years of charity show experience show our costs to be minimal, so now every penny raised will be given to the designated charity.

It was moved, seconded, and unanimously voted that dues be raised to \$18.00 yearly. It was also approved that future members joining would pay a prorated share of the annual dues, depending on which month they join. This was considered fair to each individual member. Also any person joining the club in the last quarter of the year (Oct. Nov. Dec.) would pay the remaining months plus the next years dues.

There was some good natured fun derived from Ted King's enthusiastic motion to raise dues to \$18 per month. Nice thought--but we knew what you meant.

Zatis Murphy's safety report was on hidden safety problems in moving heavy machinery. Get help, and avoid back injuries.

CLINICS AND WORKSHOPS

In September Don Richardson will give a clinic on Computer Aided Design. If your interested see Don at the meeting or give him a call.

We also need people to volunteer to hold clinics for October, November and December.

SAFETY

By Zatis Murphy

One, two, three, four.....ten! At last count while writing this, I still had ten fingers. When I first started woodworking seriously in 1981, my boss used to ask for a finger count each Monday when I came to work. It almost became a standing joke to see whether or not I had survived the weekend without losing one of my digits.

It's no joke, however, that fingers probably suffer more damage among woodworkers than any other part of the body. Indeed, some woodworkers have difficulty responding correctly to "Give me five!" since they may have only three or four.

Working with your hands can be a joy, but hazards lurk continually in the workshop. Power cutting tools are especially dangerous. Saw blades turning at 3500 rpm not only can lacerate fingers and hands, they also can cut fingers off so quickly that a person may not

realize what has happened. Use blade guards on all power saws. If the operation requires removing the guard (such as cutting dados on some table saws) be extra careful. Use push sticks and hold-downs for all operations that put your hands close to the cutting edges of saw blades, router bits, jointer knives, drill bits and the like. Also watch out for loose fitting clothing that could be caught by power machinery. You could be pulled into the cutters along with the clothing.

Protect others in your shop from injury. I have a hard and fast rule for my shop.....NO VISITORS, UNLESS INVITED BY ME! If a surprise visitor shows up, I immediately stop what I'm doing to insure the safety of the visitor.....and ME. Chuck Green of Ashland, Mass, recently wrote to Fine Woodworking (#71) about an incident in his shop. He let his small daughter sit on his workbench about 3 feet away from a bandsaw he was using. As she tried to get down, she slipped and reaced into the moving blade, cutting her finger; fortunately, the injury was not serious. Chuck's obviously painful admission suggests that he'll do things differently in the future.

Some hand tools have potential for causing injury. Although I doubt that I would remove a finger with a hand saw or chisel, I have no doubt about raising blood with such tools. (I can show you a few scars.) Dull cutting tools are enemies. They require more force to do the job and are difficult to control. Sharp tools are friends, but like all friends, they should have respect. Plan your cutting operations carefully...and the next time you count your fingers, be sure you don't stop at NINE!

PRESIDENT'S CORNER

By Sharon Buckley

Well, so far this has been an unusual or maybe just a another year in Houston commitments or lack of. Andy and I get a yes for a meeting and then they call back to postpone or cancel. Again we have to postpone another meeting at Southwest Panels in Katy! We are now shooting for a meeting date in October.

At the August meeting Sam Zeisman, Charity Chairman reported that the Northwest Mall backed out of their commitment for space for our Annual Charity Show.

Well, one thing I knew for certain was that if there was any space to be had in this town Sam would find it. After countless maybe's and definite no's, Sam has found us a place to hold our Charity Show--The Good folks at Greenspoint Mall said YES!!!!!!

Good work Sam as always. Thank You !!!

Now we need lots and lots of items, hopefully this change will bring us good luck and because of the larger size of the mall, more customers and more money for the kids.

Jimmy Harp said he will be glad to start storing any items you already have made so

bring your items to the meeting.

**CHARITY SHOW FRIDAY OCT. 28, 1988
SATURDAY OCT. 29, 1988**

Jim Sims got confirmation for our December Dinner Meeting at the Rice Faculty Club, on December 1, 1988 a Thursday. We will have more information in the next newsletter. Thank You, JIM.

PROBLEMS AND SOLUTIONS

Bandsaw tips: Align the wheels along two axis. Use a toothbrush mounted inside of your bandsaw to clear dust from both tires. This will allow them to last longer. Take the tension off the blade when saw is not in use. This will help components last longer, and will minimize blade stretching.

A Sears 12 bandsaw driveshaft migrates ? To solve this problem you need a new driveshaft and possibly new bearings. A bearing puller is needed to accomplish this.

