San Diego Ship Modelers' Guild

P.O. BOX 6725, SAN DIEGO, CA. 92106

VOLUME 10 NUMBER 1 JANUARY 1986

HAPPY NEW YEAR

Your "Staff" wishes you all a happy New Year with lots of time for model boat building. I'm making only one new years resolution....proof read before I go to the printers. Wonder how long that will last?

The Christmas party was enjoyed by all who attended. Thanks to Fred and Shirley Fraas who did all the planning and work. Also thanks to Treva O'Brien who Shirley set up a fine looking table with all the goodies. Over 50 people attended and we all had a good time. (Two lines up I see I left out helped)...so much for my new years resolution...1987 will be better maybe. Sorry if we ran out of things near the end...we expected no more than 35 guests as that has been the number at past Christmas parties. Thanks to all who brought snacks and treats...you helped to make the get together a success.

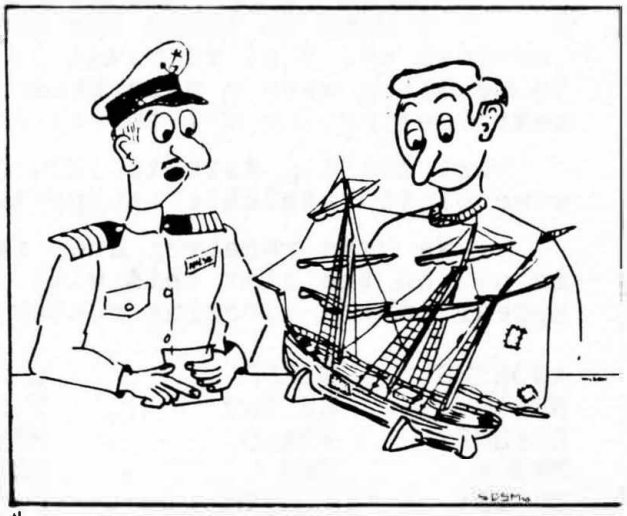
We start 1986 with a new capable staff, and if you read this paper at all you should notice a new mast head. Thanks to Albear L'Heureux our in-house (ship) graphic artist for upgrading our publication.

Loren Perry sent along holiday greetings to the Guild members along with the following information about Scale Model Warships...down the drain dueto insufficient advertisers. Sorry about that however plenty of warship material on hand that will appear in SSM in the future. Regarding those brass railings, Loren says "all Guild members entitled to 10% discount across the board! Tnx.

I also received some sample warship decals in 1/96 and 1/192 scale which I will bring to the next meeting for your examination...they look great. The 10% discount holds true for this item also. I don't know where he gets his energy however he is investigating possiblities of bring out some high-quality collectors kits of model warships eatched parts as well as cast metal and resin parts including decals. People interested in plastic models should have a ball with this type of modeling in the future..Thanks Loren for the update.

The story of the "LAKE" freighters is in this issue with a plan on the inside back cover. Thanks to Bill Barker for the loan of his book THE "LAKERS" of World War I. This info was put together by The Rev. Edward J. Dowling, S.J. and printed by the University of Detroit Press. I don't know if it is in print at this time, however it would be well worth having in your book collection.

SHOW & TELL **by Nilson**



"THE MUSEUM DIRECTOR SAYS YOU CAN PUT IT ON DISPLAY IN THE BILGES."

CROWS NEST by BILL KELLY-FLEMING

The new cruise ship terminal is nearly completed. The layout in side makes for smooth operations and visitor comfort. You will find a snack bar and gift shop inside and with big glass doors, it is possible for the public to get within 20 yards of the ship. The best time to stop by and avoid passanger traffic is about noon when a cruise ship is in for the day. A fun time is when a ship casts off, especially the Pacific Princes as one of the crew plays a ditty on the multi-tone horn.

Receive a signal from the North Centeral part of the country...that the Nautical Research and Model Ship Society puts out an excellent quarterly with modeling hints and historical information. The cost of the "FIFE RAIL" is $7.50 for Associate Membership. Send request 620 Saddle Rd., Wheaton, ILL. 60187.

