MARITIME HERITAGE ASSOCIATION JOURNAL

Volume 18, No. 1. March 2007

Website: www.maritimeheritage.org.au

A quarterly publication of the Maritime Heritage Association, Inc.

C/o: The Secretary (Ross Shardlow), 23 State Street,, Victoria Park, W.A. 6100.



Editor: Peter Worsley. 12 Cleopatra Drive, Mandurah, W.A. 6210

Annual General Meeting

at otro

12 Cleopatra Drive MANDURAH

on

Sunday 25 March 2007—10.00am

Come for morning tea and stay for lunch

For those spouses and friends who do not wish to be involved with the AGM there will be a "show & tell" of Jill's beautiful textiles, embroideries and silver which Peter has brought home from his most recent visits to South East Asia and China



The Maritime Heritage Association Journal is the official newsletter of the Maritime Heritage Association of Western Australia, Incorporated.

All of the Association's incoming journals, newsletters, etc. are now archived with Ross Shardlow who may be contacted on 9361 0170, and are available to members on loan Please note that to access the videos, journals, library books, etc it is necessary to phone ahead.

(If you have an unwanted collection of magazines of a maritime nature, then perhaps its time to let others enjoy reading it. Contact the Association; we may be interested in archiving the collection.)

Material for publishing or advertising should be directed, preferably typed or on disk, to: The Editor, 12 Cleopatra Drive, MANDURAH, Western Australia, 6210.

Except where shown to be copyright, material published in this Journal may be freely reprinted for non-profit purposes provided suitable acknowledgment is made of its source.

www.maritmeheritage.org.au

Letter to Captain Robert Brown, Master of the ship *Emperor of China*.

Ship, Emperor of China, 27th April, 1849.

Dear Sir, - We, the undersigned, passengers of the good ship *Emperor o/ China*, at the termination of our prosperous and speedy voyage from Western Australia to Swansea, cannot separate without expressing to you how fully we appreciate your unremitting care and assiduity in the command of a vessel in every respect of first-rate qualities; and how sensible we are of those to whom we are indebted, under Providence, for that unusually speedy voyage, to your admirable skill and seamanship, and the excellent conduct of those under your command, creditable in no small degree to yourself.

Your kindness to the children of the passengers, and generous consideration of the native boys in the charge of Don Rosendo Salvado, especially claim acknowledgement, and it only remains for us, in bidding farewell, to assure you of our best wishes for your health and happiness, and the success of your career in that profession which your abilities as a commander render you fully equal to the duties of, under any circumstances, however onerous or difficult.

We are, dear sir, very sincerely yours,

R. R. MADDEN, Colonial Secretary, Western Australia HARRIET MADDEN.
R. SALVADO.
HENRY SWENY.
WILLIAM R. DINELEY.
RICH W. NASH.
M. CONDSON. JAMES CONNALLY.
To Capt. R. Brown

Things They Would Rather Have Not Said

Remember never to make yourself the busy body of the lower classes for they are cowardly, selfish and ungrateful...

Richard Parker, 1797

Parker was twice discharged from the Royal Navy, then press ganged into it for a third time. While on board HMS *Sandwich* he was the organiser and leader of the Nore Mutiny in 1797. The mutiny had little support and Parker, along with twenty four others, was subsequently hanged, having achieved nothing and being regarded with contempt by those he had tried to lead.



Spirit of Bermuda

or those who know Chris Blake, lately captain of the *Endeavour* replica, you may be interested to know that he is now captain of the sail training vessel *Spirit of Bermuda*. This vessel is a recently launched, three-masted schooner 84' 8" overall with a beam of 23' 3". The design is based on a painting of what is possibly the oldest known depiction of a multi-masted Bermudan rig. The painting, by John Lynn is dated 1831 and shows the schooner, carrying the colours of the Royal Navy, beating into Port Royal, Jamaica.

In the 1820s the Royal Navy commissioned a number of these schooners for use as despatch and patrol vessels. They were built in Bermuda by Bermudian shipwrights. However the modern vessel

was built in Rockport, Maine, USA, and has carbon fibre masts and a 385 horse-power diesel to help her along. Of the five sails (she has two headsails) the mizzen is the only one with a boom, and that is attached to the starboard side of the mast with ropes and pulleys. None of the masts (the main is 93' above the deck) has spreaders or backstays, and the shrouds are of rope, leading to 34" bronze chainplates fastened to the outside of the wooden hull.

