



Warships to Workboats



Volume III
Number 3
Fall, 2005

A Joint Publication of the Modelshipwrights and Warrior Groups

The Whiskey Strake

"The Wooden Walls." "Wooden Ships and Iron Men." Modelers hold wooden ships in special regard, and many of them honor the wooden ships by building models with wood. In this issue we look at many aspects of wood: what to use, how to harvest it, even how to store it. I hope the articles contained here leave you a new appreciation of the amazing material we tend to take for granted.

We haven't forgotten the actual ships either. We have a fascinating life story of a typical Gulf schooner, *Albert Baldwin*, and a review of an incredible new book of paintings of sailing fishermen. There's a photo essay showing two incredible models. Last, but certainly not least, another collection of fabulous tips in Bits and Pieces.

I'd like to take this opportunity to thank everyone, authors, proofreaders, letter writers, and readers, for three successful years of *Warships to Workboats*. I think that as a community we can be very proud of the way we've maintained and carried on the tradition of model shipbuilding, and I've been very proud of being able to make a small contribution by editing this magazine of ship modeling.

After the next issue, I will be stepping down as editor of *Warships to Workboats* in order to give myself a bit more time for ship modeling, among other things. It's been a great time, but I'm ready to pass the keys of the press to someone else. Could that someone be you? Send me an email, and I'll help you get started.

-The Editor



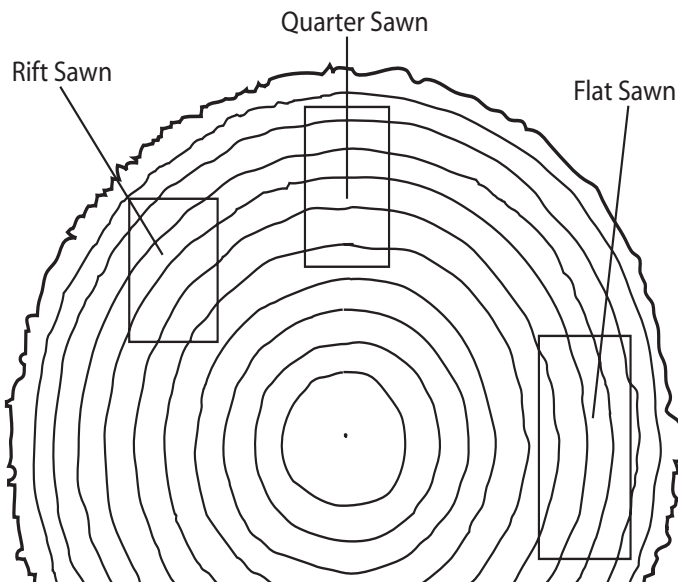
Extreme Scratch Building - Starting with a tree

By Jack Silvia

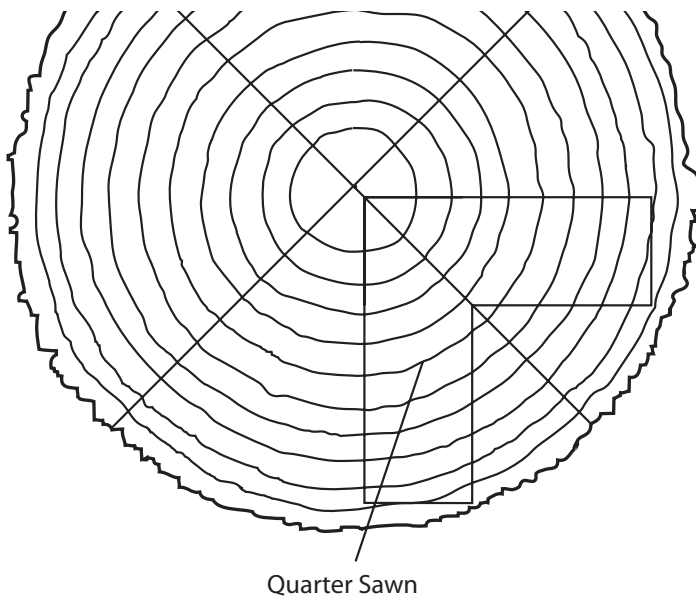
I hate to see good wood go to waste. Most fruit and nut trees and some ornamental trees provide excellent wood for model building. These same trees show up in neighborhood yards and are occasionally knocked down by storms or cut down for reasons known only to the owner. All too often they end up being added to the woodpile destined for burning in the fireplace or hauled off to the landfill. For years I've kept my eyes open for suitable downed trees and, with a bit of work, converted them into enough lumber to supply most of my model building needs. This article is about my methods for converting raw trees into quarter-sawn model lumber.

Quarter-sawn lumber is lumber in which the growth rings meet the board face at an angle between 60 and 90 degrees. This is different from flat-sawn lumber in which the angle is less than 30 degrees and rift-sawn lumber in which the angle is less than 60 but greater than 30. The advantage of quarter-sawn lumber is that it has less tendency to cup across its face than does flat-sawn or to a lesser degree, rift-sawn. Note that there is some disagreement over the definition of quarter-sawn. Some graders use 75 degrees as the low end for quarter-sawn. There are two methods of obtaining quarter-sawn lumber from a log:

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1. **Flat cutting the log** and then grading the results (see above). The boards closest to the diameter of the log, and excluding the center section of the board, meet the requirements for quarter-sawn. The boards furthest from the diameter of the log meet the requirements for flat-sawn. In between are rift-sawn boards. The yield of quarter-sawn boards from this method is relatively low. This method isn't particularly suited to home-shop sized equipment since the depth of cut needed is at least half the full height of the squared log.