From the Constitution Model Shipwright Guild we learned that the combined New England Meet is on Saturday April 19 instead April 20 th as previously announced. Another comment from the newsletter indicates that the James Bliss Marine Ship Model Dept. has been discontinued....don't see any of their ads in recent model mags. If anyone knows give us the scoop on this?

And should be up in the South Bay Area...no no Chula Vista...that big bay 400 mi. North near Frisco, The South Bay Model Shipwrights have followed our lead? and now meet on the 3rd Friday of the month (except February) when they meet on Saturday. One of my grandiose plans which gets as far as my ship modeling hopes is to compile a list of clubs, their meeting place and time so when any one is in the area they can drop in for a visit and see how the other half does it.

SHIP SCHEDULES:

PACIFIC PRINCESS	Saturdays	0730-1800	until Jan. 25 th.
AZURE SEAS	Tuesdays	0800-1600	
NORTH STAR	Wednesday	0700-1600	Jan. 22 nd.
VISTAFJORD	Wednesday	0730-1800	Jan. 29 th.

The January meeting will feature yours truly (your editor) in a talk and show on how to build railings with jigs and fixtures. Did this in 1980 but many new members since then so though you would'nt mind hearing it again.

I made a motion as retiring Captain that I be advanced to the rank of Rear Admiral and retired with a pension of $50.00 a month...$20.00?... 10 ?...5?...motion died for lack of a second. Well I hope my pay as editor will continue.

Speaking of rank, the Navy is doing away with Commadore for the last time. The next rank after Captain will be Rear Adm lower half (1 star) and Rear Adm. upper half (2 stars). From now on they will be known as upper and lower G.I.'s

I want to thank the membership again for the Battleship book that you awarded me. Fred received it on the day of the Christmas party and gave it to me along with a nice presentation at the party. I will bring it to the next meeting for all to see and sign...Thanks again

Next meeting date is January 17..now that football has come to an end maybe some of you athletic supporters will be back to the meetings.

We have received dues for 1986 from the following members. If your name is not on the list this will be your last newsletter and your name will not appear in the upcoming roster. we were up to 85 last year...come back....hear.

ANDREWS	ELLOR	HARNAN	LLOYD	PETERSON	STRANDT
BEALS	ENDERT	HASH	MOLDENHAUER	PRIVETT	THOMPSON
BOEHME	FRAAS	HEKKALA	McFARLAND	QUAYLE	WHITE
BRUCK	FRY	HOLCOMB	NILSON	RIVERA	LUCIANO
CROSBY	GLASER	JARVIS	O'BRIEN	ROSS	
EADS	HAIGH	JELLINEK	PAYLOR	SCHLOSS	
ELDER	HARMELING	L'HEUREUX	PEARCE	SMITH,D.	

Large number of whale oil lamps had two wicks

By Ralph and Terry Kovel

Cowles Syndicate

IN THE EARLY 1800s whale oil was the best burning oil lamp fluid available. Also, whales were plentiful, and the fleets could get enough oil to fill the lighting requirements of the day. However, animal fats and fish oil had disagreeable odors and burned with dark smoke.

According to legend, about 1780 Benjamin Franklin discovered that two adjacent flames give more light than two separate flames. Sophisticated scientific tests have shown that this is true. Measurements prove that three adjacent flames will give almost four times the light of one flame.

Most early whale oil lamps were made with two wicks. Whale oil remained the light source of choice from 1800 to 1840. It gradually was replaced by many cheaper fuels including turpentine, coal, gas and kerosene.

Historic ships rot away on sea of neglect

SAN FRANCISCO (AP) — Time, rot and a shortage of money are taking their toll on the United States' premier collection of old ships, officials and fans of the vessels say.

One of the ships, the 204-foot Wapama, is a stinking mass of rotting timbers. It rests on a barge in Oakland Estuary.

Officials fear that other ships in the National Maritime Museum collection, although still afloat, may have undetected damage as bad as that of the Wapama.

"Right now, I'd estimate we should be spending $3 million a year in maintenance, but we're spending about half that," says Brian O'Neill, acting superintendent of the Golden Gate National Recreation Area, where the ships are tied up.