Owned by the Bermuda Sloop Foundation, she will take young Bermudians on sail training voyages in the Caribbean, teaching them sailing skills, teamwork and instilling pride in Bermuda's maritime history.

Magnetic Docking

n early 2003 the port of Rotterdam was about to test an electromagnetic system of docking ships, replacing the normal hawsers that secure a vessel to a wharf. The array of 1 metre long electromagnets side by side holds the ship against the wharf. There are 13 magnets in each array and the inventors say that 52 of these would be sufficient to hold a 400 metre container ship in winds to force 12. Allowance for rise and fall in tide is by periodically switching the arrays off and on again. This is evidently not a new idea but has not been tried before due to the fear that the mag-

netic would seriously affect ship's navigation and communications equipment, and also some cargoes, such as computers and TVs. However the system that was to be tried in Rotterdam relies on the particular pattern of the 13 magnets in each array producing enough force to hold the ship but with the magnetic field only penetrating a very small distance into the vessel. The system was expected to save the port €5,000,000 (approx \$8.33 million) in a year, and the average turnaround time of each ship reduced by 40 minutes. I have not read of the results of these trials.



I couldn't resist putting in this picture of some awesome weather in the offing.

The edge of cyclone Graham



The Ditty Bag

An occasional collection of nautical trivia to inform, astound, amuse and inspire.

(The inspiration could take the form of contributions to this page!)



When the German container ship HPL Panama (40,306 tons) went aground on the beach at Ensenada on Christmas Day 2005 a major effort was needed to get her off. After tugs had failed to move the ship she was lightened by having containers removed both by helicopter and by means of a crane operating from a 152-metre long rock and sand ramp built out from solid land. After six tugs and a barge with hydraulic pullers, all totaling more than 80,000 horsepower, still could not get her afloat a dredge was used to dig a channel alongside. The three largest tugs and the barge puller were then able to get the ship afloat after 75 days of effort. There was no significant damage to the HPL Panama except some damage to the propellers.

Commanding officers of Royal Navy vessels which carried bullion beyond 1,800 miles from England were paid a commission of 1% on the value of the cargo carried. For instance Captain Owen Stanley, in command of HMS *Rattlesnake* (503 tons) on the way to carry out surveys in waters off the Great Barrier Reef and southern New Guinea in 1847, carried £50,000 to the Cape colony and £15,000 for Mauritius. His payment of £650 was about the same as his annual pay. He also received 21 shillings per day on top of his salary as survey pay, this extra pay commencing the day *Rattlesnake* sailed (even though the first sail was only from Portsmouth to Plymouth to pick up the bullion).

Scruple. An archaic measure of weight used by apothecaries, including those aboard ships in the mid-19th century, to measure small quantities of ingredients for medicines. One scruple equals 1.296 grams.

HMS *Thalia* was the last ship built at Woolwich Dockyard. Launched in 1869 the wooden corvette of 1,459 tons used both sail and steam. She was converted to a troopship in 1886 and carried New South Wales soldiers to the Sudan War.

In 1867 Charles Harper and Samuel Viveash built themselves a pearling lugger on Andover Station in the Pilbara. They felled, sawed and built a 12 metre vessel from paperbark and named it *Amateur*. This was then transported on a 4-wheeled dray 50 kilometres and launched at Mystery Landing. Lack of capital was to prove no barrier to these enterprising young men.

George Vancouver (1758-98) anchored at King George Sound on 27 September 1791. In fixing the position of the sound Vancouver was very much influenced by his training under the meticulous James Cook, under whom he had done two voyages. The latitude of 35° 5' 30" south was calculated on the basis of nine meridian altitudes of the sun, taken by four different officers using four different sextants. The longitude of 118° 14' 13" east (a much more difficult calculation) was the average of 85 sets of lunar distance readings. As each reading contains six observed distances this amounted to some 510 observations. Vancouver took twelve sextants with him.

In 1829 Captain James Stirling arrived in Western Australia aboard the chartered barque *Parmelia*. He later received a letter from the Navy Office dated 19 February 1830 containing the following account:

Account of the expenses incurred for the Passage of Captain James Stirling, with his family and furniture, from England to Swan River, in the Parmelia, freighted transport...

