American Woodturner

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Dedicated To Providing
Education, Information, and Organization
To Those Interested in Woodturning

President's Page

David Ellsworth, Page Editor

To many of our members, summertime means packing up the truck and heading to the craft show. It is a time to trade in the lathe for the director's chair and contemplate the ultimate question: "What is the secret of marketing?"

No one has the ultimate answer to that question because lessons in marketing are very individual and usually learned the hard way—after we have blown the sale. But sometimes it helps to visit a show and look at the work like a customer does, just to see how other people represent themselves. Such was the case when I recently cruised an "art show" at my local mall.

My lesson in marketing this day came from a booth displaying paintings. The artist drew well with her paints and the images of domestic scenes were exactly what people wanted to see: people, dogs, and houses.

Oh sure, the canvasses could have used a few coats of jesso before the paint was applied, and the paints could have been mixed a bit instead of coming directly from the tube, but that's okay. This artist was very involved in her work and obviously at the peak of her experience with the medium.

What more could anyone ask? Her prices were good for a shopping mall show, between $25 and $180, and the peg board partitions were an honest choice for the display—although I do not recall ever seeing them used on the walls in someone's home. Clearly her best painting was the self-portrait, but it was not for sale.

What caught my eye was the artist, herself. Somewhere in her mid-sixties, short and plump and quite pretty, she was dressed in a fluffy high-collared blouse and freshly ironed bib overalls. Taken out of her booth she would have blended right into the crowd. But in the booth, you could tell she was all business. Blazed across the bib of those overalls with five-inch letters of silver and gold sequins was printed the word "ARTIST." Talk about honesty in marketing— you just gotta love it.

Another form of marketing strategy comes from my 17-year-old son's copy of *International Male* magazine. I cannot attest to its honesty, but it certainly is direct. Under the title, "Kaui Cool," and for only $50.00, one can buy a pair of "Overboard Jeans" that are advertised to be "trashed, bashed and faded, the requisite rips backed by colorful hobo patches." Now really, when I buy a brand new pair of my favorite blues at the local mall for $25.00, why would I spend twice the price for something that is, at best, only half there? Do hobo's buy "cool?" Obviously, the generation gap was not created to be understood, it was simply created.

How does this relate to selling woodturnings? Well, don't laugh too soon. These two examples of marketing expertise are totally serious and you can bet they do sell products. First, both offer products that are very familiar to us; oil paintings and blue jeans. Second, they force us to compare and make decisions based upon our own "life's experience." After all, even being cool can be one of life's experiences.

It is really no different when selling woodturnings. When customers walk by our displays in malls and craft shows, shops and galleries, they ask very similar questions from their own experiences in life—usually in this order: "What is it?" "What do I do with it?" "Can I afford it?" "Do I really need it?" Of course, when you're cool, who cares?

The point of all this is really quite simple. The main reason people walk past our displays is not because they do not **like** our work, it is because they do not know **what** the work is. They are simply not familiar enough with turned objects to make the decision to buy. So one of the by-products of exhibiting our work is that exposure brings knowledge, knowledge brings confidence, and confidence brings sales.

Obviously, there are many levels of marketing and well all have our tales of woe to support our scars of battle. But there is one basic concept of selling that has never really changed: First, teach them what the product is, then let them sell themselves.

American Woodturner

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"ITOS Bowl," by Al Stirt, with Heavy Carved Rim, 1988, Cocobolo 10" diameter x 4⅛" high.

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"Component Top," by Christopher Weiland, assorted wood, 1989.

Photo by Roy Engelbrecht

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Learning Design

by Leo Doyle

Learning design is a collective pursuit that covers many different concepts which work in conjunction with each other. It involves getting an idea, and then refining that idea. When I teach my workshops, I give my students assignments each day. I supply the name of the object, and the students produce their own personal interpretation on the lathe. The results are always varied and interesting, and we discuss the merits of each design. Through this process, students improve their design awareness and learn design techniques.

We all have ideas and some design potential. The list of wood turning objects will help you generate ideas. Ask yourself how you would turn each item on the list. No two people would do it the same way, and your idea is just as valid as anyone's idea.

The most important concept and the most difficult to convey to my students is the ability to put feeling into the work. Although, it is difficult to put feeling into your work; when present, it is the culmination of skill, experience, ingenuity, instinct, design, and innovation. It takes time to sharpen your abilities. As we all grow, time is one of our most precious commodities, and in short supply, so the best solution is to make the most of what you have. It works for me.

Leo Doyle is a Professor of Art at California State University in San Bernardino, California.

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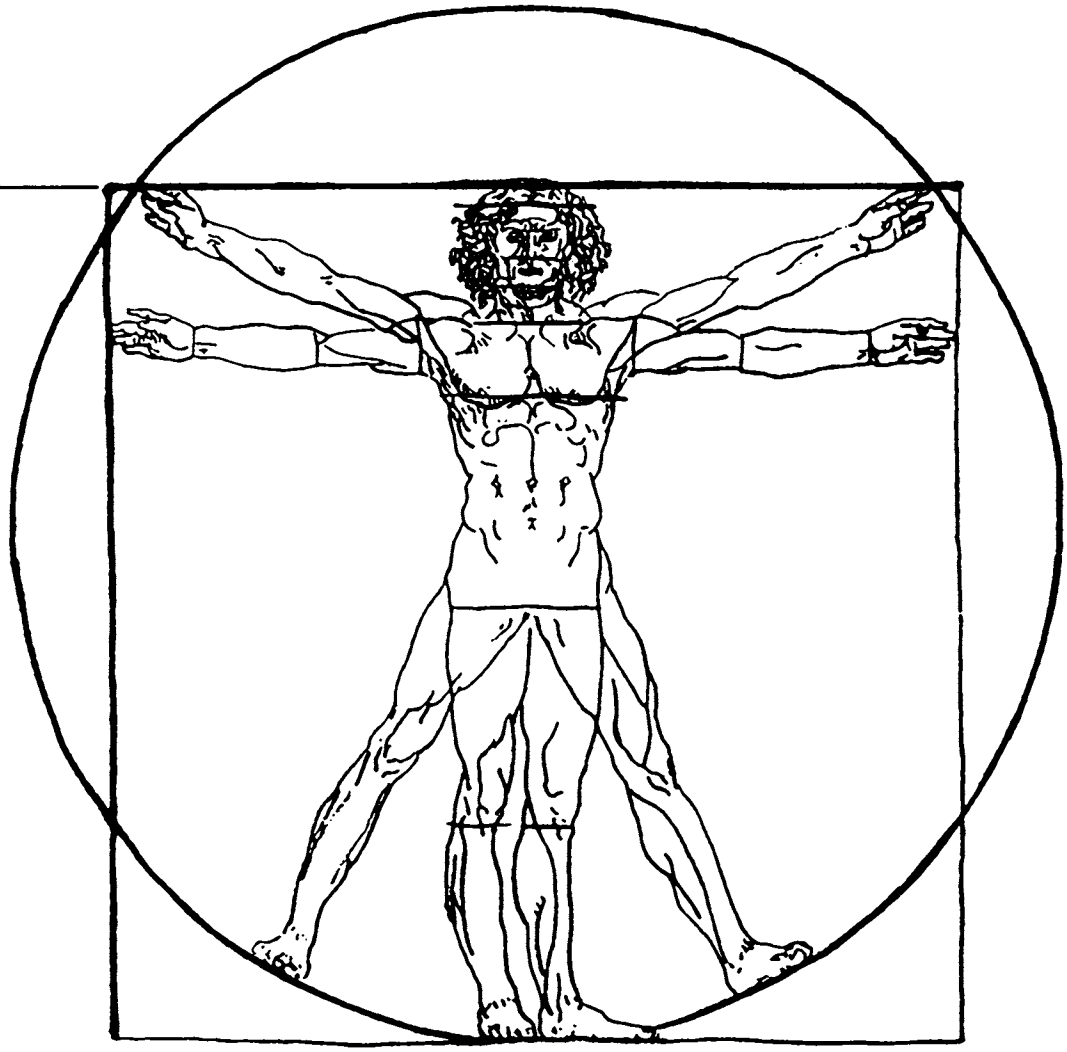


We use numbers, name angles, and draw diagrams to explain technique. We make everything as clear and as precise as possible. Technical articles relate one way of accomplishing some tasks or one successful approach to a particular problem. With similar tools, materials, and a little practice, the information in the article will enable anyone to reproduce the results the author describes. Unfortunately, trying to describe a personal approach to design is quite difficult. Even if it were possible to graph the subjective and poetic as effectively as the objective and prosaic, what would be the purpose? Even if you could somehow become perfectly acquainted with every influence, every source, subliminal and superficial, that shaped the sense of design of a master turner, then what? What makes the approach valuable and worth study is that which makes it impossible to re-use. It's unique.

A perfect picture of what is unique in a master's approach is not what we are searching for in design. Neither is a description of what is peculiar to my approach. If objective instruction is like a recipe, then subjective discussion on design is like describing the way a cake tastes. Opposing opinions are possible and valid.

Proportion, how one dimension relates to another, is one basic part of design. There are laws of proportion, and they are felt more than they are known. They resonate through all of nature. The living world is constructed from blueprints consisting of only a few numbers. They are found in the proportions of the bodies of insects, fishes, birds and people.

Everyone is familiar with Leonardo DaVinci's famous drawing of the man in the circle. It is his representation of the ancient idea of the "squaring of the circle." The perimeter of the square and the circumference of the circle are the same length, showing the unity of disparate things. The square stands for the earth, for material things, for reason and logic, for daily work and for necessity. The circle is the universal symbol of spirit, of immaterial perfection of completion of the mind and of feelings. Horizontally, his outstretched fingers reach just to the sides of the square. Reaching upwards, he just touches the intersections of the square and the circle. He stands with his feet together on the basal intersection. With his feet apart, in the stance natural to the best balance, he is, as I read somewhere, planted "firmly in the heavens."

Not only does this individual have four arms, and four legs, he illustrates no fewer than sixteen golden sections, the ratio considered to be the most essential, the most divine, and the most common. The distance from the fingertips to the wrist is in proportion to the distance from the wrist to the elbow, and the distance from wrist to the elbow is in proportion to the distance from the fingertips to the elbow. The point is not that DaVinci was a great draftsman, but that these proportions are real, and they are everywhere. The golden section ratio is an irrational number, a number whose digits, on the right side of the decimal point, stretch out forever, without reaching a

The Golden Section

by Don Kelly

"In any given situation, if you see only what everybody else sees, then you are not so much a representative of your culture but a victim of it."

S. I. Hayakawa

final definition. The only accurate and direct representation of the number is through a diagram, or even better, through a turned wood object.

Nature makes no attempt at proportional perfection. If she did, the leaves on the trees would all look like green credit cards (golden rectangles). If there were rigid perfection in all the proportions of nature, there would be no ambiguity, no luck, nothing similar but every class of things identical. It would be a theoretical universe, and not well designed.

About ten years ago, after reading about these numerical building blocks, I decided to make a pair of jars that would embody, in every direction, the short list of sacred numbers. The curve of the sides were sections of logarithmic spirals with the major diameters at the golden section point of the height. One jar was 1.618 times the height of the other, and the openings were .618 times the bases. The base of the larger jar was equal in diameter to the distance from the top of the lesser jar to its major diameter/golden section point. There was not a feature or a dimension on these jars that could not be told by taking any other feature or dimension and multiplying or dividing by .618 once or twice. "Ah, perfection," I thought. I put them on the table and stood back. They were not ugly. They were not pretty. They were dead. They seemed to suck vitality from the air. I got tired of looking at them, got a hammer, and smashed squarely through the openings.

They broke in irregular sharp and jagged lines. They were a little shorter than they had been, and they had grown. They were now fierce and beautiful. As Francis Bacon said, "There is excellent beauty that hath not some strangeness in the proportion." Theoretical perfection with the addition of a planned, irretrievable, and irrefutable hammer blow produced a revelation. The random element.