"I know I've got a real missionary job with the (National) Park Service, getting them to understand what we need to do and the money we need to do it," O'Neill adds.

Actually, the maintenance budget for the ships in the current fiscal year is about $1 million, down from $1.5 million last year.

O'Neill, who calls the ships "the largest maritime resource the federal government has," says the government needs a "grand plan, a vision, a goal that everyone can get behind," to save the collection.

Harry Dring, who was the foreman in charge of maintaining the historic ships before he retired, says what the government needs to do is "get some ship people in there who know what these old ships need, then give them the resources to do it.

"These people they have calling the shots today just don't have the background for the job they have to do," the 66-year-old Dring says. "They are all good people, but their background is in administration, paper work, not old wooden ships."

The Wapama, a 1915 schooner that once hauled lumber and passengers up and down the Pacific Coast, has been sitting on a barge since 1980, waiting for what was to be a three-year, $2.8 million repair project.

After Dring retired, the effort came to a halt. Now the vessel collects rainwater in its hold as the $8,300-per-month rent for the barge piles up.

A survey of the ship is now under way by Guilford Full, a noted marine surveyor. "We won't know what we have to do (to repair it) until we get the facts," says O'Neill.

Five of the other six major ships in the fleet are tied up at the Hyde Street Pier, at the northern end of San Francisco. A sixth, the Balclutha, is at nearby Fisherman's Wharf.

Ray Aker, a retired sea captain who is head of Friends of the Historic Ships, a volunteer group, wants to move the vesseis to the China Basin, which is a more protected spot on the city's eastern side. Now the ships are pounded by swells and bumped against the pier.

Completion of a breakwater will reduce that wear and tear but there is fear that the pounding will continue, particularly during storms.

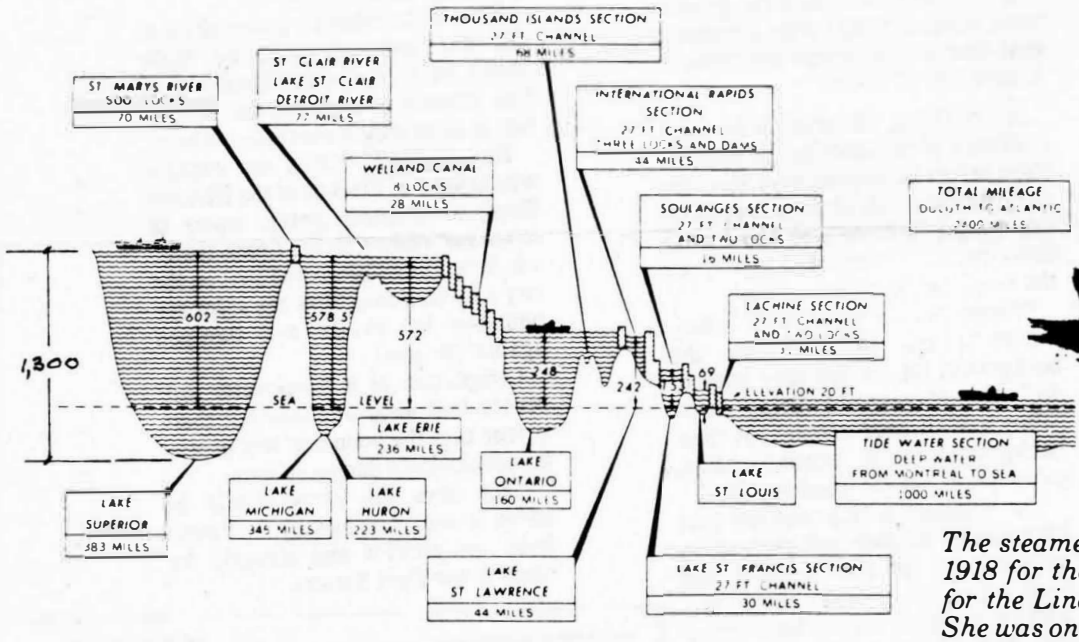
Aker says the ships should be under a separate agency — "away from the politics and struggle for funds in the Park Service."