Particulars

Passage of 10 adults, at £9.18.0 each
Do. of 1 child
Freight of 25 Tons of Furniture, at £4.19.0 per ton
123.15.0

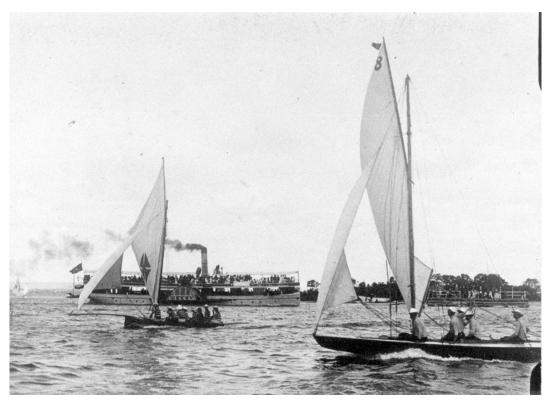
£227.14.0

Stirling's half pay had an imprest placed on it by the Commissioners until the amount was paid by him to the Navy. The Navy were determined as much as possible to defray the £2,000 cost of chartering the *Parmelia*.



Early Swan River Yachts

Yachts from around 1906 with the photographer's original titles. Can anyone name the yachts in the top photo? The *Decoy* is in the background.



Before the race



Gloria



HMS Success and the Royal George

There is a link, a tenuous link, between Western Australia and the wreck of the *Royal George*.

n 1782 the first-rate ship Royal George of 108 guns sank at anchor at Spithead, drowning about 1,000 of the 1,300 people aboard. The Royal George sank in 72 feet of water with her masts above the sea surface. This was a danger to shipping in what was a very busy anchorage, and attempts were made almost immediately to raise her. The Royal Navy's attempts to lift the vessel were unsuccessful as she was too heavy, so they attempted to blow her to pieces. This was also unsuccessful. From 1834 to 1836 the brothers, John and Charles Deane recovered a number of bronze and iron canon, 29 in all, but they did virtually nothing about the wreck as a navigational hazard. Their interest lay in the guns, as these could be sold. In fact they received £1,512.6.2 for the recovered guns. The next attempt was made not by the navy, but by the army, in the person of Colonel Charles William Pasley (later general Sir Charles William Pasley, K.C.B., F.R.S., D.C.L.), of the Corps of Royal Sappers and Miners, in 1839.

Pasley had shown an interest in diving since a request by the London Water Bailiff to blow up the wreck of the 200-ton collier brig William landed on his desk. The brig had sunk in the Thames in 1837 and was a navigation hazard. The London Water Bailiff requested assistance from the Board of Ordinance. As Director of the Royal Engineers Establishment, Chatham, the papers came to Pasley because mining (as in underwater explosives) was the province of the Royal Engineers. The William was at a depth of seven fathoms and nobody had ever attempted blowing up wrecks in such deep water. He hired diving suits and trained two of his non-commissioned officers to dive, and in May 1838 carried out the removal of the wreck successfully. He then turned to that other navigation hazard, the wreck of the Royal George.

Colonel Pasley had a team of 4 officers and 32 men, a diving bell and some of Augustus Siebe's latest diving outfits. Where the link with Western Australia enters the picture is that he used HMS *Success*, the 6th rate, 28-gun frigate, which had

twice visited Western Australia, as his dive support vessel. HMS *Success* (504 tons) came to Western Australia first in March 1827 under the command of Captain James Stirling, and again in November 1829 under the command of Captain William C. Jervoise. On this latter occasion she ran aground at Carnac Island on 28 November 1829. The frigate required considerable repairs, which took over a year at Careening Cove on Garden Island, before sailing for India on 10 January 1831. (See the excellent article by Ross Shardlow in MHA Journal, Volume 14 No. 1, March 2003)

Pasley's task was to demolish and remove the wreck of the Royal George, and recover the remaining bronze canons valued by him at £5,637.4.3. It was a task that the professional divers of the day would not attempt, as they considered it too deep and dangerous, the depth being nearly 90 feet at high tide. Most of Pasley's demolition was carried out using oak hogsheads of gunpowder, placed alongside the wreck and exploded using a wire from a voltaic battery on the deck of the dive boat. This wire was coated with a mixture of tar softened with beeswax and tallow, to waterproof it. This method would appear fairly unremarkable except that the lead sheathed oak barrels when placed by the divers were empty; they were then filled with gunpowder via a brass spout from the deck of the dive vessel, and that tube then welded or soldered shut. Today's occupational health and safety experts would definitely not approve of that practice!