2. **Quarter cutting the log** (above). The yield from this method is all quarter-sawn boards. This method is the one most suited to home shop equipment.

The following equipment is needed to reduce logs of from nine to twelve inches in diameter to billets:

- Chainsaw – used to cut the logs into manageable lengths. I typically cut them in lengths ranging from

eighteen to thirty-six inches depending on the available straight, branch free lengths of the trunk and the size of model the lumber is intended for.

- Splitting maul, wedges and small sledgehammer – used to quarter the log sections.
- Six inch jointer-planer – used to make a working face and edge on the log quarter.
- Ten inch circular saw – used to rough cut the quarters into the source stock for the billets. For simplicity's sake, I will refer to these as "blanks" during the remainder of this article.

- Twelve inch band saw – used to re-saw the blanks into billets.

- Twelve inch thickness planer – used to true up the faces of the billets and reduce them to the desired thickness.

Although this process is not discussed in this article, the following equipment is needed to reduce the billets to scantlings after they have cured an appropriate length of time:

- Micro circular saw – used to cut scantlings from the billets to the appropriate thickness.

- Micro thickness sander – used to clean up the faces of the scantlings and insure consistent thickness.

The tree used as the example in this article is a choke cherry tree that came from Assonet, Massachusetts and was knocked down, along with a half a dozen more, by hurricane Bob. I brought them home as logs ranging in length from five to ten feet, and in diameter from nine to twelve inches.

The choke cherry is a rough barked wild cherry with a small fruit hardly larger than its BB-sized seed. Although it grows like a weed in the wild, it was deliberately destroyed in the twenties through the fifties because it harbored tent caterpillars which were devastating local cultivated cherry trees. Quite a few still remain in the wild, and their seeds, dropped by birds, will root in corners of your back yard where the mower doesn't travel. Some folks let them grow in their yards as a food source for song birds. The wood consists of a hard, close-grained dark red colored heartwood and a softer, looser-grained, white sapwood.

The sapwood is almost as white as holly, but absorbs water easily and is somewhat brittle once it cures. The sapwood is less desirable for model building although I have successfully used it for deck planking or furniture. The heartwood is initially dark red colored, but lightens somewhat once it's milled. Interesting color still remains in most pieces, though, and comes out well under a clear finish. The grain is tight and fine, and thin planks can be coaxed into the shape of a hull whose lines were designed for wood planking. Thicker pieces can be used for lift models. For lift model work, I've found that the wood is quite hard and difficult to carve with a chisel, but is well

worth the effort. It finishes to a beautiful surface that darkens over time.



Picture 1. shows the progression of results from a quarter to billets. The intent for this particular run of my “mill” was to create billets intended for use as scantlings for planking. The final billet thickness is the width of the planks that I needed. The following discussion explains how each step is accomplished.

1) Create a working face and working edges



a) The working face, bottom of the right hand piece above, is created on a jointer-planer by moving and tilting the fence to provide maximum clearance for running the quarter, bark side down over the blade until a wide, flat bottom is created. With larger radius quarters, you sometimes have to do step (1.b) first.

b) The first working edge (left edge in the picture) is created by setting the fence at right angles to the table, placing the working face against the fence and planing one edge down until an approximately three inch wide edge is created.

c) The second working edge (right edge in the picture) is created on the circular saw by placing the working face down on the table and the first working edge against the rip fence.

2) Create the blanks.

a) The first blank (leftmost, below) is made on the table saw by setting the fence away from the blade by either the maximum height of the work piece near the first working edge or the maximum height the saw can cut. The



saw blade is raised to the same measurement, the first working edge is placed against the fence, the working face is placed on the table and a blind cut is made the length of the work piece. The work piece is then flipped so the working face is against the fence and the first working edge is on the table. A second blind cut frees the blank from the work piece.

b) The second blank (center) is made by placing the second working edge on the table and the working face against the fence. The cut frees the blank from the work piece.

c) The remaining piece (rightmost) is run through the jointer-planer to true up its bottom.

3) Create the billets.



This best billets

a) The billets are cut from the blanks on a band saw with a ½” re-saw blade. The shape and quality of the billets depends on which blank they came from. The best billets are cut from the first blank. The next set (below) are cut from the second blank and vary in quality. The billets of least quality are cut from the third blank. With some imagination, they can all be put to good use, even if only



The next set

for making glue sticks.

b) When cutting the billets, you need to insure that the original working face of blanks one and two or the bottom of the third blank, is on

the saw table. If you rotate the blank 90 degrees, you will end up with flat-sawn billets.

4) Cure and dimension the billets.

a) The rough cut slabs need to cure before they can be milled to finished dimensions, using finished in the sense of being dimensioned to the scale sizes representing the rough cut stock that a full-sized shipwright started with. I cure mine on a workbench in the cellar for at least two months before dimensioning them.



Glue sticks?

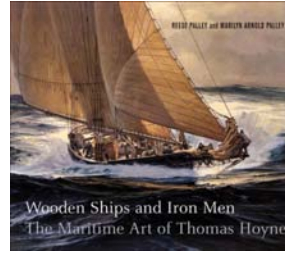
I start with three equal thickness scraps laid on the bench. On top of, and across these, put a layer of slabs, leaving about a quarter of an inch between edges. On top of the slabs, put another three scraps, followed by another layer of slabs. Keep alternating the layers until you've stacked all of the stock. This allows air circulation all around the stock which in turn, allows it to dry at an even rate. With quarter-sawn rough slabs, it's unusual to have a piece warp badly while curing.

b) Use the thickness planer to true the faces of the billets and reduce them to desired thickness.