LAKE FREIGHTERS

As a kid growing up in New York in the early 30's I saw these vessels going in an out of the harbor. My Dad, who had a trucking business, often took me to the docks on the North and East rivers to see the ships. Many well known shipping companys operated "Lakers" however many more were operated as tramp steamers.The Navy also operated these ships as supply vessels well into WWII.

Model Shipways put out a plan 3/32"=1'-0" which I have had for about 30 yrs, also recently received a 1/96 plan from Abe Taubman as my old plans are becoming hard to read. (For those interested in this plan see Abe Taubman's catolog,Pg 21 GLV-011 Lake Dancey at $9.00)

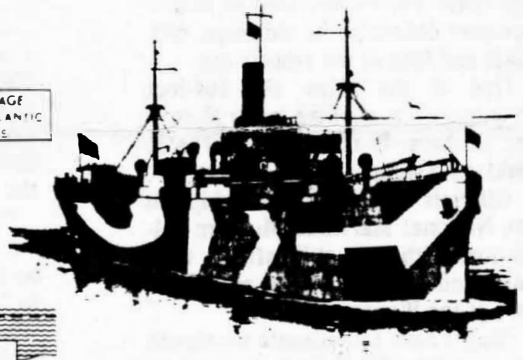
These ships were WWI's answer for a quick cargo fleet to transport war material to the allies. These ships started life as a Norwegian design for the British. Over 400 were supplied by ship yards on the Great Lakes. The U.S. took over many ships as we drew nearer to war. The deminsions were 260' X 43'6" as they had to fit into the locks which were 270' x 45' in order to get to the ocean. Notice the profile of the Great Lakes- St Lawrence Seaway system, a long way up or down for a ship to travel. (approx. 2,400 mi.) to the ocean. Ford Motor Co. bought a large number of surplus vessels in 1927 and melted them down into model "T"s and "A"s. Who knows, you may have driven a "Laker". Ford kept a few ships and made ore carriers and supply vessels out of them. At the start of WWII these were taken over by the U.S. Govt. as ships were in short supply.



The Great Lakes Area

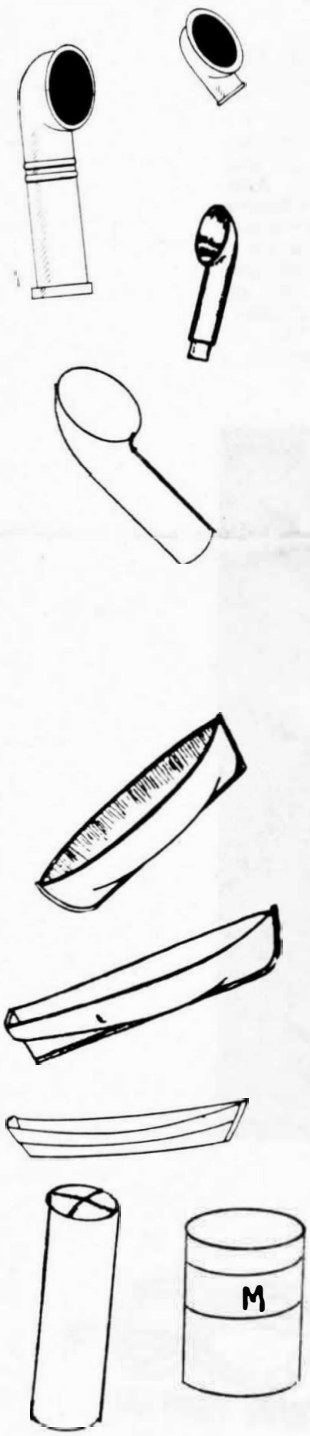
	Water Surface Square Miles	Watershed Square Miles
Lake Superior	31,200	51,600
St. Marys River	150	800
Lake Michigan	22,450	37,700
Lake Huron and Georgian Bay	23,800	31,700
St. Clair River	25	3,800
Lake St. Clair	410	3,400
Detroit River	25	1,200
Lake Erie	9,960	22,700
Niagara River	15	300
Lake Ontario	7,240	21,600

Total area of drainage basin—270,075.