The random element is still important to me, although I stopped painstakingly preparing vessels for partial destruction. It is really the way the random mixes with and influences the organized that is fascinating, and the way that mix moves through time. The sculptor, Gene Flores, has said that "art in 2 dimensions refers to the third, art in 3 dimensions is about time."

In wood, the random—injury, infection, windstorm, bullets, strange genes, frost check, where it grew, where it fell—and the organized—the patterns and repetitions of patterns inherent in life—combine over lengths of time and command respect.

Those who feel stymied by a so-called lack of originality are needlessly condemning their own creative impulses; those who take originality as their prime requisite are, in some degree, isolating themselves from their creativity by measuring their work by everyone's standard.

Don Kelly is a professional woodturner and designer from Plainfield, Massachusetts.

Carousel kaleidoscope by Steven and Debra Grey.

"Craft is the main source for all Art."

James Prestini

A lot of people say that they do not have a creative bone in their body; and they could never produce anything unique. I do not believe this is true, and I hope most of you will give the design process a fair chance. The steps for design are: the idea, brainstorming, incubation, insight, and construction.

The process from conception to completion can be very frustrating and sometimes agonizing. You will need a starting point for the design process. This is the idea that will ultimately guide the project. The idea will vary with individual interest and ability. In order to establish an idea, begin by looking within the areas of your own interests and talents, not what someone wants or thinks you should do. Let me give you an example. When I analyzed why I enjoyed designing and making kaleidoscopes, I realized that almost everything I was doing was related to my interests when I was a child. These areas of interests were optical illusions, optical toys, mechanical operations, gadgets, instruments, and a fascination for wood and all of its qualities. I realize now that kaleidoscopes were a culmination of attentions, making my work enjoyable and satisfying. If I can convince you to follow the abilities and interests that are truly you, then I feel that your designs and work are bound to be a success. To contrast this, about the same time I was getting into kaleidoscopes, I attended a symposium. It seemed as if everyone was making bowls, therefore, bowls would be the logical item upon which to work. Unfortunately, my true interest was not bowls, and my attempts showed the lack of dedication.

The next step is brainstorming. Saturate your mind with information and relate this information to your original idea. This includes woodworking magazines, design books, photos, and articles; doing quick drawings of details; taking notes; and perhaps making rough models. Look at things that seem to

Brainstorming For Design

by Steven J. Gray

"Whatever you can do, or dream you can, begin it. Boldness has genius, power and magic in it."

J. W. von Goethe

have no connection to your design, and imagine how to incorporate them into your idea, even if it seems unrelated.

You may think this is a lot of work and very frustrating. Creative thoughts do take time, and if you are not used to this type of work, you will be confused. Be assured that this is part of the process.

After you brainstorm, your designs will probably become more and more complicated—you will incorporate more details and techniques. Your mind will seem to be racing with too many options, strange solutions, and you may feel there is no hope of ever finding a workable design. This is a good time to go on to the next step, the incubation period. During this step, you need to get away from the task at hand and do something else. The best way I can explain this phenomenon is that your subconscious is hard at work on the problem, acting like a large sorting machine, attempting all kinds of combinations.

The next step is insight. Here the design becomes an involuntary action, and will tend to occur when your mind is resting and not thinking about the problem. This insight usually will happen when you're drifting off to sleep or just waking up. (Driving can be very inspirational.) You will not have very much control over this process, but you will find the solution to the problem eventually. Sometimes a workable solution formulates within an hour, usually two to three days. I have had an idea up to a year before I found a solution or a design.

If you go through the steps without any insights, it is possible to speed things up by repeating the brainstorming and let your thoughts sit again. A complicated design may need to go through the brainstorming and rest period a number of times to get the details in order. One mistake people make is they do not leave time for incubation of their thoughts, they are pressed for time. The result tends to be a piece that is overworked and over-detailed or the piece tends to lack continuity. So please give your subconscious the time it needs to help you design your piece.

If you are not used to this process, do not expect a miracle the first time, like any skill it takes practice to get better. As you progress, the creative process will get easier and eventually automatic. It would be best to only brainstorm one idea at a time, but there is no harm in storing many ideas to incubate. This is what people do who seem to have endless design ideas. When the inspiration happens, it will seem so right. I believe the reason for this is that your subconscious designed this piece for you and considered your abilities and interests.

The last step is to write down your idea, draw it, and then make it. This is a very important step, as it will finalize the process and add to your knowledge. If the finished piece is not what you had in mind, you can go back to brainstorming and rework the design.

I have used this procedure for years and never really analyzed it, but knowing how the process works takes out a lot of the uncertainty. What will this effort produce? The satisfaction of creating a piece that is truly within your interests, far out weighs the work involved. Money is also a driving force behind the creative process. New, and innovative designs are a lot easier to sell than a remake of an old design. When you have designed a piece with this method, you will have created something that is truly an expression of yourself. When your work is displayed, it will stand out in a crowd and be a piece about which you will proudly say, "I designed and made this."

Debra and Steven Gray operate a studio in Bozeman, Montana. They make one of a kind, limited edition, and production kaleidoscopes.

Component Arrangement and Assembly: A Design Process

by Christopher Weiland

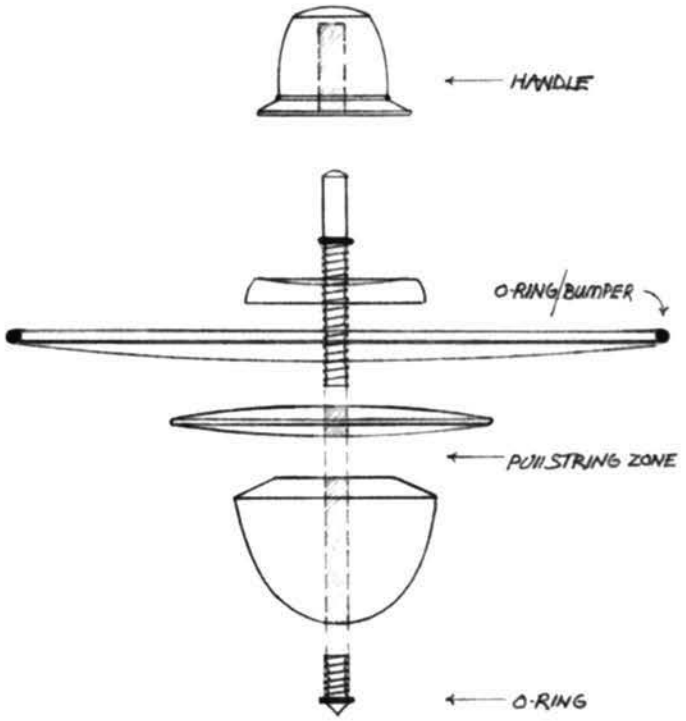


Figure 1—Components of spin top.

Much of what I design and make routinely depends upon certain design systems that allow me to identify, analyze, and apply new ideas and concepts. Over the past year, I have been working with a series of turnings that have incorporated certain design procedures, both on the drawing board and during the process of turning. The main focus of this work has centered around the subject of component arrangement and assembly. In the process, I have selected "spin tops" as a main subject of idea and form exploration for several reasons:

1. A natural sense of high energy, playfulness and visual balance.
2. Ability to be constructed from a variety of smaller parts.
3. Range of design possibilities as a three-dimensional form.
4. Size manageability as a small object.

In keeping with the theme of component arrangement and assembly, I wanted to have an ability to "build" each top form, rather than traditionally shape the entire form from a solid piece of wood. My original concept was to work with about 7-10 components (Figure 1).

In the early stages of design, each top form is roughly sketched, but only to a degree where the original idea could later be refined. Once on the drawing board, I illustrate a full-scale profile of both the front and top views of the original idea, using bond layout or drafting paper. I attempt to bring into focus as much proportional detail and overall composition of the "top" without trying to overwork it. In attempting to control the development of several variations, I make at least 10 different drawings of the "top." To begin each successive drawing, I lay another sheet of paper over the original drawing. I then lightly trace the basic outline of the first drawing in order to retain similarity of position, scale, dimension and size from one drawing to the next. These drawings are normally developed over a course of several days. This allows me plenty of casual time to think about the designs as they mature. At any given moment, it is important for me to step back from my work in order to re-evaluate the designs. It is sometimes

easy to overlook some of the most simplistic and obvious aspects relative to the original concepts. Although the design process at this stage is not always as fast as one prefers, this method of overlay drawing makes the task of designing more controlled and easier to understand, especially in comparing several variations to each other. After the selection of the most successful forms, work is ready to begin on the lathe.

Attempting to find the best method of turning that will meet the requirements of the original concept and form is an equally important part of the overall design process. After working with many "spin top" prototypes, I soon discovered a versatile method of turning, using a central threaded shaft for mounting all of the components onto the lathe. Turning from a central shaft gave me freedom to quickly mount and dismount each part from the lathe, as well as immediately assemble or re-arrange any completed parts into a particular ensemble. Having all of the parts turned on the shaft, further insures the "top" will spin on balance.

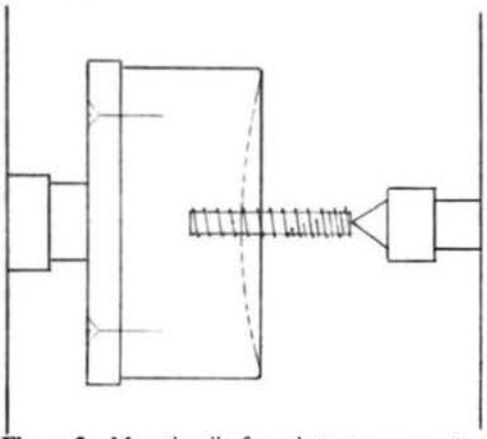


Figure 2—Mounting jig for spin top components.

Faceplate Mount with Central Threaded Shaft:

1. A block of maple or hickory, approximately 6" in diameter by 2" thick, is mounted to a faceplate, turned and centered. Its face is slightly concaved (Figure 2).
2. Using an 11/32" drill bit mounted in a chuck on the tailstock, a 1" deep hole is drilled into the exact center of the block's face.
3. The hole is then threaded using 3/8", #24 tap screw.
4. A 2 1/4" long shaft is threaded from a 3/8" stock of brass rod. Once fitted into the block, a 1/16th" hole, approximately 1/8" deep, is drilled into the end of the shaft to allow for the tip of the tail center to seat itself while turning. It is important to use a bearing tail center in order to avoid unnecessary friction.

Stock Preparation of Components:

The size of each component is predetermined based upon the measurements illustrated in the full-scale profile. No matter what size component I make, I use the same preparation procedure for all pieces.

1. The center of the component stock is marked, and the circumference of its circle is laid out with a compass.
2. The circle is then cut on the bandsaw.
3. An 11/32" hole is drilled into the center of the piece on the drill press. (This hole is either drilled through or part-way depending on the type of component.)
4. The hole is threaded using a 3/8", #24 tap screw. (Softer wood is threaded only part way in order to retain a firm fit once mounted onto the turning shaft.)

Mounting and Turning:

I prefer starting with the center disc form, since it is the largest component of the spin top. I design and build all other parts around it. In the process of turning, I complete all detailing except for the final sanding and finishing. Each successive part is shaped and finished in a similar sequence. I use scraping tools of various sizes and shapes to achieve all necessary detailing. A particular advantage to turning a component with its center hole drilled and threaded through is that both surfaces can be mounted and turned from the front side of the lathe. This is especially helpful when shaping thin discs or round forms. The final parts to be made are the spinning tip and "top" stem. Both are made from a 3/8" brass rod that is partially threaded. I use a file to shape the end of each piece prior to sanding and polishing.