So the question is "Is all this effort worth it?" I find the process fun, and not a whole lot of work. I've ended up with some stock with a useful curve to the grain not easily obtained from commercial sources, and a lot of stock that is easily a match for anything I've seen on sale. On the totally crass side, I measured the results of one day's effort, discounted for possibly substandard pieces, and multiplied it by the current going "sale" rate for cherry from one of the catalogues catering to ship model builders. The conservative result was about \$400 worth of stock. The process also resulted in about four bushels of shavings and sawdust that went into my wife's garden as decorative mulch. That made her think I had spent the day in a very productive fashion, rather than tinkering around with my models, and cleared the road for more sawdust making time.

-Jack Silvia, Little Compton, RI, USA

Book Review



Wooden ships and Iron Men: The Maritime Art of Thomas Hoyne

by Reese Palley and Marilyn Arnold Palley
New York, Quantuck Lane, 2005
ISBN 1-59372-013-0

I first heard of Tom Hoyne through an article on the models of Erik A. R. Ronnberg, Jr. published in *Maritime Life and Traditions*. I was immediately drawn to his paintings, which have incredible life and realism.

After searching the internet for several years, and buying every print I could find on eBay, I was thrilled to hear that a book of his work was being published. I immediately ordered a copy, and I am happy to report that it is as good as I had hoped it would be.

Hoyne painted mainly the vessels of the North Atlantic fishing fleet – the schooners and occasional sloops and steam trawlers that fished out of Gloucester, Massachusetts and Lunenburg, Nova Scotia. His pictures capture a moment of time when the crew is fishing, or setting sails, or being dunked while furling sails on the bowsprit. He loved the drama of a fogbank seen from sea level, with a passenger steamer looming out of the mists, or the attitude of defiance expressed by a schooner crew when a new steam trawler passes close by.

His paintings are incredibly detailed portraits of specific vessels, but the details never obscure the spirit of the subject. His lighting is luminous, even in foul weather, and his seas look wet and dangerous. I've never been on a sailing vessel in a storm, but I'm sure if I had been, it would have looked a lot like a Hoyne painting.

The book presents all of Hoyne's paintings chronologically. Many are full page (10" x12"), and all are gorgeously reproduced. Many of them include a paragraph or two on the history and significance of the vessels pictured, as compiled by Hoyne. I would have liked more information about the specific paintings, though.

The text is informative, and includes information on his life and technique. There is a transcription of a talk that he gave at Mystic where he went into depth concerning how he sketches out the composition and transfers it to canvas. Oddly, that section contains some glaring errors, as though the person who transcribed the talk didn't completely understand the topic.

Modelers will love the section where Erik Ronnberg describes how he built ship models for Hoyne to use as his artist's models. The photos of the models alone are almost worth the price of the book.

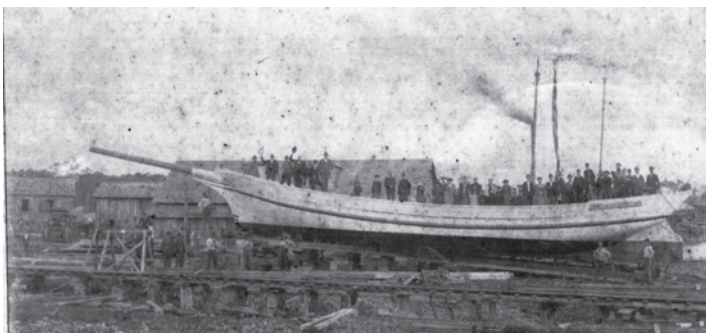
-Tom Babbín, Natick, MA, USA

The Unlikely Saga of the Albert Baldwin

by Russell Barnes

Among the hundreds of fishing and freight schooners built here in South Mississippi during the late 19th and early 20th century, one of the most interesting is the schooner *Albert Baldwin*. Built in 1895 at Handsboro, Mississippi, by the locally renowned shipbuilder Matteo Martinolich, *Albert Baldwin* measured 65 feet on deck, with a 24.2 foot beam and depth of hold of 5 feet. She was built for local shipping merchant Joseph M. Stiglets of Woolmarket. *Albert Baldwin* was named for a well-known New Orleans merchant. Apparently she was built from the same molds as another Martinolich schooner called *Alert*, launched the following year. *Alert*'s lines drawings have survived, and are part of the Smithsonian's National Watercraft Collection.

All very interesting you say, but how does this make *Albert Baldwin* so very different from any of the other schooners that plied the local waters? Well, I am glad you asked. *Albert Baldwin* is one of the only schooners I know of for which we have photos of her launch in 1895, then as a motor-powered freight boat later in her life, and photos of her final appearance after her career was concluded. While there are many photographs of local schooners under sail or sitting at the pier, there are very few of which we have later photographs of how their appearance changed. And there are none that I know of for which we have such an interesting "beginning to end" photographic record.



To begin, there is the photograph of the launching. *Albert Baldwin* was built in late 1894, but was first registered with the local customs house on February 13, 1895. The photograph of the launching shows her inclined on the ways with a mass of people on deck with flags flying as she awaits the critical moment. If you look closely, you can just see the builder standing below the bow. An unknown photographer took this photograph, but it was located in

the Martinolich family's personal collection some years ago. You can just make out the vessel's name on the name plate near the stern. The vessel was launched at Martinolich's shipyard, next to the Leinhard sawmill and brickyard on Bayou Bernard in Handsboro. Today, this is a budding residential development, but you can still see the pilings where the pier was located back by the sawmill. Martinolich did not own his shipyard, rather he leased it from Leinhard, the only stipulation being that from time to time he build Leinhard a freight schooner for hauling lumber and bricks.