The steamer Lake Ledan *was built at Superior in 1918 for the Cunard Steamship Company, famous for the Liners* Queen Mary *and* Queen Elizabeth. *She was one of a number of small ocean-going ships that were built in the Great Lakes. Only a handful of ships were delivered before the United States entered the First World War, and those under construction were requisitioned by the government, which contracted to build more than 400 additional ships of similar design. This vessel was built by the Superior Shipbuilding Company to a length of 261 feet and a beam of 43 feet. Numerous other shipyards joined the emergency shipbuilding program and most of the vessels commissioned were given the prefix name,* Lake. *Camouflage design was carefully painted to government specifications, with less than an inch tolerance for error. There is hardly a port in the world that has not been visited by a* Lake *ocean ship at one time or another. Some of the vessels actually returned to their native Great Lakes, including the* Lake Ledan *which worked for the Ford Motor Company until 1927. Others returning to the Lakes include the famous* Poker Fleet, *bearing the names* Ace, Queen, King, Jack *and* Ten.

For years a have complained about model ships with un-scale looking ventilators... no holes in them, how do you get air down to those little people in your engine room. I have observed builders models that have vents formed of sheet metal which are excellent, however that kind of metal work is beyond my scope. Looking over some old Model Engineer magazines gave me the answer to this problem. This method (printed below) makes it possible to make scale vents in 1/96 with ease. Other possibilities could be life boats, smoke stacks, torpedo tubes, etc. Male or female patterns could be used with this method. "CERROBEND" is expensive however recoverable each time after plating. Next month I will run an article on a gent who uses lead for a pattern. Any one who tries this out should give us a report at one of our meetings. If nothing else at least the termites in your wooden hull will breath more easly.



Electroforming Small Components

By R. H. Mapplebeck

THE heavy deposition of copper by electrolytic action has a ready application in model engineering, where it is desired to fabricate small hollow components of an awkward shape, such as ships' ventilators.

The principle involved is to make a pattern out of wax, and use this to make a mould in plaster of paris.

A low-temperature melting-point metal is cast in the plaster mould and subsequently, when cool, is electroplated to the thickness required, the metal being remelted and run out, leaving a hollow shell.

The author of these notes, desiring to make some deck fittings for a model launch, decided to try this method, and the results proved so satisfactory that it has been thought worth while to pass on the information to others of the fraternity who may like to have a go at this somewhat unusual though fascinating procedure.

The Wax Matrix

First of all, about eight ordinary wax candles were melted down, the wicks removed, and the molten wax cast in a small tin of sufficient volume to cover the size of the proposed component.

It was found that the wax, on cooling, shrunk to some extent and it was a simple matter to remove the solidified block from the tin by means of a few sharp taps.

The next step was to carve out the component's outside shape in the wax by hand, with a penknife or some other convenient tool. This was found fairly easy to accomplish on the whole, especially the ventilators, photographs from books or magazines providing suitable guidance.

One wax matrix was used for each component, but ingenuity will no doubt suggest to the reader methods by which the same matrix could be used for a number of castings. For instance, the plaster mould could be carefully sawn through as in the photograph, so that repeated castings could be produced, due allowance for the width of the sawcut being made by suitable packing.

Care must be taken in handling the wax whilst carving, or it will become warm and lose its shape.

The Plaster Mould and Casting

Some plaster of paris was made up with cold water in a cocoa tin, to a consistency suitable for casting, and the wax carving was pushed in just level with the surface. When the plaster had hardened, it was heated in the oven (the wife was out at the time) until the wax melted, which was then poured out, leaving a plaster mould of the shape desired. This mould was then used for making the metal casting, which was carried out with "Cerrobend" or "Wood's Metal" which will melt in boiling water, but is quite solid at room temperatures. No doubt lead would do equally well but would be more difficult to handle on account of its higher melting point.

Having poured the molten metal into the mould, a piece of wire with a hooked end was lowered into the melt and kept in position until it had solidified, a matter of a few minutes only.