Final Assembly and Arrangement of Components:

Shaping each component is very fast. I make several variations of each part in order to expand the design options of a particular top form. This is where the refinement of overall composition begins. Designing three-dimensionally involves an entirely new sense of scale and volume. From the original drawings that established the basic outlines and parameters of each part, several new elements of design entered into the three dimensional picture. Mass, space, color, texture, line, shadow and light are now key factors in the designing process. In assembly, interrelationship of one part to another is the most important and challenging aspect in making the top form visually successful. Overall proportion and limited detailing also contribute to a good composition. In selecting the best ensemble of components that work together, it is important to have several variations of each part. Preassembly of several top forms allows me to compare specific qualities of each and to exchange or add on more parts if necessary. Analysis and selection of a good, compositionally sound form concludes this stage of design. Final detailing and slight proportional changes can still be made by remounting any component on the lathe, followed by light sanding and finishing. In the end, a rubber o-ring is snapped into place onto the edge of the center disc in order to keep it from getting bumped during a "spin around the block."

Chris Weiland is a designer and furniture maker from Penn Run, Pennsylvania and teaches furniture design and woodworking at Indiana University of Pennsylvania.

Designing Bowls

by Alan Stirt

1988 Bileafed maple burl ribbed bowl 10" x 5-3/4".

After about 20 years of making and designing bowls, I still find the word "design" intimidating. It conjures up images of someone sitting at a drafting table staring at a blank piece of paper and trying to create something out of nothing. Although I occasionally make quick sketches of ideas, the method I use to create most of my work is more reactive. An idea will come when I have a piece of wood in front of me. My works are series of explorations of form, texture and feeling.

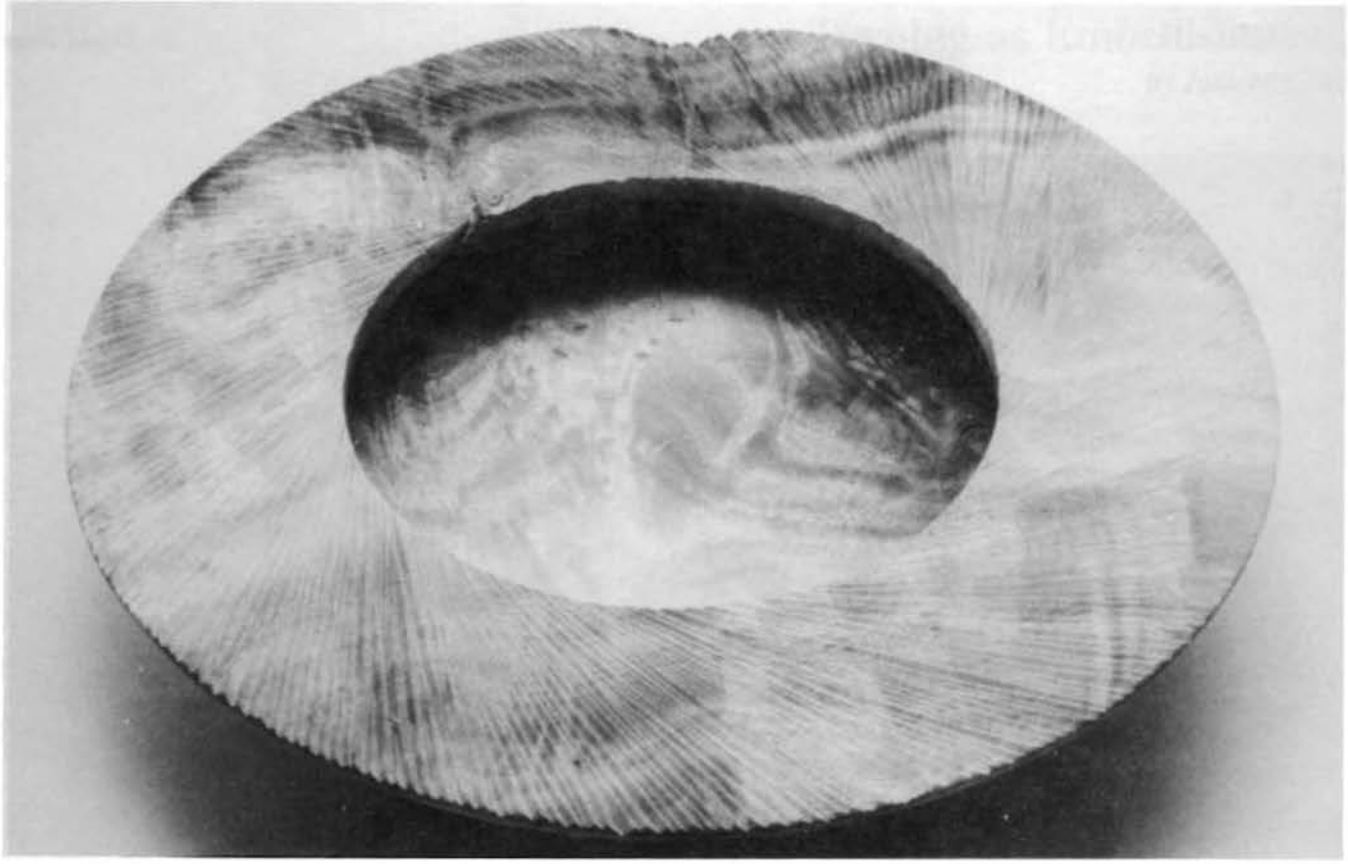
I consider my work to be successful if it seems to say something about me as well as the wood. The elements of a piece must be integrated with each other as well as with some aspect of myself. I try to make bowls that please me. It is important to work for myself, and not to try and please someone else.

I made my first fluted bowl about 10 years ago after seeing a picture of a Sung fluted ceramic bowl in a book by Bernard Leach, the English potter. The first ones I made were dry wood and carved by hand. I found the carving to be very hard and time consuming. To speed up the process, I bought an electrically powered carving tool, and started using green wood. When the bowls dried, they distorted. I liked this warping in some of the bowls (but not in all of them), and began to learn how to design these pieces to either control the distortion or allow for it. The style of carving I was using, indexed, but not perfectly smooth or even, worked well with some of the bowls. Others had their rims "adjusted" with a belt sander. The first fluted bowls were carved to the top of the rim. Later, I started leaving a section of the rim uncarved. This left a pleasing scalloped pattern near the rim of the bowl.

Recently, I have begun to carve these bowls all the way to the rim again. This new series of bowls has a more emphatic style of carving. I started using deeper fluted gouges for the carving, and this led to thicker walls to accommodate the deeper cuts. This, in turn, led to a taller foot to balance the rest of the bowl. The latest fluted bowls have a different feel than most of the earlier ones as they are bolder.

My "Ceremonial Bowls," shallow pieces with wide, flaring carved rims, were originally inspired by the carved textures of African masks. I was struck by the power conveyed by the angled, sharp edged carving. At the same time, I was inspired by the bowls of Ray Key, Liam O'Neil and Richard Raffan that had wide rims. I made a few platters that had wide rims and carved a texture with a "V" gouge. The first pieces were 8" to 12" in diameter; then 20" to 25" in diameter. I also incorporated some natural edges and bark pockets in these pieces. Somehow the combination of turned edge, natural edge and texture carving worked well together. These pieces were psychologically difficult for me because they reduced the potential "function" of the pieces. I ended up with a relatively

1988 myrtle burl floating rim bowl 11" x 13".



small bowl from a large chunk of wood, and the new work would have to be appreciated on esthetic grounds. However, after I made the first one, a new function emerged. The bowls were powerful objects which could function on a ritual or ceremonial level. This changed the direction of my work from searching for refinement and elegance to looking for pieces that could also communicate a certain ritual power. This way of working was also more satisfying as a means of self expression.

This new focus has been liberating in terms of some of the rules of turning I had been following. Pieces could work even if they were not thin or if the wall thickness was not even. Some pieces "wanted" to be heavy and more solid. Thinness and delicacy were (and still are) important for some of my pieces, but not for all of them. In my newer ceremonial bowls, I have been playing with the transition from the rim to the bowl. At first, I turned a sharp break between the two; lately, the transition is much more gradual. I have been exploring the effect of the angle and curve of the carving as well as the shape of the bowls.

While I studied these pieces, I was investigating the visual properties of the rims of deeper bowls as well. I wanted a bowl with a wide rim, but did not want a flared and thick rim. I made some bowls with relatively wide rims which were undercut. While my original concern was to keep the weight down, the most important thing about these pieces was how they worked visually. The over hanging rim seemed to float above the rest of the bowl when viewed from above. When I made my first floating rim bowl, I thought I had come up with something new until I saw some old Persian pottery with similar rims. Since then, I have seen examples of this sort of feature in the pottery from many areas of the world.

I have recently begun working on a series of bowls combining an angular shape with carved sides. After making some that did not work very well, I started to make some that seem to have just the right combination of hard and soft lines, texture and form. I am calling these "hard edged" bowls. As with all my work, the successful pieces come out of an intensive investigation of certain aspects of a bowl.

When I teach, I try to convey more of an attitude of how I approach my work rather than just how to do it. The process of exploration of both form and technique seems more important in the long run than specific directions. Certain techniques and designs work better for some people than others, but anyone can find a way to work that is satisfying to themselves.

Alan Stirt is a full-time woodturner and a former member of the AAW Board of Directors.

The Creative Process

by David Ward

Oak burl bowl 8-1/2" high by David Ward.

I have often wondered what gives a piece that magic spark that distinguishes it as a true art form. Often the closer an artist is to discovering the magic formula, the more elusive it seems to be.

Our western society is characteristically preoccupied with thinking and planning, and weighing all the possibilities before starting. We seem intent on trying to visualize how the turning should look when it is finished, and if it will be pleasing or not. The tendency is to change the work midstream because it does not look right, when what is being observed, and consequently criticized, is often perfection in its incomplete stage. I find that the turnings that I think are fantastic while they are on the lathe, often end up looking contrived and superficial, while the very best pieces I have made are ones that I was sure were ruined.

In recent years, there has been renewed interest in primitive art. I suppose the aspect of primitive art that is so intriguing is its innocent quality. This work is often associated with some sort of worship. The artist is compelled to do his absolute best work with the materials at hand, and criticism is seen as a violation of a sacred rite. Understanding primitive art is not such a mystery once we understand that primitive art forms are usually caricatures of actual objects distorted to accentuate what is behind the form. The invisible element behind the form can be described as life, or the spirit of life. I have found that this invisible element is a vital part of the creative process, creative process, and is that which puts us in touch with the deeper elements of the work at hand. There has to be a certain amount of magic present in the creation for a piece of work to possess that magic spark. Is not the source of magic, life itself? Connected with this source, the craftsman imbues the piece with life, his life, which then becomes the life of the piece. That is why some art work seems to have a transcendent quality.

When people who are not familiar with my work see one of my bowls, they often ask for what is its purpose. I used to say it is sculpture, but I am beginning to question that answer. A bowl is intrinsically functional, and is recognized as such. Where sculptures are almost always titled, bowls usually are not. Our culture is, to a large extent, devoid of ceremonial objects related to our daily routines; and such things only have meaning to primitive and ignorant people. In this context, it is sad to think the only objects that have any meaning in our society are trendy trinkets and moldy treasures from the past.

I like to think that I turn wood because it gives me a particular opportunity to express some finer qualities of myself. I value the time spent in this way and it is meaningful to me. In this way, I give meaning and value to my work. As for the purpose of the bowl, we might look to the Shinto tradition of Japan where places and objects are valued for the essences they contain. The bowl is a vessel, full of all that went into its creation.

The Nantucket Lightship Basket: Turning as Embellishments

By John McGuire

John McGuire inserting black ash spokes into a hand shaped cherry oval base in preparation for weaving a Nantucket Lightship basket. A round lidded Nantucket basket with a turned knob is in the foreground.

Photo by James Yost

Over the last few years, woodworkers and woodturners have realized that basketmaking involves historic woodworking skills. Perhaps the most appealing form of basketry for individuals with these skills is the Nantucket "Lightship" basket. There are many theories about the origins of the Nantucket basket, perhaps a make-do repair done on the bottom of a broken basket or pragmatic expansion of the Native Indian style. Whatever the case, it is a cane woven basket conceived in the early 19th century with a turned wooden bottom, oak or ash ribs, oak or ash handle, and a carved rim. According to experts, sailors aboard ships anchored as floating lighthouses, would begin to make the Nantucket baskets as a way of passing the time. These men would usually spend eight to nine months out of the year on the vessel, entirely out of touch with their families and friends. Between their chores, the empty hours were filled with basketmaking which became a highly profitable way of passing time. Today, Nantucket baskets are no longer made on ships; but they still continue to draw attention and income to Nantucket basketmakers. A highly visible and profitable variation on the classic oval Nantucket was developed approximately forty years ago. Later, a school teacher from the Philippines, Jose Reys, added a woven top to the open basket.