The second photograph comes from the Stiglets family. This is Stiglets' Landing on the Biloxi River near Woolmarket. Although she is not pictured here, this is a typical scene along the local rivers and one in which *Albert Baldwin* was probably found on many occasions. The landing operated from the late 1860s until about 1920. The Stiglets family owned *Albert Baldwin* from 1895 until they sold her in 1927. They refitted the vessel as a motor-powered freight boat in 1913. It was about this time that many of the old freight schooners went to work either as fishing schooners, or lost their sails in favor of an engine.

In 1927, the Felsher family of Handsboro bought *Albert Baldwin*. The Felshers have been here on the Gulf Coast since before the Civil War and for all of that time,

Warships to Workboats

is a joint publication of the Modelshipwrights and Warrior Groups. For information on the groups, please see our websites:

www.modelshipwrights.net

www.warriorgroup.org

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they have been boat captains. In fact, one of the Felshers was the captain of *Albert Baldwin* during her first years as a motor-powered vessel. According to her papers, her captain in 1920 was Henry "One armed" Felsher. Felsher lost his arm in a family hunting accident when he was a young man, but he continued to sail schooners and eventually operated motor-powered freight vessels during the 1920s. It was Henry, along with his brother William Felsher who bought her in 1927. William Felsher operated *Albert Baldwin* as a packet boat throughout the 1930s until his death in 1939. The boat passed then to his son, Albert Felsher, who continued to run the boat as a packet between Gulfport and New Orleans until 1947. We have a couple



of interesting photographs from this period. First there is *Albert Baldwin* coming off the ways at the Frentz shipyard in Biloxi. This was in about 1946. She was having some minor repairs and

general cleaning done. The second photograph is of *Albert Baldwin* tied up at her berth in Gulfport. She is loaded down with cargo.



But what finally happened to *Albert Baldwin*? I was asked that question by many people who remembered her from the 1940s. I had no answer until I met Albert Felsher, Jr., who was able to tell me the story. After the Felshers sold the boat, he saw it again on the beachfront in Biloxi, where it was sitting at a berth with no engine. The new owner had erected a screened porch type of structure on the deck and put up a neon Schiltz® sign on the deck house. The boat was now a floating restaurant called "The Pirate Ship", offering cold beer and fresh oysters. Albert's story and photograph support the vessel's official record. On the last page of her papers, it is noted that she was sold to one Henry Carpenter in March 1950, without motive power. Albert does not know what became of the hull after this, but it is likely she was broken up, her remains either plowed under for new development, or hauled off to the dump to be burned.

So, there is the story, so much of it as we know, of the great sailing schooner *Albert Baldwin*. How did such a beautiful hull become a floating oyster restaurant? It sounds unlikely on its face, but when the facts are laid out in detail, the process seems believable enough.



-Russ Barnes, Biloxi, MS, USA

Woods for Building Ship Models

By Wayne Drusch

The traditional ship model building wood of choice has been Boxwood and fruitwoods such as Apple and Pear. Admiralty Models of the 16th and 17th centuries were primarily constructed of such woods. Modern ship model builders continue to use such woods but scarcity and rising cost of these traditional materials has resulted in many modelers switching to a variety of other suitable woods to use in construction of their ship models.

Traditional modeling woods such as Boxwood were chosen for fine working characteristics, pleasing color and availability. Modelers today, because of the global economy, now have choices of many fine substitute wood species available that have the fine working characteristics of the traditional woods along with interesting colors, a ready supply and reasonable cost.

Below is a list of the more common ship modeling woods and some of the new species available along with a brief description.

Apple- (*Malus pumila*) Color varies from light tan sapwood to medium, pinkish brown heartwood. It is heavy, has a fine dense even texture, and bends easily. These characteristics make Apple suitable for carving, turning and fabrication of all parts of a model. Apple's ease of bending makes it an ideal wood for planking applications. It finishes well and can be stained. Overall, Apple is a very desirable and versatile wood for ship model building.

Alder, Red- (*Alnus rubra*) Alder, a relative of Birch, is light tan with a reddish or yellowish tinge. The wood has straight grain with a uniform texture and is easy to work. It

stains well to blend with Walnut and Cherry. For this reason it is commonly used for furniture. Alder is medium density, with low bending strength and stiffness. It is plentiful and makes a good model wood for frames and other structural parts.

Balsa- (*Ochroma iagopus*) A white/pinkish-white to grey wood which is very soft and light weight. Cutting can be difficult as the wood fibers tear easily leaving a rough surface. Balsa will not maintain a clean, sharp edge. It glues well, but its low density prevents fasteners from holding well. It dents easily and requires filler for smooth finishes due to its open grain. This wood has limited use in ship model building except for filler blocks.

Bamboo- A grass with over 2000 identified varieties. For ship model use the type with hard, straight stalks is the variety of interest. Primary use for model building is for fasteners and trunnels (tree nails) when processed through a drawplate to suitable diameters. A good source of stock is the grocery store where cooking skewers and chop sticks are available.

Basswood- (*Tilia americana*) Also known as **Linden**, and **Lime** (Europe). Almost white to pale creamy brown in color with straight grain and fine uniform texture. Care must be taken to keep a sharp edge and it tends to become fuzzy or fray when drilled and sawed. It bends relatively easily but wetting tends to soften the edges of the stock. Basswood is inexpensive and easy to find at most hobby and craft stores. It is utilized extensively for POF and solid hull construction by American ship model kit manufacturers. It carves extremely well and is a prime choice of wood for figure and decoy carving.