The plaster was then broken open (or carefully sawn through as desired) releasing the solid metal component shown in the accompanying photograph. This was filed up and polished, and here let it be emphasised that a good polished surface is absolutely essential if the finished product is to be smooth.

The Plating Bath

The wire projecting from the casting was now used to suspend the component in the plating solution whilst electro-depositing the copper, which was carried out as follows.

The plating bath can be any suitable glass or glazed earthenware vessel, but must definitely not be metal on account of the acid. A two-pound glass jam jar was found to be just the job and this was filled about two thirds full with the following solution.

Copper Sulphate—32 oz. or 200 gms.

Potash Alum—2 oz. or 12 gms.

Pure Sulphuric Acid—9 oz. or 56 gms. by weight, or 5 fluid oz. or 31 c.c.s by volume.

Distilled water—1 gallon or 1 litre.

The two measuring systems are given for convenience, and, of course, there is no need to mix up more than say, one pint of solution, though the above proportions must be adhered to.

To allay the fears of the timid, it should be mentioned that during the plating process there is no heavy gassing or creeping of the solution or its salts; the process is quite clean.

As previously mentioned, the specimen was lowered into the solution by means of the cast-in wire and kept in position by hooking it over a piece of wood placed across the mouth of the jam jar. This formed the cathode or negative electrode of the bath, whilst the positive electrode or anode consisted of a heavy copper plate about 2 in. × 4 in. × ⅛ in. connected by a piece of 12-s.w.g. copper wire.

A source of direct current was connected to the bath (negative to the specimen and positive to the copper plate) at a potential of six volts, the

The finished ventilator for deck mounting

current being regulated to pass about half an ampere.

It can be left to the individual to devise a means of regulating the current, which should be at a density of about 15 amps per square foot area of specimen to be plated. A few turns of resistance wire suspended in the leads, or a small lamp, should prove adequate. The source of direct current was a small 5-ampere hour accumulator, connected to a charger, so that it could be left working indefinitely without draining the accumulator, as this process of copper deposition took 48 hours plating to deposit 50-thous. of copper, roughly one thou. per hour.

If a sufficiently large accumulator or other direct current source is available, the charger, of course, will not be needed.

Every few hours the specimen should be turned on its hook so that a different side faces towards the anode in order to obtain a more even distribution of the copper.

Another point to bear in mind is that the current density should not be increased in the hope of speeding up the process, as this will only result in inferior plating or a spongy deposition of the copper. The slower the process, the more efficacious the result. Also, it may be found that if carried for too long a period there may be a tendency to produce a growth of nodules on the specimen. Nothing can be done then but to halt the process.

It will be noticed that the more copper deposited, the more will the anode become eaten away, since it is the source of copper, the solution only acting as a conductor, which was the reason for using a heavy gauge anode plate and connecting wire. It does not matter about the wire suspending the specimen, as that will become coated with copper where it is immersed in the solution, but a suitable gauge wire to use is say, 18-s.w.g. copper.

After about 48 hours, the specimen was removed from the bath, and thoroughly washed in hot water, after which the suspension wire was cut off, and the copper which had been deposited on the neck filed away to expose the "Cerrobend." The specimen was then put in a container of water and brought to the boil, whereon it melted and ran out, leaving a hollow copper shell.

The rough parts were filed away, the whole being rubbed up with emery paper, and finally polished as required with metal polish

Although this process may seem complicated, it is really quite simple, and it produced a very strong and lifelike ventilator, as shown in the photograph.

A Diversion

Whilst on the subject of "Cerrobend" it has been used by the author with great success for bending small copper pipes and tubes. It is only necessary to put a bung in one end of the tube to be bent, melt up some "Cerrobend" and pour it into the tube, making sure that the tube has first been coated with oil on the inside to prevent the molten metal sticking on withdrawal.

To make sure that the molten metal has settled down in the tube properly without solidifying in lumps, the tube should be heated gently whilst in a vertical position either by playing a flame up and down the tube or by holding it near a source of heat so that it can be kept at about 100 deg. C. It should not be overheated, or the alloy will deteriorate.