C-L-R (Calcium-lime-rust) removes rust from steel. Rust cure converts rust chemically to a black surface. Get this or similar products from auto supply stores and some hardware stores. Gun Bluing can be used on cast tables, like table saws, jointers etc. It minimizes rust, and is very inexpensive. Obtain at sporting goods stores or in the sporting goods department of Wal-Mart.

Don't use silicone-based waxes (car waxes on the tables of machinery. The silicone will enter the grain of the wood, and prevent finishes from properly applying. Instead, use a hard paste wax, carnuba wax or bees wax. Toilet bowl rings contain bees wax along with silicones, but they are an inexpensive source of multi-purpose wax to use on screw threads, etc.

BUY AND SELL

For Sale: Ringmaster with motor \$250.00 used 6 times--Ronnie Derks.

For Sale: Duofast Framing Gun 8-16D \$395.00 Lewis Vallette.

SHOW AND TELL

Zatis Murphy displayed Salt and Pepper shakers. He used scraps. Ideal charity show project. Lacquer finished with cork stoppers.

SHOP TALK

By Don Sloan

When people tell me about quick tricks I am not always sure about the outcome. On your saw blades, they will stay cleaner longer if you, after cleaning the blade, spray it with Pam, or any other kitchen non-stick product. Be sure to run the blade through a piece of scrap two or three times after spraying before you run it through your good material. The blade will clean easier the next time, and stay clean longer.

SEPTEMBER MEETING

WHEN: SEPTEMBER 10TH 9:00 A.M.
WHERE: UNIVERSITY OF HOUSTON
INDUSTRIAL ARTS BLDG.

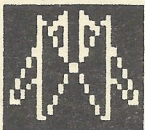
DIRECTIONS: Take the Calhoun exit off of the Gulf Freeway (I 45). Go west on Calhoun Street past Elgin to the first Entrance No. 19, Turn right. After entering, drive between parking lots on both sides to the first street, turn left and follow around between buildings to the end of the street then look to your left to see the older Concrete Block Bldg.

NOTE: The map in the February 1988 issue is correct, but the written directions on how to exit the Gulf Freeway has changed. that section of the freeway is finally complete for this month.

NEWSLETTER INFO

THE OCTOBER NEWSLETTER
LAST DAY FOR PUBLISHING--SEPTEMBER 21, 1988
THE NEWSLETTER WILL BE MAILED THE WEEK OF OCTOBER 3RD.

Would you like to join the **WOODWORKERS CLUB OF HOUSTON**????? Bring your \$4.00 to the meeting of send to **WOODWORKERS CLUB OF HOUSTON P.O. BOX 34481 HOUSTON, TEXAS 77234.**



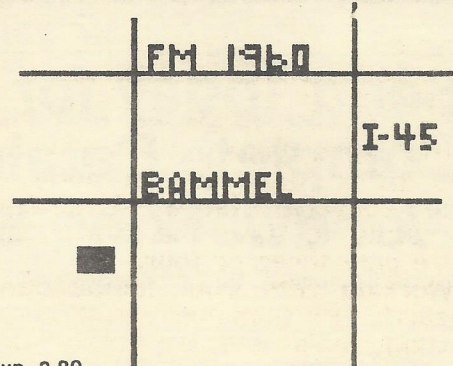
AUSTIN HARDWOODS

13001 VETERANS MEMORIAL DR.
HOUSTON, TEXAS 77014

440-0764

WE STOCK OVER 80 SPECIES OF LUMBER INCLUDING RARE EXOTICS AND TURNING STOCK

PLYWOOD, VENEER, MOULDING, FLOORING, TOOLS, MILLWORK, PANELING, ETC. ALSO AVAILABLE



Exp. 8-89

Welcome to the Wonderful World of Billiards!

No one really knows where and when billiards originated, but it can definitely be traced back a very long time. Mary Stuart, Queen of Scots, is reported as perhaps the earliest well-known patron of the game! "Billiards" has become somewhat of a generic term covering several types of games...six-pocket billiards (pool), snooker billiards, carom billiards, etc.

Originally probably a ground game, billiards is certainly the product of evolutionary selection. Many changes in the game and in the playing equipment have evolved over the years. However rich the history of billiards, it is a surprisingly difficult story to reconstruct. William Hendricks, in his "Official Standard History of Pool/Billiards/Snooker", states that "The researcher finds himself tracing small volumes long out of print, translating documents in languages no longer spoken, and gingerly handling decomposing old manuscripts. He reads tomes on...furniture making; collects obscure letters of pardon for long forgotten medieval crimes...." A copy of Mr. Hendricks book will be available for you to look at at the end of your meeting. If the thought of tracing the game through its history appeals to you, we will have copies of the book available for purchase within the next ten days to two weeks.