Alongside this development came the addition of scrimshaw and carved decorations which were seldom employed in the earlier baskets due to their design limitations. Soon, the purse with an oval plate in the top became an area perfect for embellishments made from whale, elephant, walrus and mammoth ivory.

In an effort to help save the whale and stop the killing of animals for their ivory parts, turning synthetics such as DuPont's Corian and other substitutes, serves as an alternative for me and one that I encourage my students to use in the workshops and seminars. Ivory nuts (tauga nuts) can be turned on the lathe and used to decorate, as well as highlight, the Nantucket Lightship purse. Such substitutes can be used for knobs and clasps and carvings on the ladies' handbag. One of my favorite styles is the lady's work basket which has a flat lid with a turned wooden knob. This type of basket was made during the 1870s and possibly earlier. During the early

days, there was a rhyme about the baskets:

I'm made out of Oak
I'm strong and I'm stout
Don't lose me or burn me
And I'll never wear out.

With the new emphasis on experimentation in basketry, I am encouraging others to use woodturning as a form of embellishment. The bases of the baskets are of a variety of woods and turned on the ship using a treadle lathe. The 7/16" wood was turned with a saucer shaped edge; then a deep score line in the center of the edge was made to insert the spokes. A final angular foot was made to reduce the squareness. The round bottom was embellished with score lines and gouges giving personal expression as well as a recognized maker's marking. Today some makers turn rims and covers with finials to add individuality. I still turn more traditional finials using a screw center, and fashion my bases using a screw center that has been redesigned to take a 3/16" machine bolt and thumb screw to hold the wood. This smaller and cleaner hole is easily filled with a wooden dowel or a #7 knitting needle in white to simulate an ivory plug. While I have become known in basketmaking for rejuvenating interest in traditional methods, I still venture away from the past to show creativity and to encourage others to explore basketry as a way of incorporating your turning skills in other dimensions.

John McGuire is one of the nation's leading authorities on traditional New England splint basketmaking. He is the author of Old New England Splint Baskets and How to Make Them *(Schiffer Publishing) and the newly released* Basketry: The Shaler Tradition *(Lark Books, Asheville, NC). He also serves on the faculty of several craft schools throughout the United States.*

The American Turner and Turned Objects: The Contemporary Evolution

by Albert LeCoff

Over the past fifteen years, I have watched as turners explored the use of the lathe, learning time-honored traditions and accepted standards, and then improve them. For example, it was believed that wood must be thoroughly seasoned before turning. In our first symposium in 1977, Paul Eshelman showed us how to rough-turn unseasoned wood, let it dry, and turn it again.

There are as many techniques for turning as there are turners; and as many reasons for turning as there are techniques. During the symposia in the 1970s, turners would ask how to hide screw holes in the bottom of their bowls. Bob Stocksdale demonstrated the use of the four-jaw chuck which left no screw holes; Rude Osolnik showed us how to use double-faced tape; and Jack Straka demonstrated his re-chucking technique.

What makes this field so exciting today is that it is open to all types of work. Many turners work soley with wood while others add paint, metal parts, and other materials to their objects. As Jonathan L. Fairbanks, curator of American Decorative Arts and Sculpture, Museum of Fine Arts, Boston, Massachusetts, expressed in his ITOS juror's statement, "I now feel much more informed about the development and state of contemporary turning, and realize the Museum of Fine Arts' collection of turning needs to grow in order to reflect the diversity and quality of artistic expression that permeates the field."

Over the years we have been captivated by the works of Bob Stocksdale, Rude Osolnik, Ed Moulthrop, Melvin and Mark Lindquist, and David Ellsworth with the bowl/vessel form. Turners like Bill Hunter and Bruce Mitchell are now taking the vessel into the realm of sculpture. Other turners create objects that are both functional and whimsical. Leo Doyle's "Matched Candle Sticks with Match Drawers" and David Ebners' "Scallion Coat Rack," both exhibited at ITOS, are examples.

Today, turners are redefining the applications and uses of the lathe with many new combinations of materials. The table Michael Hosaluk prepared for ITOS (titled "ZAP!") used aluminum, plexiglass, colorcore, and lacquered finishes. Wayne Rabb and Giles Gilson use the turned form as a curvilinear canvas for the lacquered paintings. Addie Draper, Bud Latven, and Fletcher Cox work with a variety of woods as if they were different pigments.

I really feel the highly skilled turner is going to be in demand by woodworkers and designers who need constructional and decorative turned elements for furniture, architectural components and sculpture. Even the hobbyist and artists for whom the lathe is not a primary tool are carving out a niche in this fast-growing and diversifying field. We are witnessing a fresh point of view in the unrestricted and spontaneous work produced by our new, contemporary turners. These artists are experiencing breakthroughs in their own styles of self-expression, using the materials to make personal statements.

Our field is young and so are the turners. We have just touched the tip of the iceberg for the potential use of the lathe and combining materials to create functional and decorative objects and sculptural statements; and we are just beginning to get past the materials and into ourselves. The possibilities are endless.

Albert LeCoff is Executive Director of the Woodturning Center and Curator of the ITOS Exhibit.

A Short History of Kiji-shi

by F. K. Anan

In Japan, turned woodenware does not predate pottery. Archaeological investigations have discovered traces of earthenware manufactured with the use of revolving axis mechanisms in the Yaoi Age (B.C. 20 to A.D. 200). It was not until the 7th and 8th century that Korean refugees brought woodturning, along with various other manufacturing skills and a Chinese political influence, to Japan. Numerous woodturned miniatures of Buddha and temple towers from this age are not yet preserved.

Documents from the late 8th century set down the regulations for several hand crafts (woodturning among them) for the official use of the Emperor. Similar regulations spread to provincial governments within another 100 years, setting the standards for handcrafted items used by local officials.

The 10th century saw the gradual evolution of woodturned ware for general use. The transfer of political power from aristocracy to feudalism in the 13th century resulted in intermittent civil wars and cataclysmic upheavals in the general social structure. The woodturners left the towns and took up an itinerate life in forest-rich areas where they lived in small groups consisting of a few families.

In this new environment, they controlled the entire process: harvesting the timber; rough-turning; seasoning; and finally, turning of various products worthy as merchandise. They moved, as necessary, from one forest to another to be near a supply of the proper timber. In addition to their household possessions, they carried portable turning devices.

In the 14th century, a new mercantile class arose, and barter gave way to the use of currency. This gave woodturners access to much wider markets. However, to cope with the problems this created, craftspeople in general, and woodturners in particular, formed respective guilds to set standards for and to protect their livelihood.

Stronger guilds were licensed nationally by the Emperor and Shogun. Most, however, were licensed by the local diamyo or lord. The license authorized the guild to operate under the protection of a tutelary deity. The deities were derived from legend. Woodturners were called Kiji (wood material) shi (professional) or Kiji-ya (occupation). As with most guilds, Kiji-shi was hereditarily passed from father to son or a close relative. It was a closed trade and has remained so until modern times. The Kiji-shi's lifestyle remained unchanged until the fall of the Tokugawa and the Meiji restoration of 1867 (so called because it returned power to the Emperor Meiji).

The Meiji government abolished feudalism and the Samurai class, destroyed all but several castles, ordered census registration, taxation, military draft and compulsory education. In the five years, from 1867 to 1872, there was another cataclysmic upheaval for Japanese society. The Kiji-shi's lost their right of forest commonage and were forced to settle down in one place. They preferred areas close to tree-rich mountains.

The Kiji-shi's new situation caused the switch from one man spring pole type lathes to two man spring pole lathes. It is interesting to note that in Japan, the rope was pulled by hand with the other hand guiding the tool. With two men, the master turned with the apprentice pulling the rope. Soon the pedal mechanism (like that on a sewing machine) was introduced. In their time, the steam engine and the electric motor have kept the Kiji-shi more productive.

The Meiji government later founded various trade schools which included hand and machine trades. The Kiji-shi, however, were still trained by personal apprenticeship and remained a closed trade. Even today, national qualification is not yet applied to handcraftsmen.

Since the 1950s, industrial mass production of woodturned products has overwhelmed manual turning. Today, Kiji-shi style turning is only appreciated by a relatively few people who venerate its artistic quality. According to an internal review service list, about 200 Kiji-shi were registered in 1980. Several years ago, the Kiji-shi Association was started so that the tradition will be preserved.

Letters To The Editor

Dear Editor:

First, may I say thank you to the American Association of Woodturners for being the starting point of what seems to be a growing list of satellite chapters. I am proud to be a member of the Central New England Chapter, meeting in Worchester, Massachusetts. In my first year, I have learned that wood turning is made up of many individual approaches. Our meetings are most interesting and include discussions ranging from basics to extraordinary product development. I look forward to our show and tell and wood grab bag.

Close to 100% of our group devotes its time to face plate or chuck type turning. This brings up a fact that perhaps we can address through our organizations. Most lathes sold today are of the bed and tailstock type with so much of it going to waste. A few months ago, I had the opportunity to get a page from an old Oliver Catalog describing an Oliver No. 52 motor head lathe. This machine is truly the bowl turners dream. I called Bob Stewart of Oliver today and learned that this machine was first made in 1911. When I asked if there was any chance it could be brought back into production, he told me that if there were enough requests, Oliver might give it some thought. Ladies and gentlemen of the wood turning world, if you feel you might see this machine in your shop, write to:

Bob Stewart
Oliver Machinery Company
1025 Clancy Avenue, NE
Grand Rapids, MI 49503

Sincerly,

George L. Paes
Barrington, RI

Editor:

The March issue of the Journal was simply outstanding! Every article was thorough, easy to understand, and informative. It will be hard to maintain the standard, but we all are rooting for you. My congratulations to you, the staff, and the members of AAW who made this issue such a success.

Sincerely,

James R. Johnson
President
Central Texas Woodturners Association

Dear AAW Members:

Stepping aside from the Board of Directors of AAW was a difficult decision. It has been an educational, exciting, and rewarding three years; and an honor for which I would like to thank the members. I see this move, not as leaving the team, but as a way of expanding the team with the addition of two capable, new directors. I will remain active with the Special Funds Committee, its scholarship program, the Board of Advisors, and serve as a liason between AAW and the National Association of Artists Organizations.

It is great to see the field so healthy and expanding so rapidly. We can see the signs from the grassroots on up. The membership and enthusiasm of our local Chapters is unparalleled; the craft schools turning classes are filled; the universities are starting to recognize turning as a viable part of their programs; ITOS is traveling and getting great press; tool manufacturers are showing innovative new products; galleries and craft shops are putting together inspirational shows; and the development of our organization's symposia and journal reflect the maturing of the field.

Many new opportunities are on the horizon and will develop with our enthusiasm and hard work. Get involved in these exciting times, and grow with our organization. Thanks again, it's been a great ride!

See you in Seattle!

Bill Hunter

Editor:

I want to congratulate you on the new content of the American Woodturner. I just received my copy today. Although, I did not believe it was designed to appeal to the general membership in the past, it certainly is now! You are to be congratulated on the change. The articles on how to do various things associated with woodturning were helpful and well done.

One major problem I see in the future and currently, which will impact our organization, is the problem of liability. Our Chapter meets in various members' shops, and we are involved in a lot of hands-on meetings. We certainly anticipate putting on various demonstrations for the public to promote turning. I believe the liability problem can be more effectively and economically handled on a national basis than at a local level, with coverage applying to local chapter members who are also members of the national organization.

I certainly believe that the new look for the American Woodturner, plus an effective liability insurance would promote the national membership.

Keep up the good work!

Very truly yours,

Robert L. Knox
Treasurer
Central Oklahoma Woodturners Association

Information for Contributions to the "American Woodturner"

"I would have written a shorter letter if I had more time." B. Pascal.