When cooled the tube is virtually solid, and can be bent very easily without kinking, and it only remains to re-heat the tube and run out the metal.

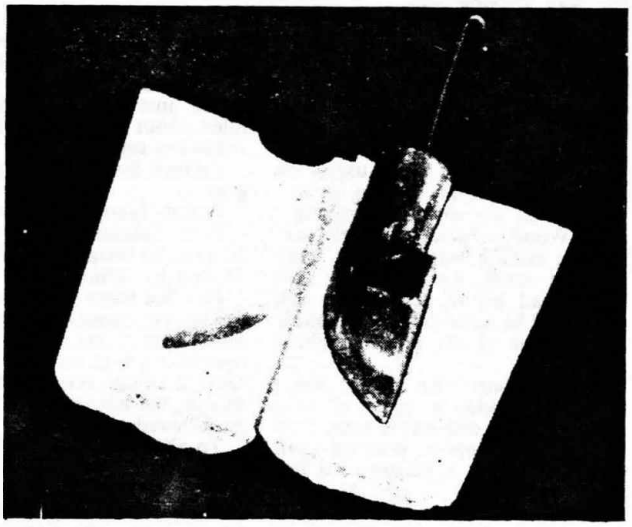
Conclusion

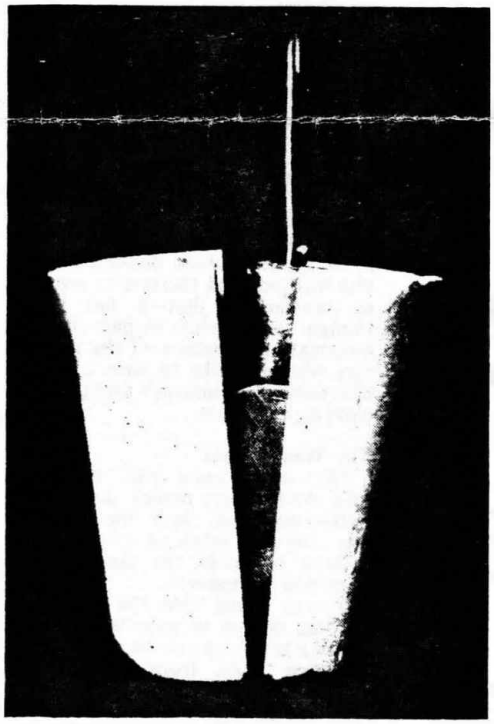
Although a ventilator has been mentioned, many other fittings have been made successfully by this process. Being copper, they are very suitable for boats, and as they are hollow, are very light, and may be painted or not as desired. Also, they can be soldered or otherwise handled like any other ordinary copper fitting, as far as the thickness of the shell will allow, so that with small threaded studs soldered to their underside, a means of fixing is obtained.

Thanks are due to Mr. M. Townley of St. Albans, who kindly took the photographs.

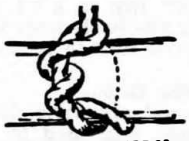
Right—Prising apart the halves of a plaster mould reveals the metal casting

Below—Showing the "Cerrobend" casting in the mould. Note the cast-in wire for suspension during plating