Hendricks quotes The Dictionary of Furniture and Design, ".....is it to be wondered that in the eighteenth century the billiard table had become an indispensable piece of furniture? Is it surprising that writers of the period indicate its presence in every castle, in every palace, and even in the homes of ordinary citizens?"

Because we believe in pool as a sport, we believe that there should be a place in every modern home for a pool table! Not only does pool provide excellent reinforcement of the math principles of angle and trajectory, plus equal and opposite reaction, it also provides family interaction! You can communicate verbally while playing and still concentrate on the game!

As you all well know, woodworking of any sort requires the application of certain mathematical principles. When you begin to think about making a pool table, however, you must add physics to your geometrical calculations, as billiards as played today is a very precise compendium of action and reaction plus angles and trajectory.

Not only must you consider the final appearance of the furniture, you must take into consideration such things as proper angle of the rail rubber, pocket openings which meet BCA specifications, proper height of the rails, support for the immense weight of the slate bed, and provision for the ability to achieve a perfectly level playing field.

Slate is the most perfect substance known to Man for providing a perfectly level, perfectly stable playing field for the game of billiards. Some tables have been sold with "slatite" or "slatene" which is colored to look like slate. Others have particle board or "honeycomb" tops. While they serve their purpose, there is no disputing that slate is a superior playing surface.

Slate used for billiard tables is of a dark grey color, and in its most perfect state, without veins of light color (lime). Slate is quarried from the earth in huge chunks and removed from the mountainside to a processing facility where it is cut into slabs. It is honed to perfection and any necessary holes are drilled into it.

Smaller slabs which are used for the smaller playfields can be left in a single piece. Only when the slate reaches the larger, heavier dimensions does it become prudent to cut it into the familiar three pieces. The myth that a three-piece slate is better than any other can be supported only by the fact that it is larger and heavier, and the rails of the table are bolted through the slate (thus providing greater weight and stability). The inherent characteristics of the slate, not its size or the fact that it is one or three pieces, determine its relative quality.

As late as the late 1940's, the EXPORT from the US of billiard slate reached a high of \$79,687 out of a total export (for all uses) of \$595,023. Total slate IMPORTS (for all uses) in 1951 were \$252,000...about 2-1/2 times higher

than in 1950!! Those values have almost totally turned around now, with almost all billiard slate coming from Italy where there are some highly automated and computerized processing facilities. Even some SMALL importers now bring in slate equal to or greater than the value of ALL billiard slate EXPORTS in 1949!!

Common playfield sizes (from cushion tip to cushion tip) are 39 x 78 and 40 x 80 (7'), 44 x 88 (8'), 46 x 92 (8-1/2'), 50 x 100 (9'), and 56 x 112 (10'). Six foot tables can have playfields as small as 32 x 64, and as large as 36 x 72. As you can readily discern, there is an approximate differential of 3" in the slate and playfield sizes of the "regular" sized slates.

As a general rule of thumb, the size of the slate for these playfields...if it is oversize (the rails bolt through the slate)...is 7" greater than each playfield dimension. Thus, a 44 x 88 playfield would require a 51 x 95 slate.

While some 44 x 88 tables are produced with 3/4" one-piece slate, the better quality tables generally opt for at least 7/8" slate on this size. It is not uncommon or undesirable to have 3/4" for the 7' size. 46 x 92 and larger playfields almost demand at least a 1" thick slate, due to the greater span.

If the table is constructed so as NOT to have the rails bolt through the slate, popular vernacular sometimes refers to those as "regular-size" slates. It is in these undersized slates that you will find the single piece prevalent.

In the typical coin-operated table, where this "regular" size is dominant, the 42 x 82 dimension was historically the standard. With the advent of the Valley coin-operated table, Earl Feddick chose to down-size the slate somewhat (40.25 x 77.5) for the smaller table, and up-size it for a mid-size (43 x 83) 7'. This results in playfields of 37.5 x 75 and 40 x 80 respectively. In later years, Dynamo chose to adopt Valley's extremely successful dimensions. As a measure of Valley's impact on the industry, some manufacturers of home tables have also opted for the 40 x 80 playfield with the 43 x 83 slate.

No matter what the actual playfield dimensions, the table should conform to the "two-square" principle, i.e., the length should

always be twice the width. In this manner, the mathematical formulas which govern complicated rail shots remain the same from table to table.