"American Woodturner" articles should be short, innovative, provocative, and of interest to a broad audience of woodturners. The ideal maximum length is 2 printed pages (approximately 5 to 6 double spaced manuscript pages, including tables and illustrations at the smallest readable size with captions). Illustrations should be copies, not originals. If rough-drafted, they will be redone in our office. Include only large uncropped black and white photographs.

Manuscripts should be submitted in two parts to the Editor-in-Chief. The text must be typed double spaced, and, if available, submitted in computer-ready format. The copy must be checked to insure the figures are referenced in the text. The second part consists of the illustrations and photographs, in the order in which they appear in the text. Preface the illustrations with a list of the figures and full figure captions. Do not write with a pen anywhere on them. Ink can rub off or make marks on other illustrations. Do not write on the back of a print with a pencil because the indentations can show through. Do not paperclip illustrations together, instead, spraymount each illustration to a full sheet of paper, with the author's name and figure number on it. Manuscripts are copy-edited after acceptance. Unfortunately, the author will not be able to see the galleys or page proofs.

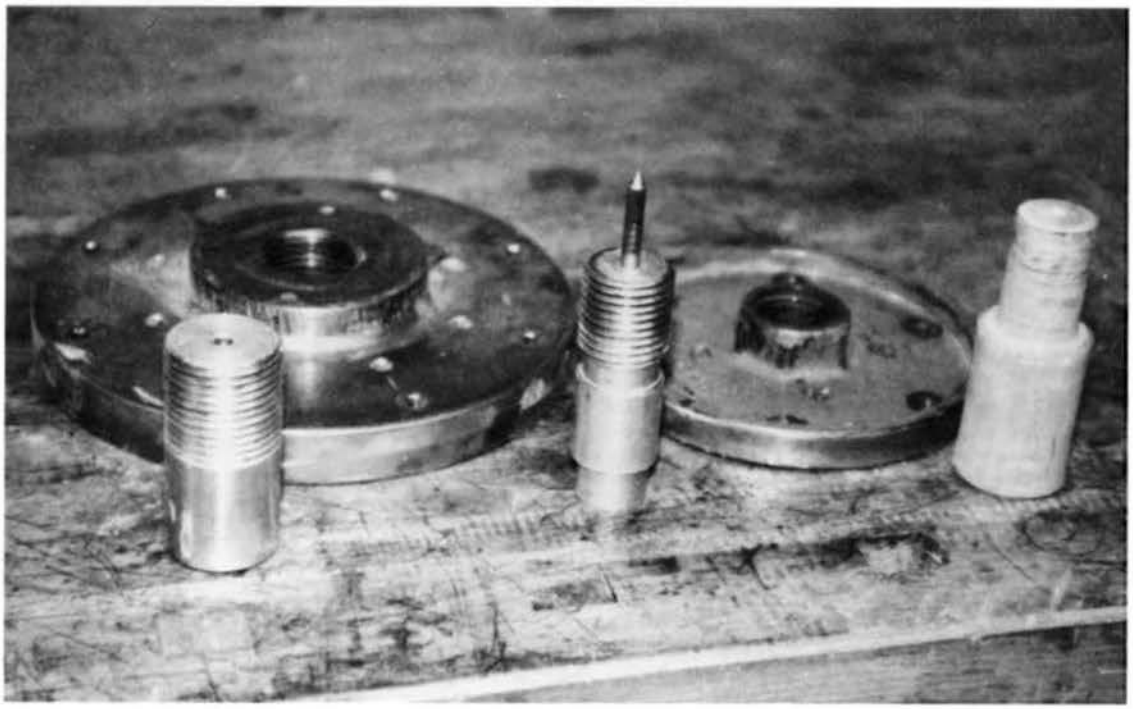
A Faceplate Centering Tool

by Dennis Elliott

I have had this device in my tool box for about ten years, and assumed most woodturners have something similar. Unfortunately, most do not have one, judging by the look of surprise from the turners who have seen this one. It is simply a mandrel threaded the same as your headstock spindle (Figure 1). Through the center of it is a 1/4" hole which accepts a pin. What this device does, in effect, is reduce the hole in your faceplate to 1/4" into which a pin or scratch awl can be inserted to find the exact center.

The mandrel can be used in different ways. For example, if you want to turn a thin platter without screw holes or chuck marks, use hot melted glue or double faced tape. When using tape, take a thin, wide board and scribe out a circle with a compass or trammel points. You now have a circle drawn and right in the center is a tiny mark left by the point of your compass. Put a couple of strips of tape on your faceplate, screw in the mandrel, insert the pin, and hold the whole thing over the wood (Figure 2). Place the point of the pin in the compass hole and lower the faceplate down to the exact center of your circle. Apply some pressure for a few seconds, unscrew the mandrel and make a platter. Please note, the most difficult part of this procedure will be getting the platter off the faceplate.

Figure 1—Two aluminum mandrels and a homemade wooden mandrel.



Do not force it. It requires steady pressure to separate the two.

Another way this device helps is when a piece is turned between centers. To flatten the area at the tailstock to receive the faceplate, a little spigot of wood will remain. After you have knocked off your spigot and mounted the faceplate, just insert the mandrel and pin and give it a wack, and you will have your new center point.

If you want one, you will have to get one made. I came about mine quite by coincidence. I had to have something made that would screw onto one lathe and enable me to use the chucks from my smaller lathe. My local machine shop made this but it seems, when they have to thread something internally, a blank faceplate for instance, they have to make this "Boss" first, to guide the internal thread cutter. When I went to pick up my order, he gave me the boss as well, for free. It had no pin or hole through the center, but even a wood lathe can do that.

Incidentally, for this article, I just turned up a wooden version of this, with no thread, just a tight fit, and it works as well as the aluminum one (Figure 1).

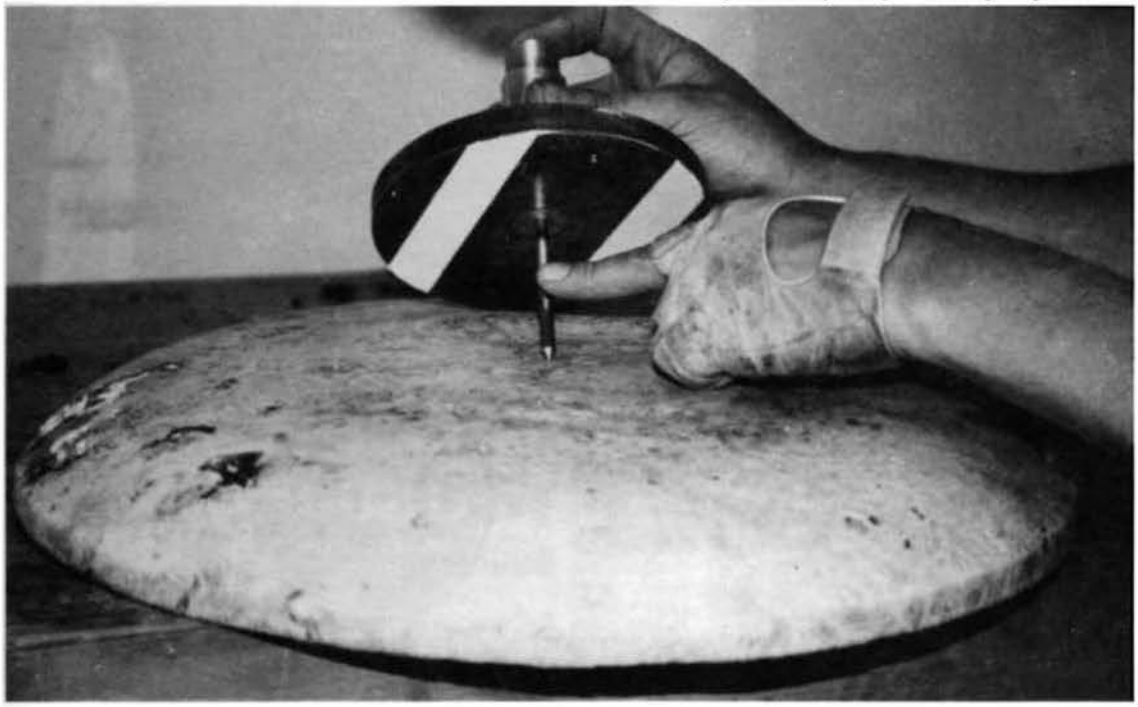
Dennis Elliot is a professional woodturner in Sherman, CT.

Tips & Techniques

Tight muscles from turning all day? Want to stretch 'em out without joining the local health club? Build a simple *hanging bar* in your workshop! Turn a bar about 1 1/2" diameter and 20" long. Attach the bar to the ceiling over your lathe, just above your finger tips as you stretch upward. Then, on your tip-toes, grab the bar and hang until your heels slo-o-owly drop and touch the floor. Hold on for a minute to stretch and extend your muscles evenly. Presto, you've just grown two or three inches. Try it every hour; you will be amazed how it helps to relax!

Tired of broken turnings from poor shipping containers? Make a better box! Double boxing is fine if you happen to have two that fit. If not, line your box with sheets of 2" styrofoam, available at your local lumber yard. Using layers of 1/2" carpet underlayment foam, line the inside about 3 inches thick on all sides, and "nest" your bowls snugly inside—do not jamb. Six foot wide rolls of carpet foam are cheap and available at local carpet shops. Foam rubber is best because it absorbs any shock delivered to the box. Styrofoam peanuts can settle to the bottom of the box, and plastic bubble-wrap transfers the shock directly to the surface of your bowl. Design the interior so galleries can re-pack the work with little difficulty.

Figure 2—Tape on faceplate, pin in compass point hole.



Questions & Answers

Cliff Schroeder, Page Editor

Question by Ted Marcus of Jerusalem, Israel: I am looking for a book about microwaving wood, published by the Association of British Woodturners. I would also like any other references about the subject (ie., books, magazine articles, personal correspondence, etc.).

Answer by Cliff Schroeder: If any member is aware of this book or has access to these references, please forward the information to me (1612 Sunset Drive, Traverse City, MI 49684) or directly to Ted Marcus (21 Keren Kayemet Street, Jerusalem, Israel).

Announcements

ELECTIONS! ELECTIONS! ELECTIONS! ELECTIONS! ELECTIONS! ELECTIONS!

Three Board positions come up for election this year and *NOW* is the time to consider running for the Board.

REQUIREMENTS: Resume and a Paragraph of Intent (500 words maximum). Paragraphs of Intent will be published in the September issue of the Journal. Examples of these paragraphs can be seen in the December '88 issue of the Journal.

DEADLINES: All materials *must* be postmarked by *JULY 1st* for processing and publication in the September Journal.

BALLOTS: Separate voting ballots will be mailed to each member *with return deadlines*. We will publish the winners in the December issue.