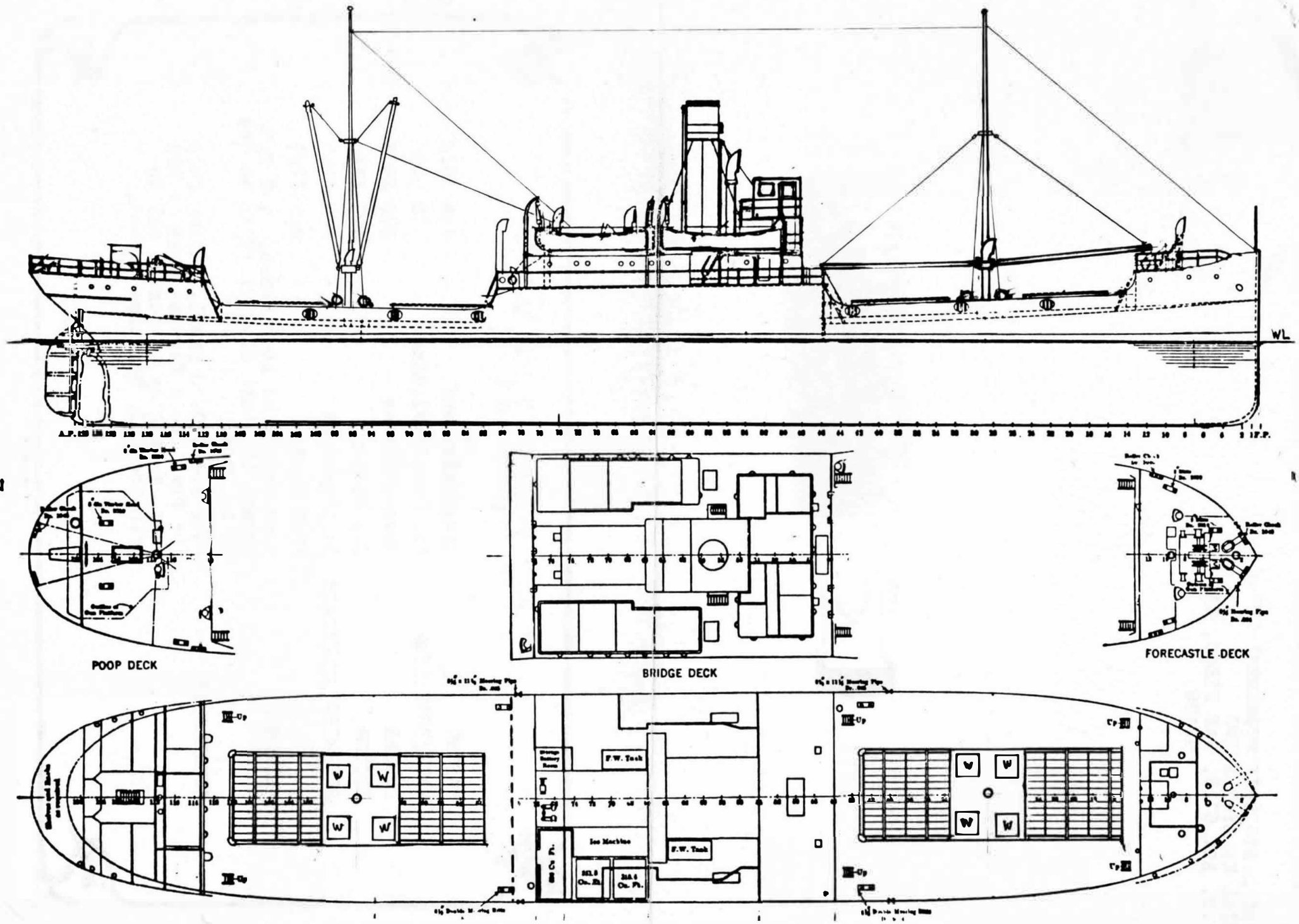
KNOTS HITCHES & SPLICES



TIMBER HITCH

LARIAT LOOP

FIGURE EIGHT KNOT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POOP DECK
BRIDGE DECK
FORECASTLE DECK
F.W. Tank
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BILL KELLY-FLEMING
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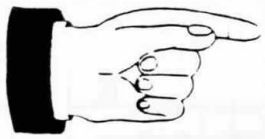

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SAN DIEGO SHIP MODELERS' GUILD
OFFICERS FOR 1986

MASTER	Doug McFarland	/redacted/
MATE/LOGKEEPER	Bill Kelly-Fleming	
PURSER	Herman Boehme	
EDITOR	Roy Nilson	
STEERING COMMITTEE	Al L'Heureux	
	Fred Fraas	
MEETINGS:	3 rd Friday of each month, 8;00 P.M. aboard the bark STAR OF INDIA on the Orlop Deck.	
MEMBERSHIP:	Dues are $10.00 yearly. After July the dues are ½ for the rest of the year. We highly encourage all to join the S.D. Maritime Museum.	