When building pool tables, there are several design variations which provide adequate support for the slate. One device is the "hidden" frame, or support wood which is hidden completely by the exterior "skin" of the table. In yet another design type, the actual frame may become part of the design itself.

Whether to use ply or solid wood on the frame is a decision which you must make. We find that, while router cuts are not very attractive on ply, many times the grains of the ply are detailed enough so that the table looks good with just plain sides! Trims can be applied to either wood. Many tables built before the 1960's were veneered or covered with high-pressure laminate. Most commercial tables today use laminate and metal corners, although some of the more upscale pool rooms are going to real wood and leather pockets.

The height and method of securing the legs to the frame will be indicated by the type of frame design that you choose. While the majority of the pool tables being constructed today have four legs, a double pedestal, properly attached to the frame, will work nicely. Whether you choose plain square or tapered or ornately carved legs will have a lot to do with how much the table costs to build.

While the top "cap" of the rail is generally solid hardwood such as oak, walnut, or mahogany, the "sub-rail" is generally of a less expensive, though sturdy, wood. The thickness of the combined rail governs the angle of the cut made to accommodate the rail rubber, or cushion. The cushion must be affixed so that the point strikes the ball at a precise angle just above center.

The rail also plays a part in determining the size of the pocket opening. While roughly half of the pocket opening is formed by the slate, the balance is formed either by the cut in the rails or by the pocket iron, in the case of a leather pocket table. A common error novices make in constructing a pool table is that of leaving a portion of the table frame blocking a portion of the pocket!

"Pearl sights", which used to be diamond-shaped and of real mother-of-pearl, are now generally round and of a pearlized plastic. These are spaced along each rail according to specific mathematical values.

While you visit with Mr. Bill Forgie in our shop next door, look around you! The building was built over a hundred years ago as a livery stable! With a crude environment and very elementary tools, Mr. Forgie's unique talent turns wood into wonder!!

Before you leave, be sure to pick up the literature packet which we have provided for you. We hope that your visit will be pleasant, and that it will whet your appetite for a good game of billiards!

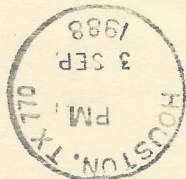
Alicia Morrison

**INTERNATIONAL
BILLIARDS, INC.**

2311 Washington Avenue Houston, Texas 77007
(713) 869-POOL



Broad Wagon 1880s
USA



Woodworkers Club of Houston
P.O. Box 34481
Houston, TX 77234

ALLWOOD/SCHROEDER INC

Imported & Domestic

Marine Plywood
Parana Pine
Mahogany

Teak
Exotic Hardwood
Domestic Hardwood

WALNUT - BIRCH - ASH - CHERRY

CYPRESS - RED AND WHITE OAK

SUGAR PINE AND OTHERS

MON. - FRI 8:00 TO 5:00

SAT - 8:00 TO 1:00

5401 Lawndale

(713- 921-6131)

Quality
Hardwood - Softwoods - Plywood
Mouldings & Squares
Self-service

A complete selection of finishing supplies

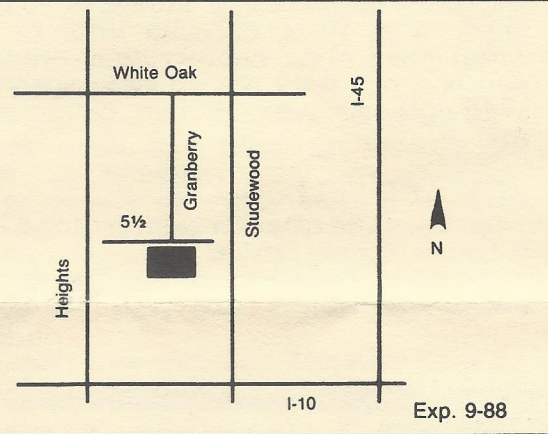
Exp. 5/89

HARDWOOD LUMBER CO.

700 E. 51/2 St. (In The Heights)
Houston, Texas 77007
(713) 862-6628
Hours: M-F 7:30-5:00, Sat. 8:30-1:30

We stock over 65 species of lumber including
hard to find exotics!

Also: Plywood, Veneer, Moulding, Formica,
Custom Milling, Woodworking Tools, Books, etc.



Send Today for the Most Complete Catalog Selection of Woodworking Supplies

Please Enclose \$1.00 (3rd class) or \$2.00 (1st class)

Name _____

Address _____

City _____ State _____ Zip _____

Orders Shipped Within 48 Hours

Exp. 5/89

21801 Industrial Blvd., Rogers, MN 55374

The
Woodworkers'
Store