Beech- (*Fagus grandifolia*) A white to pale brown wood with a red tinge and distinctive fleck pattern. Beech is hard and has a straight but coarse grain with even texture. It bends very well and keeps a sharp edge so works well as planking material. The wood stains and finishes well. The small flecks in the grain pattern can simulate scale oak planking.

Birch- (*Betula alleghaniensis*) Sapwood is generally creamy-white and heartwood is a very pale reddish brown. It has an even and straight grain, and has good strength and bending properties. It is very hard and holds a clean edge. Birch is made into high-grade plywood for paneling, cabinet making and modeling. Takes paint and stain well. Most "Popsicle" sticks and tooth picks are made from Birch because the wood does not impart a flavor or odor to food products. This is a good wood for frames, deck planking, and jigs and fixtures.

Boxwood- (*Buxus sempervirens*) **English** and **European (Pyrenees)** varieties are the most desirable of the boxwood species. It has become expensive and can be hard to find. Boxwood has a distinctive tan to yellow color and a

very fine texture. Boxwood is a very dense wood with almost no grain so it carves with great detail and holds sharp edges. It is an excellent wood for all parts of ship model construction because of its hardness and ability to take a fine finish. It was the wood of choice for Admiralty models in the 16th-18th century and remains so for many of today's modelers.

Boxwood, South American- (*Calycophyllum multiflorum*) Also marketed as **Castella** and **Palo Blanco** Boxwood. This is a different species of tree than European Boxwood, but has similar properties although somewhat lighter in weight. It may be easier to acquire and is available in larger size boards than European Boxwood. It is light lemon yellow to tan in color, with straight, compact and uniform grain. It can be finished to a high polish. It does not carve as well as European boxwood but still maintains many of the same desirable qualities for ship modeling to make it a good substitute.

Cedar, red- (Eastern- *Juniperus virginiana* and Western- *Thuja plicata*) A fine textured, straight grained softwood varying in color from pale pinkish-brown to dark brown. This wood has an aromatic scent and is commonly used to line closets. Works easily but is brittle and can chip easily. It will take a good finish. Cedar is too soft for most static ship modeling but its light weight and flexibility makes it useful for larger scale pond yachts.

Cherry, Black- (*Prunus serotina*) An excellent hard, close grained wood ideal for all areas of ship modeling. Cherry has a light to pale reddish-brown color which deepens with age. Cherry is a fine furniture wood that can be stained or painted. Cherry carves and works well with sharp hand and power tools. Its fine grain and good bending characteristics make it ideal for planking or other wooden fittings required for ship models. It is also an attractive wood for half-hull construction, display boards and cases. Cherry is usually readily available from most hardwood dealers and still reasonably priced.

Degame²- (*Calycophyllum candidissimum*) Also called **Lancewood**, and **Lemonwood**. It is a pale, creamy yellow to light brown hardwood that has a very fine, even texture with straight grain. Heartwood is darker. Known for use in wooden bows, it machines well and carves with fine detail. An excellent choice for small parts, masts and spars when supplies can be found.

Ebony, African or Gaboon (*Diospiros* spp.) A dark brown to jet black hardwood with fine grain. Ebony is extremely heavy and dense requiring very sharp tools to work. It produces sawdust that can be irritating and toxic to some so respiratory protection is advised. Shavings can stain materials. The wood is brittle and bending is difficult which limits its use in ship modeling to accent pieces requiring a dark or black color. Thin strips will bend with

dry heat and steam, but has poor bending qualities in thicker pieces. Ebony is affected by ammonia and can be discolored. Primary use in modeling is for wales, deck fittings, rails, and planking of bulwarks where black strakes are needed. It is very expensive and usually comes in short narrow lengths.

Hickory/Pecan- (*Carya glabra/Carya aquatica*) Both woods are members of the hickory family and many times sold as one another. Heartwood ranges from light to medium tan with fine brown lines. Sapwood is a creamy white with little grain figure. Hickory/Pecan heartwood may be used for attractive cases and bases but is of little use on a ship model.

Gum, Red- (*Liquidambar styraciflua*) Also called **Sweetgum** or **Sappum**. Color varies from a white to golden yellow sapwood to heartwood of brown to reddish-brown. Gum has a close, fine, and even texture, with an irregular grain pattern. The wood is moderately hard and has good bending qualities. Used in the furniture industry for inexpensive furniture stained to resemble Walnut. This wood is not expensive and works well for frames, planking, and decking. It can be a very versatile choice for model making.

Holly, American- (*Ilex opaca*) Coloring is ivory white to gray-white with some samples having a greenish hue. Has straight, close, extremely fine grain. It is a quality wood with a uniform light appearance that bends well and is easy to work. Holly is an excellent modeling material, being fairly hard but easily glued. Holly carves well and has good edge holding ability. Holly can be used for all parts of a ship model but is especially useful for decking and hull planking where a very light whitish color is required. It is moderately expensive but a very desirable and versatile modeling wood.

Jelutong- (*Dyera costulata*) A creamy white to straw-colored softwood with fine, even texture. It is often used in pattern making because of its stable, even grain. Cuts and carves easily making it ideal for solid hull models or other carved items. It is often supplied in European ship modeling kits where light color wood is required.

Mahogany, Honduras- (*Swietenia macrophylla*) A medium to deep red-brown hardwood which works easily, and takes a superb finish. Prized in fine furniture but the open grain makes it too coarse for ship modeling except at larger scales. It is excellent for half-hull models because of its coloring and easy workability. True Honduras Mahogany is an endangered species and not as common as previously. Many other African varieties of Mahogany-like trees are now available as substitutes but in general the mahoganies are not suitable for scale ship modeling because of their prominent grain.