However, much of the diving was carried out with practices that are accepted as standard today, such as diving in pairs. Despite their lack of knowledge of the dangers of pressure caused by depth, not one life was lost diving on the *Royal George*. There were some close calls, such as when Corporal Richard Pillman Jones got his safety-line and air-line entangled in the chains which were lifting heavy pigs of iron ballast. He slashed his air and safety-lines, kicked off his heavy boots and ascended, exhaling continuously in copybook fashion. Competition between pairs of divers to raise more than the others became almost battles at



times. Pasley encouraged this as sling loads of timber and the occasional cannon were brought to the surface. The salvage, and the deeds of the divers, were the subject of much public interest, and newspaper correspondents aboard HMS *Success* sent daily dispatches to their editors.

Pasley not only introduced many modern diving techniques but was an early maritime archaeologist. All the artefacts brought to the surface, and there were very, very many, were carefully recorded, including drawings.

The salvage finished in 1845, but not before Colonel Pasley of the British Army had organised one of his men, the same Corporal Jones mentioned above, to set up the Royal Navy's first diving school. The 13 pupils for the first course came from HMS *Excellent*, and the Royal Navy has since retained this name for its diving school.

References

Blackmore, H.L., 1976, *The Armouries of the Tower of London: 1. Ordinance*. Her Majesty's Stationery Office, London.

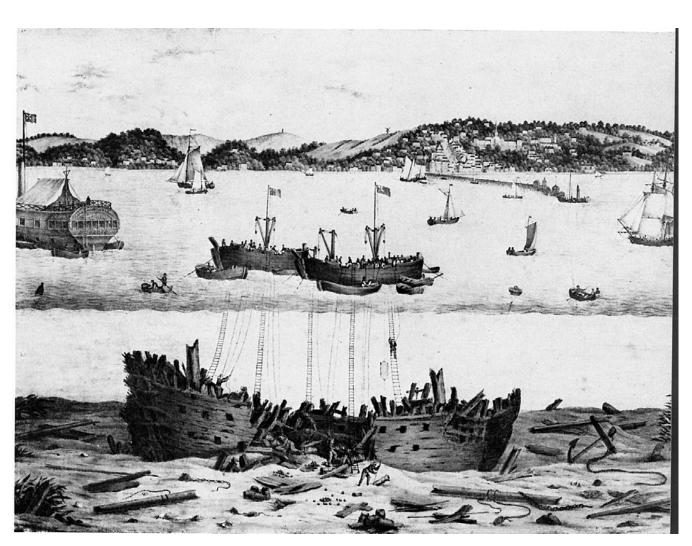
Dugan, J., 1956, *Man Explores The Sea*. Hamish Hamilton Ltd., London.

Gosset, W.P., 1986, *The Lost Ships of the Royal Navy* 1793-1900. Mansell Publishing Ltd., London.

McKee, A., 1968, *History Under The Sea*. Hutchinson & Co. (Publishers) Ltd, London.

Shardlow, R., 2003, HMS Success Hove-To Off Carnac Island, Western Australia – 1827. *Maritime Heritage Association Journal*, March 2003.

Peter Worsley



Salvage work on the Royal George. The vessel on the left with the canvas shelter is HMS Success



The Cyclone of 1908

The following items from the *Headland Advocate*, Saturday 9 May 1908 are self explanatory.

IN THE TRACK OF THE WILLY ON BOARD THE PAROO

(By Mart Freney) Broome, April 30 1908

Today came and went and very little information was received from the pearling grounds, the scene of the disastrous storm. Mr. Male, M.L.A., and members of the Pearlers' Association met at 9.30 this morning and wired to the Premier for permission for the Paroo to make a search for the missing schooners, luggers and men. The permission was received during the afternoon, being subject to the approval of the master, Capt Mills. On the arrival of the Paroo at the jetty, at 8.30 p.m., a hurried consultation took place, when it was decided to search the coast thus: The Paroo would proceed SW as far as Solitary Island, keeping about 25 miles from the shore, and then return NE to Mangrove Point, or until she met the schooner that was sent out from Broome to patrol the coast. We steamed away from the Broome jetty at 20 minutes past midnight, Mr. Male accompanying us. We proceeded SW under easy steam, and at daylight on Friday a boatswain's chair was rigged, and it was arranged that the Malay crew should take hourly watches from the truck of the mast. At 6 a.m. the first man was drawn up about 80 feet above the sea level to scan the horizon for any sign of sail or life. Everybody on board, both passengers and crew, were scanning the ocean. The day was beautifully fine and clear, and there was hardly a ripple on the water, with a light westerly wind. We sighted nothing till 11 o'clock, when the look-out (the sixth to go up in the chair) called out in Malay that a sail was visible to the SW, right in out track. We soon picked up the sail from the deck of the Paroo, and at once recognised her as the brigantine Gwendoline, Capt Percy master and owner. She acts as tender to his pearling fleet. We came up with him at 11.45, steamed alongside, and Capt Percy reported a terrible gale on Sunday night and Monday morning, with tremendous seas, heavy rain and furious wind from all points of the compass, particularly the NW. Before the blow commenced he was anchored near Patterson's shoals, close to the schooner Alto – the tender in charge of Newman & Goldstein's