Contact Bonnie Klein for information and details: 6514 115th Place, NE, Renton, WA 98056. (206) 226-5937

Getting Started

by Dick Gerard

Types of Tailcenter

1. Dead Center Cone
2. Dead Center Ring
3. Dead Center Cup
4. Ballbearing Cone
5. Ballbearing Ring
6. Ballbearing Cup
7. Ballbearing Universal

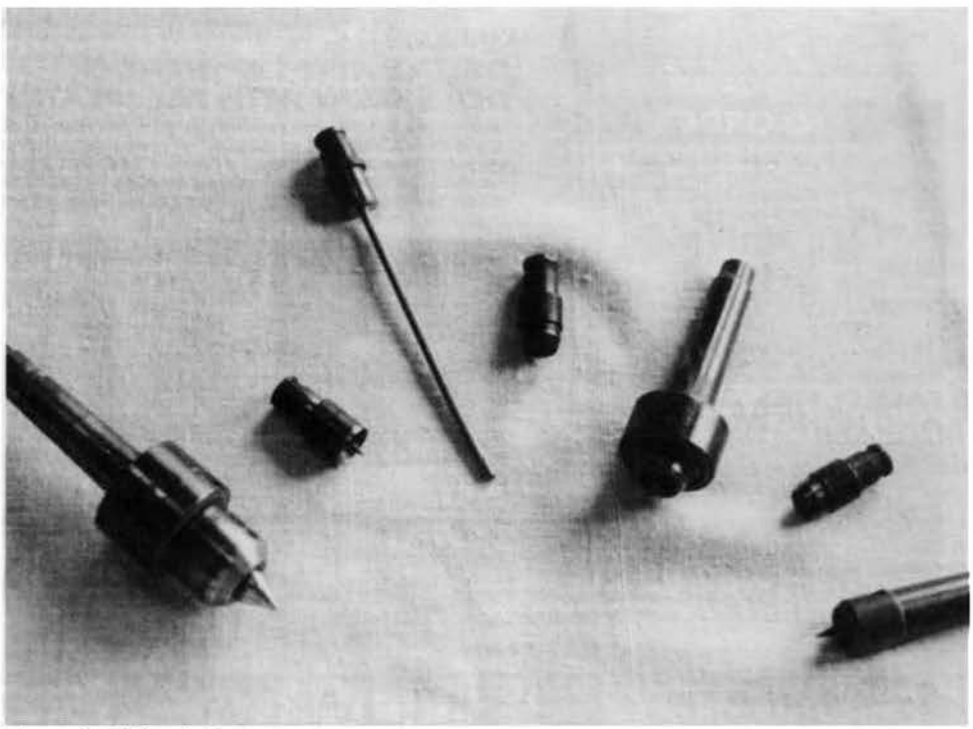


Figure 1—Tailstock Centers

Clockwise from the left: Live Center with Cone Insert, Ring Center Insert; Live Center with Mandrel Insert, Ring Center Insert; Live Center, Ring Center Insert, and "Dead" Center.

We are all aware that each day more and more chucks and wood-holding devices are being developed and marketed. In a recent issue of a wood-related periodical, I counted no less than 15 ads for different wood-holding devices for the headstock of the lathe. If you count the number of tailstock centers, that number could easily reach 10 or more. The number of devices warrants a large discussion of the common devices available.

Spindle work is generally defined as turning where the direction of the grain of the wood is parallel to the lathe bed. The wood would normally be supported by the tailstock and the headstock simultaneously. This means that the supporting devices are applying mechanical and compressive forces to endgrain rather than side grain. If too much compressive force is applied to the wood between the tailstock and the headstock, the wood may split.

The most basic method of attaching spindle stock is by using a drive center and a tail center. Until the advent of the ballbearing supported tail center, they were indeed "dead." The "dead" center supports the wood without turning and causes charring of the wood. Applications of oil or wax are used to minimize the charring and burning, but are never 100% effective. The ballbearing supported tail center, on the other hand, revolves within a bearing and eliminates friction induced damage. The tailcenter can be a dead center, or ballbearing center, or some type of mandrel that supports the wood by being inserted into a pre-drilled centered hole. Both dead centers and ballbearing centers come in differing shapes. They may be cone centers of various degrees, ring centers, cup centers, or so-called "universal" centers, which resemble a small cylinder (Figure 1).

Drive centers can be of the 2 or 4 pronged variety, cup chuck, spigot chuck, screw chuck, square drive chuck, split ring chuck, pin chuck, expanding collet, 3 or 4 jaw chuck, faceplate and screws, "bung," and many other types (Figure 2).

Some of these driving devices are intended for more advanced users, such as the 3 and 4 jaw chucks, screw chuck, and the expanding chuck. Each chuck was developed to be used for particular applications and to meet certain needs. No one chucking device is truly universal in design. However, for more spindle work, a 2 or 4 prong center and a good ballbearing tail center for the tailstock is an excellent combination.

Find and mark the center on both ends of the spindle. Using a wooden mallet or softface mallet, position the point of the drive center over the marked center of one end of the wood. Give the end of the drive center a good whack to seat it into the end grain of the spindle. You may wish to use a chisel to make a seating groove or use a bandsaw to provide a groove

Types of Drive

1. 2 Prong
2. 3 Prong
3. Cup Chuck
4. Spigot Chuck
5. Collet Chuck
6. Square Drive
7. Split Ring
8. Expanding Collet
9. 3 Jaw
10. 4 Jaw
11. Screw Chuck
12. Pin Chuck
13. Faceplate and Screws
14. Bungs

Figure 2—Drive Centers

Clockwise: Screw Chuck, Spigot Chuck, 4 Prong Center, Drive Center Jig, Expanding Collet, and 2 Prong Center.

for the prongs. Now place the drive center into the headstock. Place the drive center marked end of the wood on the prongs and bring the tailstock, with the ballbearing supported center in place up to the right-hand or tailstock end of the wood. Place the center of the tailstock into the previously marked center of the wood. You may wish to use an awl to provide a small starting dimple for the tailstock. Lock the tailstock securely to the lathe bed and use the handwheel of the tailstock to apply compression to the spindle. Lock down the handwheel. This effectively traps the wood between the pronged driving center on the left and the supporting tailstock on the right.

Nearly all the other chucks and holding devices for spindle work are variations on this basic set-up. The exceptions are those devices that allow the wood to be held by only one end with the other end free of encumbrance. Chucks such as the spigot chuck, 3 and 4 jaw chuck, and screw chucks are all capable of supporting the work on the headstock. Using the spigot chuck or the 3 jaw chuck, the stock must first be turned (at least partially) to a cylinder to fit the particular device being used. Then the wood is remounted by the prepared end and the rest of the wood is turned and finished. Four jaw chucks are a bit finicky, but can grip irregularly shaped work. A screw chuck can grip quite tenaciously. The only preparation for using a screw chuck is to drill the proper sized hold to the proper depth. The wood is then mounted on the screw and turned as before. At times, you may find yourself using the tailstock as added security when first turning or when the piece is exceptionally large. Personally, I never miss an opportunity to add security to the holding power of a chuck by bringing the tailstock into play.

The charts above show 98 different ways to hold wood on a lathe (14 types of drives x 7 types of tailcenters) and we have not even considered faceplate or bowl work!

BOOKS AND VIDEOS

Artistic Woodturning, by Dale Nish
Creative Woodturning, by Dale Nish
Woodturning with Richard Raffan (Video Available)
Bowl Turning with Del Stubbs (Video Available)
Woodturning in Pictures, by Bruce Boultner
Turning and Design, by Ray Key
The Practice of Woodturning, by Mike Darlow

Rings of Saturn

by S. Gary Roberts

It is still exciting to try new and different projects on the age-old lathe in this age of space exploration. While watching some of NASA's photos of Saturn, I noticed the rings around the planet resembled the growth rings in a tree. This article is the result of an experiment done that same day.

The Rings of Saturn can easily be completed in an afternoon (Figure 1). Choose a log that is as round as possible. Heart cracks can be a problem, but "Hot Stuff" works wonders to cure cracks and faults. Distinctive growth rings and contrasting colored sap wood can add to the visual effect of the finished product. Do not be afraid to experiment; as you can turn out some interesting patterns from any tree.

Figure 1—Rings of Saturn.

Attach the blank to the faceplate with sturdy screws, as near center as possible. I always support any turning with a live center in the tailstock until it is in the round. As soon as the piece is turned into round, stop and mark the two lines that establish the width of the disc. In most woods, 3/16" wide is plenty for dressing and sanding. Should knots show in the disc, do not stop. They add to the effect when finished. I call them "Moon Swirls."

With a sharp parting tool, cut either side of the disc into what will become the outer diameter of the sphere (Figure 2). I have found that the project looks balanced if the sphere is about 1/3 of the total diameter of the disc. This is certainly not critical, but if the diameter of the disc is too short, the sphere looks like it needs to go on a diet. Bring the body of the piece down to a uniform cylinder on each side of the disc. On the end next to the tailstock, turn a 1/2" long tenon to the same diameter as one of your larger drill bits. In this case, I used 1" diameter brad point, but you can use any size that is handy.

Using outside calipers, measure the diameter of the sphere. This dimension is not critical, but both sides must match and a template makes it easy. Scribe a circle with the same diameter as the sphere on a piece of the light weight cardboard. With scissors or a sharp knife, cut out the template using the outer arc of the circle (Figure 3). Using the template as a gauge, cut out the sphere using a sharp chisel. Remember, the sphere starts at the center of the disc.

Shape and prepare to part off what will become the lid of the box or top of the sphere (Figure 4). Check the tenon that will be used to hold and hollow the lid. Using a parting tool, cut a lip on the lid that will be inserted into the disc later, and part off next to the disc. I cut down to about 1/2", and using a back-saw, saw off the piece and the waste outside the tenon that will be used to glue and support the lid.