Mansonia- (*Mansonia altissima*) Also spelled

Manzonnia. A grayish brown to dark brown African hardwood. Straight grained and fine textured. Mansonia works easily but is not commonly available from local wood sources. It is often supplied in European ship model kits as a substitute for Walnut.

Maple, Hard- (*Acer saccharum, Acer nigrum*) Also known as **Sugar, Black or Rock Maple**. Color can vary from a pale yellow to deep honey tan. A heavy fine grained wood that is stable and extremely hard. Its extreme hardness makes it difficult to work but will produce fine small parts and fittings. Maple is excellent to use for jigs and fixtures. Maple has good bending properties, holds an edge well and takes a good finish.

Maple, Soft- (*Acer rubrum*) Also known as **Red or Silver Maple**. Light tan to redish tan coloring sometimes with pith flecks. Usually straight grained and 25% less hard than Rock Maple. Easier to work than Hard Maple, it bends well and takes a nice finish. Good for model ship decking, fittings and trim.

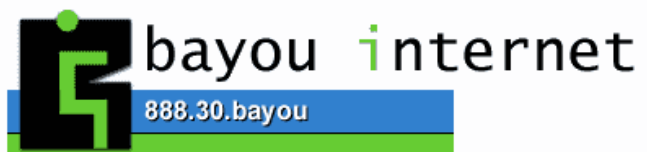
Maple, Box Elder- (*Acer negundo*) Another variety of maple that is light in color and not as dense or heavy as Hard Maple. Not as common as hard and soft maple but a good modeling wood for frames, planking and decks.

Mukali- (*Anigeria robusta*) Also known as **Anigre, Anegre or Tanganyika**. Color can be yellowish white to pale red-brown. Has straight grain with medium to coarse texture. Works well with tools. Dust can irritate skin and respiratory tract. Not commonly available from wood suppliers but supplied in some European ship model kits.

Oak- Principle varieties marketed are **Red Oak** (*Quercus rubra*) with a reddish tan coloring and **White Oak** (*Quercus alba*) with a light tan coloring. A very strong wood not usually recommended for modeling due to its coarse texture and prominent open grain pattern. Is easy to work and takes an excellent finish but primarily is furniture wood or used for flooring. Red and white oak are suitable for cases, model bases and backboards.

Obeche- (*Triplochiton scleroxylon*) Also known as **Obechi, Ayous or Abachi**. A very light, straw-colored open grained hardwood which works and finishes well but requires very sharp tools. The wood fibers contain a grit

We would like to thank Bayou Internet (new home of Worldnet Communications) for their generous hosting of Warships to Workboats and the Modelshipwrights and Warrior web sites.



which quickly dulls tools. Obeche bends easily. The open grain usually needs filling for a smooth finish. This wood is not commonly available from wood suppliers but is supplied in some European ship model kits.

Pau Marfin- (*Balfourodendron riedelianum*) Also marketed as **Guatambu** and **Brazilian Maple**. A heavy, dense pale yellowish brown to cream or yellow wood from South America. Has straight grain with generally even texture and high strength. Pau Marfin has poor bending qualities. Good for frames and structures. Is not a commonly found wood from most wood sources.

Pear, European- (*Pyrus communis*) Pear has a pinkish brown to rose-brown color with a fine, close grained structure. Pear is a very versatile modeling wood that takes fine detail from carving, bends well and takes a fine finish. Grain pattern varies but straight grain can be found. Pear may be used successfully for all parts of a model from frames and planking to fittings. Pear is not readily available from most wood suppliers but worth looking for. “**Swiss pear**”, usually European, is produced by steaming pear under pressure to even the coloration to a uniform soft red-pinkish brown. Swiss Pear coloring provides a good contrast to other woods such as Ebony and Holly in unpainted models. Domestic fruit Pear can also be used for model building as it has similar working characteristics but it is not commonly marketed.

Pine, Sugar- (*Pinus lambertiana*) An even grained almost white softwood. Is very stable and a long-time choice of pattern makers. Has excellent working qualities and carves well. Not as commonly available as it once was, it may be hard to find. Good for solid and lift hull models, and other large carvings.

Poplar- (*Liriodendron tulipifera*) Also known as **Tulip Poplar**, **Tulipwood** and **Yellow Poplar**. This wood varies in color from light, almost white sapwood to a pale brown with greenish cast heartwood. The heartwood is more stable and preferred over sapwood for use, but many modelers don't like the greenish coloring. Wood has straight grain with fine, even texture. It takes paint or stain and finish well. Poplar is commonly used for furniture as frame structures or can be stained and finished to look like Walnut or Cherry. Poplar is a good replacement in models for softer Basswood or more expensive woods in the unseen areas of a model. It is also readily available from many local lumber sources.

Ramin- (*G. bancanus*) A creamy white to pale yellow hardwood from Southeast Asia. Has a straight grain with fairly fine texture. It splits easily when nailed. Commonly found as dowels in hardware stores. It is the light colored wood supplied in some European ship model kits.

Rosewood, Brazilian- (*Dalbergia nigra*) and **Honduras** (*Dalbergia stevensonii*) Rosewoods are fine furniture woods

with a heavy fine grain. The surface has a variable pattern that may have deep reddish to chocolate brown to purple black coloring. Modeling use would be limited to accent pieces on the model, and baseboards and cases. Rosewood is very expensive but produces a beautiful finished product.