fleet – and all her luggers and several other luggers. During the blow his vessel drifted 25 miles and then the chain parted and lost his anchor and 90 fathoms of chain. The seas at the time were fearful, and they washed his motor boat from the davits also the whale boat and other loose deck fittings. He was then searching for his motor boat and one of his luggers and also to render any assistance to his brother pearlers.

THREE DAYS IN THE WATER

During his search Capt Percy picked up a Malay seaman clinging to the top of a deck house of a lugger, where he had been for three days. He was terribly exhausted but has since recovered. The Malay states that he belongs to Moss & Cov's station, and that his five mates were drowned; that his boat went down in the storm. also another boat belonging to the same station, the six men aboard of her being drowned. Capt Percy says he parted with the Alto on Tuesday morning steering SW, the Alto going NE, in search of her luggers (over 20), none of which have yet been found. Capt Percy's losses are one lugger and six men missing, a motor launch, and several dingheys [sic], anchors and chains. Capt Mills arranged with Capt Percy to meet him on the next evening at Mangrove Point. The Gwendoline then shape an ENE course and the Paroo continued her way. We sighted nothing during the afternoon, and anchored at 6.40, north of Solitary Island. On Saturday morning (May 2) we started at 5.30 southwards. The look-out soon reported luggers to the SE, at 6.45 we were up with them and the schooner Jimmy. The master, J. Clark, reported very heavy weather at Turtle Island, and asked how the weather was northward. All these boats were working away, some of the divers were almost under the Paroo. At 7.30 we steamed away about due east from the second wash to patrol the longest stretch of unbroken beach in Australia, the land rising very gradually from the beach, and not even a creek discharging into it. At 10 a.m. we passed Wallal, standing off shore 4 or 5 miles, from where we could see plainly several whites and natives on the beach. About 10 miles further on we discovered what appeared to be a motor boat, bottom



up, high and dry on the beach. We sailed on and soon discovered some wreckage, where we anchored. Capt Mills, with Mr. Male and a crew put off to the wreckage, which proved to be a luggers main mast with sails attached, the mast being cut away. They secured the sail, boom, and gaff and found a canvas water bag attached branded J.H.C. immediately identified it as belonging to J.H. Cormack, of the lugger Commonwealth, which was reported at Broome as safely anchored with her two masts gone and the tender (a Jap) drowned. We steamed on our course and at various points sighted 4 whaleboats or dingheys [sic] and a few loose gaff booms and masts floating, also a great deal of floating seaweed. At 3 p.m. we caught up with the Gwendoline once more. Capt Percy had nothing further to report other than that he picked up a few spars. We then transferred Mr. Male to the Gwendoline, intending that she should continue along the coast. We steamed on and at 5.40 sighted a mast sticking out of the water about a mile from Mangrove Point. It was too dark to do anything, so we anchored for the night. On Sunday morning we were up at daylight, and Capt Mills, the Chief Officer, the writer and a crew of three rowed over to the vessel, which was another lugger, which, apparently, had sunk at her anchor. Her foremast was standing with the rigging taut, her jib-stay carried away, her gaff was broken and her boom was floating with the foresail attached. The main mast was broken off about 12 feet from the deck, and was floating, being held fast by the rigging. The top masts and both fore and main masts were painted white, but the truck had gone. Close to the top of the foremast was the crutch of the main boom, lashed securely with a rope and a strong fishing line. The number 101 was cut into the support of the crutch. The top of the mast had some of the paint off, indicating, with other signs, that some of the crew had climbed there for safety, but it would be of little use, as the tide completely covered the mast at high water. We could do nothing more, the water being so muddy that we could not see her hull. She lies in about three fathoms of water at low water springs, and a very strong tide runs there. The lugger Andrew, of Messrs Robinson and Norman's fleet, came up to us. She had a Japanese crew on board, and we could not understand any of them. Wen [sic] we boarded the Paroo we found the Gwendoline close up, and the schooner Mena and lugger New Moon bearing down on us. The New Moon (which, strange to say, is owned by Capt Mills,) had on

board a telegraph operator with a telephone. They sailed from Broome at mid-day on Thursday, meeting head winds all the way. The Gwendoline reported a lugger high and dry on the bank over the reef, with a flag flying on the sand hills close by. The Andrew lugger sighted her and stood in. With the glasses we could see three men on the beach, and they appeared to be well pleased when the Andrew dropped anchor. I watched them meeting, and think the shipwrecked men were Japs. They all had a look round the lugger on the beach and then pulled off in the dinghey [sic] to the Andrew.