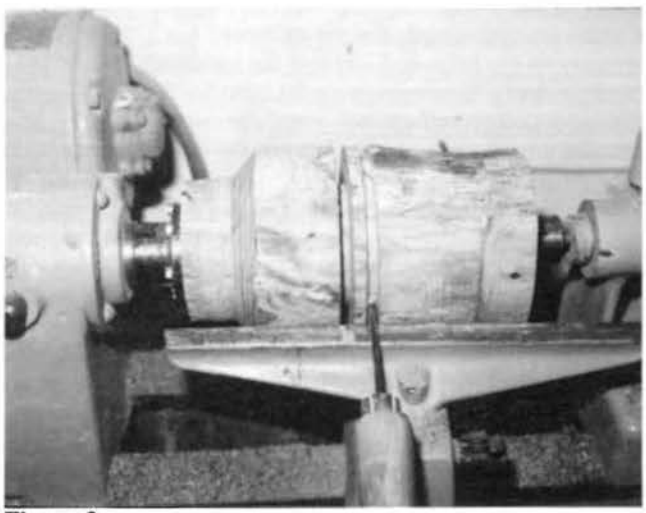


Figure 2

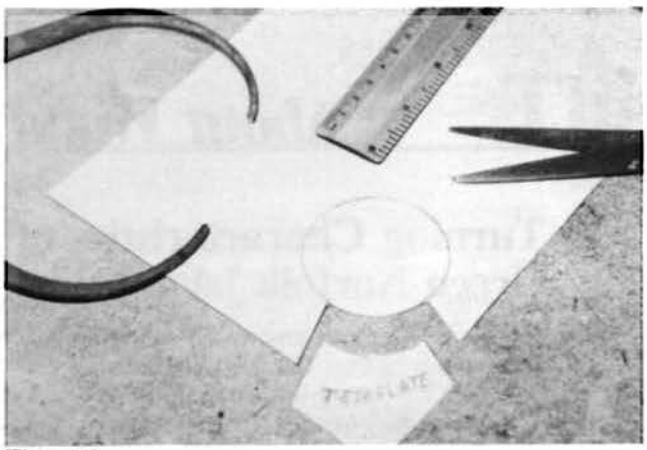


Figure 3

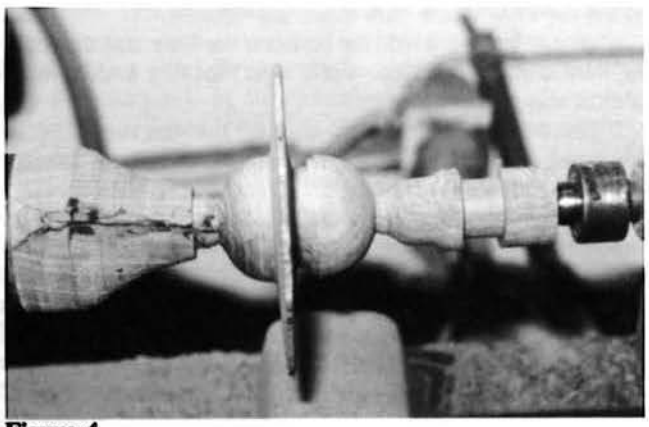


Figure 4

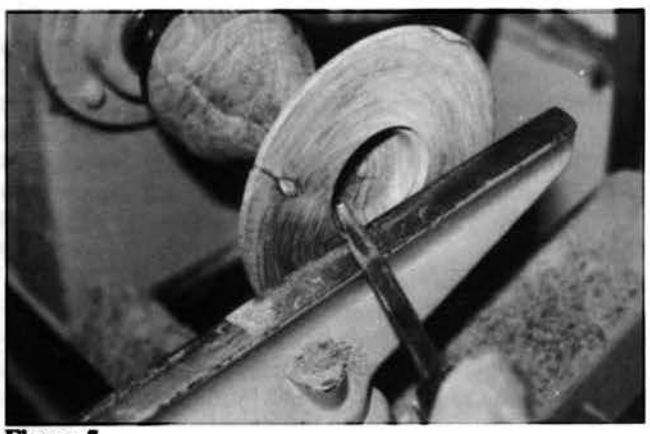


Figure 5

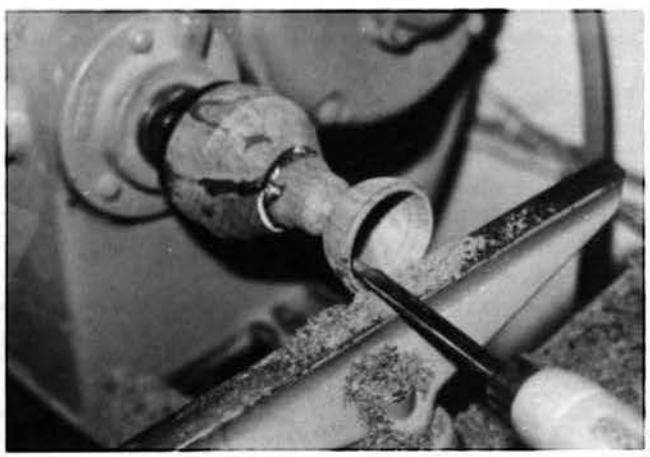


Figure 6

Hollow out the sphere making sure the lip on the lid fits snug into the groove of the body at the disc (Figure 5). Sand and finish the body with the disc attached. Before removing from the tenon, I use a single coat of spray satin Deft over the piece. This will eliminate finger prints and glue lines. Back-saw the body from the tenon leaving about 1/16" for sanding. Remember, the sphere continues to be round into the tenon. If you saw it too close, the sphere will have a flat spot right where it looks the worst. With the drill chuck mounted in the tailstock, drill a hole in the waste block still mounted on the faceplate. If your lathe does not have this capacity, just turn a hole in the waste block to fit the tenon made earlier. Just make sure the tenon fits tight. Use "Hot Stuff" to glue in the tenon. Make sure it is centered and runs true before gluing. Hollow the lid as you would any bowl, making sure you leave the lip to fit the body (Figure 6). Saw off as before. I use a sanding pad in the drill chuck to hand sand the tenon off both pieces. Use a circular motion and you will find it easy to blend the shape of the sphere round as you remove the tenon. Remember to spray with Deft, so the glue will not show if you elect to glue the lid on permanently. I cannot resist the urge to put something inside the sphere to prove it is hollow before I glue it up. Usually a couple of BB pellets from my grandson's air rifle.

Turn a stand between centers. This should be no longer than the total diameter of the disc (Figure 7). The bottom is concave so that it sits upright. The top should be about 1/3 the diameter of the sphere and hollowed slightly. If you really want to be a perfectionist, go back to the template, and using the same method in reverse, make the top fit the sphere. Apply your favorite finish to stand and project and you will find that you can tilt the "Rings of Saturn" to any angle you wish for better viewing.

Figure 7

Norfolk Island Pine

by Casimer Grabowski

This tree of the tropics and sub-tropics superficially resembles a pine, but actually is a member of a very small group of trees, ARAUCARIA, which are close relatives of the pine family. Though technically a "softwood", the wood is light but tough and has some very unusual characteristics. Large bowls can be turned end grain from wet wood and these will dry without cracking or warping to any significant degree. Eventually, these bowls can be worked to a beautiful, thin, translucent shell.

Branches emerge from the trunk in whorls of 4 to 8 at the same level, with 12 to 18 inches of bare trunk in between, which gives the tree a tiered appearance. The bases of these branches form knots which go all the way to the center of the trunk, providing the turner with a neat radial arrangement which can be worked into the design of a bowl.

This wood must be used within a few weeks after being cut, because mildew attacks it very rapidly, leaving it a rather uninteresting solid grey. The dry wood is also very difficult to turn. Consequently, the use of this wood is confined to woodturners who live close to areas where this tree grows.

Ron Kent of Hawaii, is a master turner who is well-known for his Norfolk Island Pine pieces. One of them, a bowl he donated for our Education Fund drawing, is illustrated in the September, 1987 issue of the Journal. Below are his comments about the wood.

Turning Characteristics of Green Norfolk Island Pine

I buy my wood from tree trimmers who deliver the logs within a day of cutting the tree. The first log is usually on my lathe the day after.

Almost as soon as they are cut, the logs exude a thick gum-like sap. (This is not, however, resinous or pitchlike as would be the case from a true pine tree.) This gum congeals on the cut ends where bark meets sapwood.

I force a large screwdriver between the bark and the log; the bark comes off in one thick layer, leaving a shiny-wet (almost slimy) wood surface.

If you work the logs shortly after the tree has been felled, this wood is WET! Even at low speeds, it throws an almost continuous stream of water as it revolves. Not only does water puddle on the surface of my scrapers, but it soaks everything in a radial circle up to five feet from the lathe bed which, of course, includes the woodturner.

Most of my work is done between centers with the log mounted along its transverse axis. Thus, the bowl is cut end-grain. The wood cuts cleanly with a variety of gouges, but also shaves beautifully with a sharp scraper. In this fashion, you can make a peeling cut from outer circumference right to the core, with a single continuous ribbon piling up in your arms, over your shoulder, or on the floor. The ribbon may be as diaphanous or thick as you choose.

Within a few months of the trees' felling, the logs have lost much of the moisture. They still cut smoothly, but with a lot less splatter.

The knots, an important part of Norfolk Island Pine, usually are solidly implanted in the wood, but brittle and resinous. As a general rule, the knots respond better to a sharp scraper than a gouge.

I rough cut the bowl to about 1/2" thickness and set it aside to dry. This takes only a week or two, and usually involves minimal warpage. Dry and remounted, the final cuts and sanding go quickly, but my finishing process takes up to six months. I prefer to hand-sand the bowl with Watco oil and 80 grit wet-or-dry, then allow a few days of drying. Repeat again and again for up to six months.

The Spalting Process

by Larry Roberts

Most woodturners are familiar with spalted wood, but few understand nature's process of transforming an ordinary piece of wood into a highly figured prize. The patterns created through spalting do not follow the grain of the wood—therein lies the beauty of spalting. Those irregular dark gray to black patterns, and sometimes spectacular red to coral colors, that permeate spalted wood are caused by fungi and related microorganisms. This heterogeneous group includes actinomycetes, certain molds, yeast, and yeast-like organisms. These microorganisms are primarily saprophytic forms found in soil. They play a primary role in the cyclical transformation of organic matter. Wood decay is a part of this cycle. Woodturners interrupt the process and call it spalting.

The process begins as the fungi invade the wood, sending out root-like filaments or hyphae. The hyphae release enzymes which, in effect, digest the wood. The enzymes first attack the parts of the wood that are less complex, such as the sap and soft extra-cellular materials. It is the chemical reaction between the enzymes and these materials that produce the color change in the wood. Fungi are quite familiar to us. Consider the many antibiotics produced by fungi. Wine and other alcoholic fermentation, cheese, and yeast bread are by-products of these microbes.

The dark gray to black colors are generally the fungi itself. It takes millions of microbes, gathered together, before they are visible to the eye. This is the point where we should stop the decomposition process. Harvest the wood, put it in dry storage or, better yet, turn it! If the process continues, the fungi then attack the wood cell walls and the cellular structure is destroyed. The wood becomes soft and punky. Again, it is best harvested before it gets to this advanced decayed stage because it then becomes difficult to turn.

Sharp tools and shear cuts are necessary in turning spalted wood. Problems, such as tear-out, can be diminished by preventing the wood from decaying too much. In fact, you will find more varied colors and patterns in fruit woods at earlier stages of decay (spalting).

Frequent questions regarding potential health hazards related to woodworking led me to consult a noted allergy specialist, Lazarus Loeb, M.D., of Arlington, Texas. According to Dr. Loeb, allergic reactions to microorganisms in spalted woods are relatively rare.

Dr. Loeb states, "While there are pathogenic forms of fungi, one should not be overly concerned because the disease-causing varieties comprise an infinitely small portion of the known fungi. However, problems can and do occur when wood shavings are allowed to accumulate. The shavings create an environment where secondary growth of other microorganisms occur, and dangerous pathogens may arise. Use common sense! Always have adequate ventilation, use dust removal equipment (exhaust fans, dust collectors), and always wear dust masks."

Let's apply some microbial knowledge and help nature help woodturners. Instead of hunting spalted wood, we can make our own. Simply put a limb or log in a shady spot outside, and cover it with leaves, grass clippings, sawdust, or any organic material mixed with soil. Keep the pile moist for one to three months (time will vary depending upon the area in which you live), and soon the wood will spalt. If you have some shavings from turning spalted wood, put them on the piece of wood first; and the shavings will become a starter culture. Do not let your spalting culture dry out. The key is moisture, warmth and darkness.

Once you have turned a spalted chunk of wood, you will come to appreciate the added beauty of spalting. Nature, through this wondersul process, makes the average turner an artist, and a nondescript piece of wood a magnificent prize.

Collaboration Piece Takes Full Turn

Albert LeCoff receiving sculpture.

Last January, thirty-five participants of the ITOS exhibit presented Albert LeCoff, curator of ITOS, an International Turn Sculpture in honor of his efforts. The artists felt Albert had done so much for woodturners by taking them by the hand and leading them into the art world, a sculpture consisting of canes made by the participants was appropriate. Albert, due to an unfortunate accident, employs a cane. The Sculpture, a large turned stand with thirty-five canes, was conceived by Wendy Michelsen. Reporters from *American Woodworker*, *Fine Woodworking*, and *American Craft* magazines attended the presentation of the canes. The AAW staff, board and members send congratulations to Albert and thanks for the marvelous ITOS exhibit.

Symposium '89 October 13, 14, & 15

Plan to attend the 3rd Annual Woodturners Symposium, Seattle Chapter, near Seattle, Washington. Experience the companionship of fellow woodturners, and have the chance to share ideas in a quiet, unhurried atmosphere.

DEMONSTRATIONS:

Ornamental Turning	— Dale Chase
Lidded Containers	— Kip Christensen
Design	— Frank Cummings
Hollow Vessels	— David Ellsworth
Tools	— Jerry Glaser
Photography	— Tom Neff
Chatterwork	— Stephen Paulsen
Sandblasting and Bleaching	— Michael Peterson
Bowls	— Richard Raffan
Spindle Turning	— Gail Redman

SPECIAL FEATURES:

Keynote Address; Trade Show; Instant Gallery, Banquet; Auction; Slide Shows; On Campus Lunches; Special Spouse Activities

PLACE:

Overlake School
20301 NE
108th Street
Redmond, WA 98053
(206) 868-5442

The school is located in a rural setting with many beautiful trees, lots of space for free parking and facilities for R.V.'s.

REGISTRATION:

$140—before July 1, 1989
$150—July and August, 1989
$160—after September 1, 1989

LODGING:

Special arrangements have been made with Red Lion Inn, 300 12th Avenue SE, Bellevue, WA 98004-6412 (206) 455-1300).

Rates: $68—Single $78—Double

Call or write for reservations. Be sure to identify your affiliation with AAW.