Sapeli- (*Entandrophragma cylindricum*) Also spelled **Sapelli** or **Sapele**. A tropical hardwood with a fine textured mahogany-like grain structure. Heartwood is a dark red brown or purple brown in color. Wood is easy to work and finish. This wood is often supplied in European ship model kits.

Spruce, Sitka- (*Dicea sitchensis*) Also called **Silver Spruce**. A softwood with an off white to pale yellow color with a slight pink tinge. It has a fine, uniform texture with straight grain. Spruce has good bending qualities, and works and finishes well. It is great for masts and yards due to its long grain structure and stiffness. Spruce is used in mast making for various classes of sail boats that haven't switched to aluminum. It makes excellent masts and spars for pond yachts and static models.

Tupelo- (*Nyssa* spp.) Also called **Tupelo gum** or **Sapgum**. Wood is white to light cream and grey-green. It has an even, fine texture, and an interlocking grain resists splitting. Carves exceptionally well and is preferred to basswood by some wood carvers. It is stable but not very strong. Used for all aspects of ship modeling in the same ways as basswood. It is somewhat hard to locate but can be found through carving supply sources.

Walnut, Black- (**American-** *Juglans nigra* and **European** *Juglans regia*) Black walnut is a uniform dark purple brown except for the sap wood which is tan. It has an even but coarse, open grain. Walnut is hard and strong but works easily making it a popular furniture wood. Will bend easily when steamed or heated and sands to an excellent finish. Walnut makes beautiful half hull models when used in combination with contrasting wood colors. Walnut also is ideal for cases and baseboards. Walnut is commonly supplied in ship model kits for the second planking, keel pieces, fittings and accent pieces.

Yellowheart- (*Euxylophora paraensis*) Also known as **Amarello**, **Pau Amarello** and **Brazilian Satinwood**. A fine straight grained hardwood from South America with a consistent bright yellow color. Machines and turns well. Good for planking where yellow color is wanted on a ship model. Dust can irritate the skin.

For References and links, please check the
Modelshipwrights website at
<http://www.modelshipwrights.net>.

-Wayne Drusch, Spring, TX, USA

Bits & Pieces

STRIPWOOD STORAGE



Are you tired of looking thru that box of all those new and leftover wood strips for the right wood variety and size? I was, and a few years ago I thought I had found the answer on one of the model ship forums: clear plastic mailing tubes. They are available in sizes up to 3" dia. and 36" length from several sources online. I opted for a batch of 2" dia. by 24" length at about \$1.45 each, and thought that I had my storage problem solved.

WRONG! The cardboard beer carton and dividers I had used didn't hold up. The tubes and wood flopped all over the place, especially when moved. So, while finishing off the dust room of my new workshop project, I thought: 'tis about time to do this storage thing right. Hence, the birth of my Stripwood Caddie.

For less than \$20 in materials, this sturdy, mobile caddie was the solution I was looking for.

The caddy is about 20" x 17", with thirty 2½" holes, equally spaced in the two ⅛" masonite dividers, and a ⅝" plywood base with casters fastened to the underside. The frames are ¾" x 2" pine, dado cut to accept and support the dividers and base.

Glue, screws, and a coat of paint, and *-voilà*, a very sturdy, rollaround model.

A little sorting and a few labels, and now I can find exactly what I'm looking for. By the way, it worked so well I made two.

The second one holds all of my long strips that don't fit under the benchtop, plus a hundred lbs or more of various brass, aluminum, and steel metal tubes, bars, and such raw stock ... all readily available and movable to my next work station.

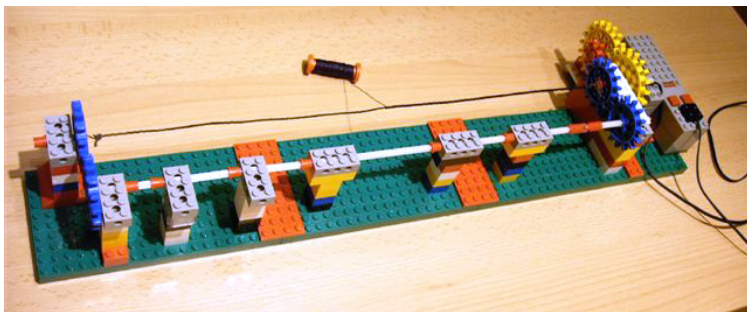
-Ron Romanski, Avinger, TX, USA



Another funny machine

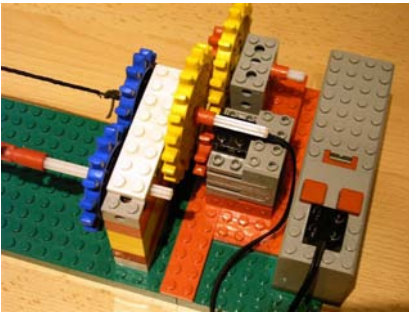
In the recent W2W Summer issue, Terry Lynock introduced a great device for serving rigging line. Like many modelers, of course, I'm also involved in searching for useful solutions when serving of ropes is required. With Terry's machine in mind I started considering what I could do with objects I already have at home. Then I remembered a Christmas gift my son received two years ago: A small battery operated engine produced by LEGO®. That's it! They offer so many parts and pieces from which one could build nearly everything!

My seven year old daughter was digging with enthusiasm through this big box and finding blocks, axles, cogwheels, and so on. Together we built up what I desired within about thirty minutes, while my son looked on with suspicion (maybe a job like this is already too foolish for a ten year old boy).



The only thing which required a little brainstorming was to slow down the engine to a suitable speed. I achieved that goal by constructing gears with different sized cogwheels.