The New Moon reports that there are many wrecks and much wreckage at Cape Joubert, Geoffrey Bay, and Red Hill, where there were

A GREAT NUMBER OF BODIES,

all colored men, excepting 2, and all more or less frightfully disfigured by sharks. The stench along the beach there was horrible.

Mr. Male went aboard the New Moon bound for Broome. The Gwendoline then squared away for Wallal. Mrs. Percy, wife of Capt Percy, always lives on board, and went right through the gale safely. The Mena anchored close to the wreck (101) to render assistance to the three shipwrecked men the Andrew was bringing out. We then steamed 10 miles along the coast, saw many wrecks and much wreckage floating about while there were numerous luggers rendering assistance. At 10.30 we steered for Hedland.

THE MOST DISASTROUS EFFECTS OF THE BLOW

seem to have been centred between Mangrove Point and Cape Frazier. It was here, in Frazier Bay, that most of the luggers were sheltering from an easterly wind and Sunday, all anchored close together. When the wind veered to the nor'-west many parted their chains or dragged their anchors and dashed into other luggers close by, smashing them to pieces and sinking immediately. An eye witness told me that the

SCREAMS AND CRIES OF THE MEN WERE AWFUL.

in fact the description is better left untold. Many of the men were in the water for hours and some for days floating on anything coming their way. McLaughlin and Gaskin are the only whitemen so far known to be drowned. Bodies, bedding, and all sorts of wreckage were floating about here for days, and most of it is now thrown up on the



beach.

THE NUMBER DROWNED

will not be known until the pearlers have a roll call in Broome, and I fear the figures will be astounding. Many small pearlers have lost all their boats, and the loss to Broome will be very great.

The only thing we sighted after leaving Patterson's shoal was the Charon making a search on her way to Broome.

Too much praise cannot be given to Capt Mills and his officers for the systematic manner in which they carried out the search. Mr. Male also deserves credit for the active part he took.

From Hedland to Wallal

NO WRECKS

The Port Hedland police report having searched the beach as far as Wallal without having discovered any wreckage.

A native was sent out towards LaGrange from Wallal, and after proceeding about 20 miles he met a Japanese, who reported that his five mates had been drowned and the lugger lost.

News from Broome

SOME FORTY VESSELS LOST ONE HUNDRED MEN DROWNED DAMAGES OVER FORTY THOUSAND POUNDS

Broome, May 7

Mr. Arthur Male, M.L.A., returned from his rescue trip along the 90-Mile Beach yesterday, he went down with the steamer Paroo and returned on a lugger. On the way back he landed at many places where wreckage was seen. He visited Noonan's and Eacott's cattle stations to pick up any who may have made those places; he also examined the

wrecks about Capes Joubert and Frazier.

It is believed now that 36 luggers and four schooners have been lost. It is impossible yet to say how many lives have been lost, but it is almost certain that 100 have perished. There were three whites lost – Richard Gaskin, Alex McLachlan and Fred Koschus.

Mr. Male was shown the bodies of 17 cattle blown into the sea and then cast up again. At Noonan's it is surmised that many more have been drowned.

The sea weed is piled up feet high along the 90-Mile Beach, and particularly close to the scene of the wrecks, so that it is possible that many bodies are buried underneath.

The actual loss to Broome will be between £40,000 and £50,000.

Miscellaneous

Capt. Mills, of the s.s. Paroo, states that his ship drove through what was apparently the tail end of the storm for 600 miles before reaching Derby, the rain falling in deluges.

Several narrow escapes by luggers and schooners are reported, the boats having for various reasons, to leave the scene of the disaster for other places.

Alex. Anderson, of Hedland, purchased a boat in Broome on the Saturday and sailed from Broome on the Sunday, with W. Manley and another Hedlandite on board. Their boat was wrecked that night, but the three men got ashore and turned up at LaGrange.