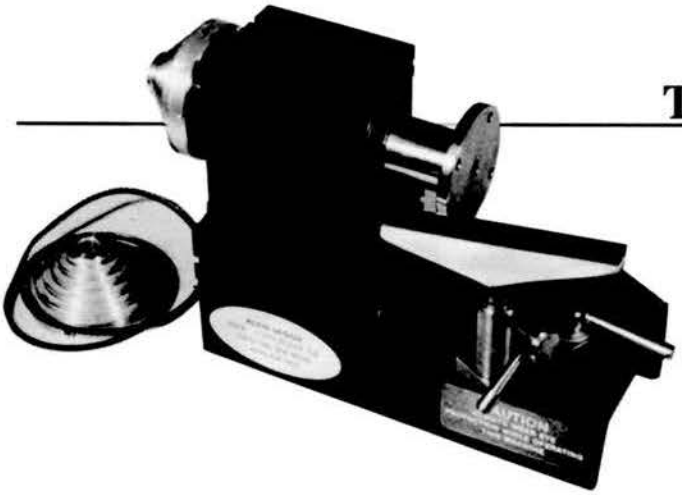
OFFICIAL AAW TRAVEL AGENT:

F.T.C. Tours and Travel
65 East 4th Avenue
San Mateo, CA 9442
(800) 227-6870

Offering special air rates with United Airlines for early reservations.

For further information call or write:

AAW Office
P.O. Box 6220
Lynnwood, WA 98036-6220
(206) 670-1011



The Klein Design Short Bed Lathe

Our special thanks to Bonnie Klein for donating the Klein Design Short Bed Lathe for this issue's drawing. This "mini bowl lathe" was developed by Bonnie for ease of use over the bed ways. It comes with a faceplate, a hardened steel tool rest, pulleys, belt, and is capable of turning 5" diameter pieces. With the motor mounted under the bed, this becomes a very compact and portable lathe, suitable for the backyard picnic table, motorhome, or even a suitcase! Since the headstock and tool rest are removable, it is possible (with the addition of the standard bed and tailstock) to convert this lathe to the basic mini lathe for between center turning. Besides being durable, it is very functional; the winner will truly be pleased.

As before, in exchange for each voluntary contribution to the Education Fund (we suggest $5) we will send you a ticket; five tickets for a $20 contribution. As before, once we receive your contribution, we will send you your ticket stub, and put your ticket in the drawing box. Your membership number will be put on both the ticket and the stub.

Congratulations

M. Dale Chase, Chico, CA captured first place in AAW's Lidded Container Competition with his 3" diameter African Blackwood box. Second, Third, and Honorable Mention places were secured, respectively, by George Perfect, Saskatchewan, Canada; Arthur Duell, Fayettville, AR; and Henry Teller, Greenville, OH. AAW sends congratulations and prizes to the winners.

Local Chapter Update

by Dick Gerard

Please continue to send the following information back to Dick Gerard, 7410 Railway Court, Indianapolis, IN 46256:

1. Name of Chapter
2. Location (City/State/Zip)
3. Meeting Dates and Place(s)
4. Officers
5. Mailing Address
6. Phone
7. Shows Completed and Pending
8. Number of Members; Rate of Growth
9. Fund Raising (How activities are financed)
10. Visiting Turners
11. Special Projects
12. Special Problems and Concerns

The deadline for receiving your Chapter Update for the September issue is June 10, 1989.

1. **Arizona Woodturners Association,** Glendale, AZ; meeting calendar n/a; John Lea; Don Mitchell, (602) 938-9566. No response.
2. **Bucks Woodturners,** Churchville, PA; meeting calendar n/a; Jon Alley, (215) 364-0778. No response.
3. **Central Florida Woodturners,** Winter Park, FL; meeting calendar n/a; Rollin Patrick (305) 646-4451 or 657-2811. Alternate person to contact: Bob Miller, Box 1510, Apopka, FL 32704 (407) 889-7491. Mailing address: 7510 Azurebrook Court, Winter Park, FL 32792.
4. **Central Indiana Chapter AAW,** Indianapolis, IN; 2nd Sunday, Sept.-May. President, Tom Newkirk (317) 251-4515; VP (vacant); Secretary, Betty Scarpino; Treasurer, Ralph Oxford. Person to contact other than President: Dick Gerard 7410 Railway Court, Indianapolis, IN 46256. Mailing address for all correspondence: 7410 Railway Court, Indianapolis, IN 46256. CIC-AAW hosted a turning demo with guest turner Rude Osolnik on April 9, 1989. New officer elections in May. We are also interested in exchange program with other Mid-West/Great Lakes Chapters.
5. **Central New England Chapter (CNEW) of the AAW,** 38 Stowe Road, Crafton, MA 01519. Meeting calendar n/a; Toby Winkler (508) 839-3588. Secretary, Paul Fenell. Other officers n/a. Shows: Feb.-March, 1989—Juried Regional Turned Objects Show. Feb. 18, 1989—Hands on turning session at Worcester Crafts Center. Growth, 35 members from 5 New England states. Fund raisers include CNEW donated tools and equipment to Worcester Crafts Center. Visiting turners include Al Stirt. Special projects: traveling collection of turned objects by members; Woodworking World Trade Show; CNEW is looking into liability insurance/incorporating as non-profit group.
6. **Central Oklahoma Woodturners,** Norman, OK; meets 2nd Tuesday every other month (Feb/April/June/Aug/Oct/Dec). President, Alan Lacer (405) 364-9180; VP, Bill Hull; Secretary, Bill Porterfield; Treasurer, Robert Know. Membership of 24. Liam O'Neill and Rude Osolnik have been guests.
7. **Central Texas Woodturners,** Austin, TX; President, Gary Roberts (512) 345-1621. Person to contact other than President, Lyle Mettler (512) 295-3998. Officers n/a. Meeting calendar n/a. Visiting turners include Devore Birch, Euclid Moore, and Liam O'Neill. 53 members. Fund raisers include monthly raffles of wood and equipment.
8. **Florida West Coast Woodturners,** Clearwater, FL. President, Roger Bouchard (813) 447-6481; VP, Larry Hasiak; Secretary, Trudi Hunsinger; Treasurer, Charles Harbough. Meets 2nd Wednesday each month at the Work Bench, 701½ Franklin Clearwater, FL 34616. 35 members. One year old. Shows: Tampa Woodworking Show in January and at the Florida State Fair in February. Both shows will include demos and exhibits. Fund raisers include auctions of tools and wood. Visiting turners: Liam O'Neill.
9. **Mid-Cal Woodturners,** Clovis, CA. Meeting calendar n/a. Rick Johnson (209) 299-0538.
10. **Minnesota Woodturners Association,** Shorview, MN. Meets 2nd Tuesday each month, 7:00 PM. President, Mary Redig; VP, Donabelle Hansen; Secretary, Dave Hedlund; Treasurer, Mary Redig. Calls may be directed to (612) 483-3489. Visiting turners: Rus Hurt, April 8, 1989. Special Problems include getting enough lathes together for hands-on demos.
11. **Nor-Cal Woodturners,** Sacramento, CA. Meets 7:00 PM, last Wednesday, monthly at Nemy Tool. Contact other than President: Dick Krause (916) 988-0330. President, Russ Williams; VP, Jim Armstrong; Secretary, Doug Woodrow; Treasurer, Dick Krause. Mailing address and phone numbers: 9345 Rock Canyon Way, Orangeville, CA 95662 (916) 988-2829/453-6031. 30 members.

12. **Northcoast Turners,** Akron, OH. Meeting calendar n/a. Officer n/a. Contact Dave Hout (216) 744-2248. Northcoast Turners have demonstrated and displayed at several woodworking shows in their area. Membership of 75. Fund raising by monthly raffle of tools and wood. Visiting turners include Palmer Sharpless, Rude Oslonik, Nick Cook and Clead Christiansen. Special projects: Annual social dinner (spouses included) and project swap. Regional Symposium was held in March, 1989.
13. **Pikes Peak Woodturners,** 1527 East Jackson Street, Colorado Springs, CO 80907. Michael D. Gombert, President (719) 630-7770. No response.
14. **San Diego Woodturners,** San Diego, CA. Richard Griebe (619) 272-2867. No response.
15. **Seattle Chapter of AAW,** Seattle, WA. Denver Ulery (206) 868-5442. Bob Krauss put together a workshop. Seattle is hosting the National Symposium in October, 1989. Seattle is having a Logo Contest, logo to be used on Seattle's correspondence. March meeting featured Casey Burns, noted instrument maker.
16. **Tennessee Association of Woodturners (TAW),** Nashville, TN. Officers and meeting place/dates n/a. Contact Charles Alvis (615) 833-1201. TAW will be involved with next woodworking show in Nashville. June 10-11, 1989: Second Annual Symposium, Appalachian Crafts Center, Smithville, TN. Contact Charles Alvis for further details. Featured turners include Del Stubbs, Dick Gerard. Active members 36. Growth rate up 30% in 1988. Fund raising projects include an auction in early 1989. Visiting turners include Nick Cook and Myron Curtis.
17. **Tidewater Turners of Virginia,** Virginia Beach, VA. President, Howard Everton (804) 471-0904; VP, Tom Meade; Secretary, Frank Yeiser; Treasurer, Etta Peterson. Mailing address: Tidewater Turners, 4253 Indiana River Road, Virginia Beach, VA 23456. Meets last Tuesday of each month. In 1988, had 68 members. Dues $15. Participated in Woodworking World Show, Norfolk, Jan. 6-8, 1989; and Woodworking World Show, Richmond, March 10-12, 1989.
18. **Woodturners of Polk County,** Bartow, FL. No response.
19. **Gulf Coast Woodturners Association,** Pasadena, TX. Don Hart (713) 487-5484. No response.
20. **Michigan Association of Woodturners,** Ann Arbor, MI. Meets second Tuesday of each month at Clague School, Ann Arbor, 6:30 PM. Officers: President, Barry MacDonald (313) 881-7097; Secretary/Treasurer, Russ Clinard. Visiting turners include Palmer Sharpless, March 10-12, 1989. Ron Kent visited April 27, 1989.
21. **Northwestern Michigan Chapter of AAW,** Kewadin, MI. Robert Van Stee (616) 599-2864. No response.
22. **South Florida Woodturners Guild,** Homestead, FL. David Freundlich (305) 245-0511. Meeting calendar n/a. Guild members show at 1st National Bank of Homestead Dec. 7-19, 1988. Demo at Fruit & Spice Park National Arts Festival, Jan. 14-15, 1989. Raises funds by wood raffle each month.
23. **Woodturners of Northern Illinois,** Lisle, IL. Tom Jesionowski (312) 961-9187. Meeting dates and location n/a. Officers n/a. Membership approximately 30. Visiting turners: Clead Christiansen and Dennis Stewart.
24. **Woodturners of North Texas,** Arlington, TX. President, Larry Roberts (817) 496-5336; Treasurer, Bert Zitek (817) 649-5405 (day) or 275-1832 (nights). Mailing address: 1916 Lost Creek Drive, Arlington, TX 76006. Chapter is one year old with 52 members. Visiting turners include Rude Osolnik, James Poppell, Clay Foster, Jim Johnson, Alan Lacer, and Euclid Moore. Most meetings include "Show and Tell." Participated in the North Texas Woodworking Show. They had a demo and a gallery of turnings. Over 200 prospects signed the "interested" list, and resulted in 14 new members. Meetings generally held the last Thursday of the month, alternating between Ft. Worth and Dallas.
25. **Miami Valley Woodturners,** Tipp City, OH. Judy Ditmer and Gordon Warren (513) 667-8561. No response.
26. **Woodturners of Arkansas,** Little Rock, AR. Tony Bilillo (501) 221-0266. No response.
27. **Mountaineer Woodturners,** Huntington, WVA. Charles Brown and Bob Fleming (304) 525-2735. Invited to participate in Mountain State Art and Craft Fair, June 28-July 2, 1989. Tom Lynch to demo spindle turning in May, 1989.
28. **Tri-State Chapter, AAW,** Walton, KY. Pat Norris (606) 485-6780. Newly formed as of Oct., 1988. Dick Gerard demonstrated bowl turning at the February meeting.
29. **Utah Association of Woodturners,** North Ogden, UT. Clead Christiansen (801) 782-5105. No response (newly formed).

OTHER: Recent inquiries indicate interest in forming local chapters in Louisiana; New Hampshire; Berkeley, CA; Washington, D.C.; and another in Florida.