The whole machine was now operating in a perfect manner and I performed my first attempts using just my fingers to guide the serving thread. After several turns the result was quite nice. However, the final solution should be a more automatic one.



As shown in Terry Lynock's device, I tried to build a simple server and thread holder. To regulate the tension of the serving thread I drilled two short channels in the head of the server. It's really amazing: the server is pushed along the rigging line just by laying down the thread while the machine is turning. Nothing more to do but to watch! To increase stability, the serving threadholder is sliding along the edge of the machine's bottom plate.

As one can see the result is not bad. So, daddies, uncles, and grandpas, ask your kids for help and have fun together!

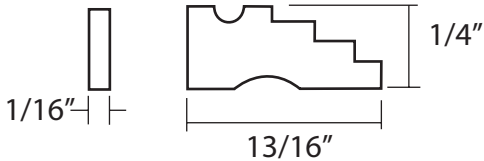


-Gernot Reisner, Arding, Austria



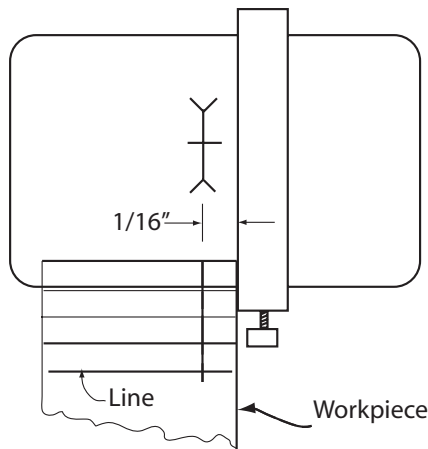
Making Duplicate Parts on a Miniature Table Saw

Often in ship modeling, it is necessary to make duplicate parts, such as gun carriages, timber heads, capstan whelps, hanging knees, etc.



Dimensions shown are for a 9 pdr. gun carriage at 1:64 scale

Strike a line at right angle to the grain, $\frac{13}{16}$ " from both ends. Set the saw fence $\frac{1}{16}$ " away from the blade.



This is how I make gun carriage sides: Prepare a piece of pear or maple, $\frac{1}{4}$ " x 3" x 8" On a router table, rout the steps and trunnion seat cross-grain at both ends of the piece:

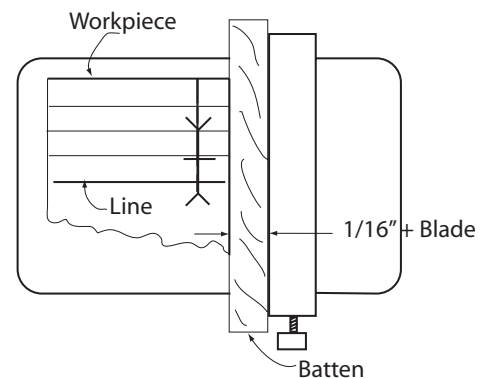
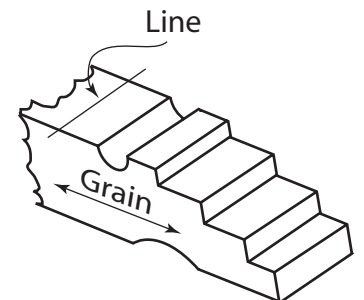
With the table saw, rip a short batten about 4" long, $\frac{1}{4}$ " high, and $\frac{1}{16}$ " plus the thickness of your saw blade wide.

Make a rip cut to the line. Do not withdraw the workpiece. Stop the saw, release the fence, and place the batten between the workpiece and the fence. Bring the fence up to the batten and lock the fence.

Withdraw the batten and the workpiece and make a 2nd rip cut. Repeat until you reach the end of the workpiece. You should repeat cuts at both ends of the workpiece.

Cross cut the workpiece at the line at both ends.

It may sound complicated, but you get into production mode quickly!!



-Keith Harrison, Port Coquitlam, B.C. Canada

Now *That's* a Big Model!

When modelers mention ½ scale, they usually mean ½" to the foot. A few modelers have taken the scale literally, that is, ½" to the *inch*, or half life-size. Two of these *über*-models reside in Massachusetts: the well known whaling bark *Lagoda* at the New Bedford Whaling Museum, and the lesser known fishing schooner *Rose Dorothea*, which for years was

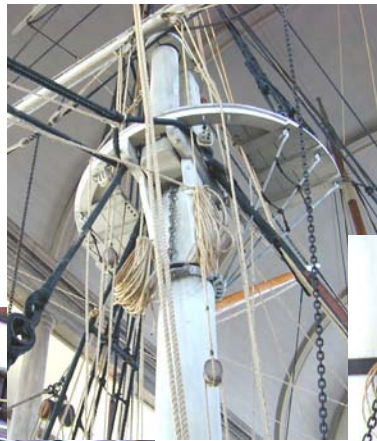
hidden in the shuttered Historical Museum in Provincetown. The Provincetown Public Library has recently taken over the *Rose's* building, and made the model the centerpiece of its children's book collection.

-Photos by Tom Babbins

Left: Lagoda's main top



Above: Lagoda's forecastle and headsail sheets



Above: You can walk the Lagoda's decks.



Left: The Lagoda's stern from sea, er..., floor level



Above: Rose Dorothea's beautifully ornamented bow and hawse hole. The model was built in 1977-88 by Captain Francis "Flyer" Santos, master shipbuilder. Rose Dorothea won the 1907 Fishermen's Cup race sponsored by Sir Thomas Lipton of tea and America's Cup fame.



Two views of Rose Dorothea's decks. The lights are designed to make it appear that the schooner is resting at a dock in Provincetown.