The greatest sympathy is expressed by the Port Hedland people for the Broome people in their very serious losses.



A lugger laying up at the end of the season



Messing About Incompetently

Part II of Nick Burningham's times under sail

lan, Shane and I were slowly preparing our small perahu lambo for a voyage to Australia. Alan seemed less and less keen on the project.

Alan was taking less and less part in preparing ANTARTIKA for sea. In truth none of us was doing enough, we were hiring people to do the work for us. There were no ratlines and I never went aloft to check things when the shrouds were replaced. Alan's baleful presence wasn't much missed when he disappeared for a few days. He returned more cheerful to announce that he wanted out. He'd been talking to people and his worst fears were confirmed — everyone in Bali believed we were mad homosexuals, we were the laughing stock of the whole island. Given the truly mad (and gay) personalities of some of the beautiful people living in Kuta in those days, it was difficult to imagine how we could have attracted much attention even if the basic allegation had been floridly true. But Alan was convinced.

Across the harbour from Benoa village at Ujung Benoa was a row of very shabby knocking-shops, there was also an equally scruffy eating-house and a beer and coffee shop, where harbour ferry passengers and crew from visiting yachts could take refreshments. Our failure to frequent the knocking shops was obvious to everyone, that was why they thought we were queer, Alan argued. Actually I had been a customer after staggering back from Kuta with Peter Walker one night, but Alan had shown no inclination to sample their wares. In the time I'd know him, he'd made no advances to any female, and as far as I knew, he had made no sexual advances to any male either.

He'd sunk most of his savings into the project. I had very little of my savings left, and in the end Alan just walked away leaving everything. I have never heard anything of him in the years since then. He was right about some things. We should not have spent so long dickering around in Benoa. We should have been out sailing somewhere. There were a number of reasons why we were still in Benoa: laziness and inexperience were two reasons. We weren't doing much of the work ourselves and we weren't sure what had to be done

and what wasn't essential. Ketut Kawi and his family were doing the work and were feeding us too (I had moved on board ANTARTIKA at some stage) and they were being paid for it. Ketut and his father were doing good work but they had no reason to hurry. It was October by the time the blacksmith had fixed our second anchor, new sails were made, a cooking stove was fitted, along with the Barlow bilge pump I'd bought on the trip to Singapore, and there was a rudimentary chart table for the charts. The original idea was to go cruising but we were out of funds and low on energy.

We felt that we needed to sail down to Australia to accumulate funds and recuperate. I can't say that my memories of that time are much clouded by failing health and inter-personal problems. Mostly I was enjoying myself: ANTARTIKA was looking pretty and the work we were doing, or having done, was arousing some approval among the Indonesian sailors on the perahu that brought turtles to Benoa. One day while I was painting something – the covering boards around the rail I think — a sailor came alongside in his dugout canoe. I scowled at him because I didn't want him to clamber aboard smearing the paint, but he smiled back and just handed me a black coral bracelet without saying a word, and paddled away. I thanked him as best I could as he left, and, not for the first time or last time, felt embarrassed at my rude intolerance towards Indonesians who are, almost always, gracious, generous and courteous in ways that would appear affected or extremely old-fashioned in the West.

Peter Walker and I each had our outrigger sailing canoes. Mine had a single outrigger and being a Benoa fishing canoe was too narrow and deep to sail without an outrigger. Peter's canoe was PER-INTIS's sampan — a dugout designed to paddle or sail without outriggers, but he had put double outriggers on it for sailing on Benoa

harbour. My canoe was better upwind and Peter's was faster downwind, but they were fairly evenly matched. Occasionally we would race them in the late afternoon after work had finished. We'd both had some experience

of dinghy and yacht racing and we sailed the ca-



noes fairly well, I kept the outrigger flying clear of the water when it was to windward. One evening, at the end of a close race, we came in to the beach together and the sailors on some of the nearby perahu started clapping to applaud our performance. Probably they were Bajo's from Mola who also have a tradition of racing canoes (far more skillfully than we). On Sundays at Mola the young men perform trick sailing in outriggerless canoes, two or three men in one canoe performing synchronised gymnastics on the rail while sailing up and down in front of the village.

Learning about sail-making was interesting and a visit to the blacksmith was always fascinating. Blacksmiths had special status in Balinese villages, standing separate from the four main castes of the Bali-hindu caste system and classified as Pande (cognate with "Pundit"). The Benoa blacksmith dressed in white and wore his hair long, tied at the back of his head, like a Balinese priest. His forge was small but very efficient, always fuelled with charcoal made from coconut shell which produces more heat than wood charcoal, and the bellows were two big bamboo tubes with plunger valves made of feathers. Though his forge was small he could work large pieces of metal, he could even "strike" (make) anchors which is very difficult work for any blacksmith, eastern or western.

Eventually the fitting out was nearly completed and it was time for ANTARTIKA to sail, even if it wasn't the season to sail.

Shane and I decided we needed a third hand for the voyage to Australia, so we advertised around Kuta. It was sometime before anyone came forward. Eventually a man called Tim, with a shaven head and Hare Krishna uniform, presented himself. He was cheerful and compus mentis, if a bit weak and lethargic after a lengthy stay in India and a vegetarian diet. He said he knew about nutrition and how to put together a healthy diet in Asia so we let him take charge of provisioning.

Prior to departure, we'd only been sailing twice on two short day sails. Tanjung Benoa was then a very narrow and crowded anchorage with a terrific current pouring through it on spring tides. A perahu had to be moored parallel to the other perahu with four anchors out, or as many anchors as she had plus lines to stakes driven into the sandy mud in the shallows. It was a situation that didn't encourage slipping the lines whenever there was a nice breeze for sailing.

ANTARTIKA was fairly well founded. She didn't leak much. She had her old cotton sails, a new set of blue synthetic sails, and a storm trysail should we ever need it. The ground tackle (anchors, chains and cables) was adequately good.

Before we could sail I had to get a Sailing Clearance from the Harbourmaster's Office. That took two frustrating days and ended with me going to the Harbour-master's home in the evening to get his final signature.

I think we sailed as planned on 1st November. Tim said sailing on the 1st of the month would promote unity. But any time in November is a terrible time to sail, there is virtually no wind in November.

The canoe was a problem that I hadn't thought through. Perahu crews use dugout canoes with no outriggers which are easy to haul onboard and stow. ANTARTIKA's original sampan had been too small for us to use and we were not experienced at balancing an outriggerless canoe, so, we'd got a small Benoa jukung with a single outrigger. It could carry three people, it sailed nicely and could come alongside ANTARTIKA. But it couldn't be carried on deck with the outrigger fitted, and no one, not even a nimble native, could balance it with the outrigger taken off. Once we had disassembled our outrigger canoe we could only communicate with the shore by shouting or swimming ashore. We were ready to sail except that we couldn't get one of our anchors up. It took some time to organize for about a dozen local men to come on board and haul the anchor up with a much larger, rusted, ship's anchor foul on it.

Finally we slipped out of Benoa with a light southerly and the ebb rushing out. We did well to avoid getting swept onto the reef in the dog-leg of the channel. My intention was to sail south of the Lesser Sunda islands where, according to the wind charts, we might pick up light southwesterlies in November. The Benoa sailors

agreed with that prognosis. During the first after-



noon out, we beam reached southeast fairly slowly on the predicted southwester. Before sunset we made the first of many sub-standard meals at sea using our sub-standard ship's stores, and as dark came down we were becalmed somewhere south of Nusa Penida.

A squall was brewing away to the northeast. As it approached we took down the mainsail. The squall hit, not too fiercely, and we reached away to the southeast at what felt like an excellent speed under the jib. Because of the blanketing rain, we couldn't see any lights or land marks for several hours. The wind gradually got lighter and reverted to southwest and southerly and it rained and rained. When the rain finally cleared we

could see some lights but couldn't figure out where we were. It just didn't make any sense. We kept heading slowly southeast. When dawn came, we were becalmed and I'd worked out what had happened. The current in the straits between the Lesser Sunda Islands sets north from November to April. It must have been setting north at a considerable rate when the tide was high during the first half of the night. During the second half of the night, when the tide was lower at the Indian Ocean end of the strait than at the northern end, the current was held up and might have set south a little. Although we'd sailed on southerly headings all night we were no longer south of Nusa Penida, we were slightly north of it on the Lombok side of the strait.



Nick Burningham (centre, in cap) directing the crew of the then recently completed Rottnest Island Pilot Boat replica, with the late Tup Lahiff at the sweep

A breeze enabled us to sail a few miles south during the early morning, then the current started roaring north again. The big Indian ocean swell running from the south turned into big ugly overfalls where they met the surging current in the strait between Nusa and southwest Lombok. The breeze went round to a light southeasterly and we quickly lost all interest in attempting to sail south of Lombok. We turned north. Once we got clear of the narrows the sea was smooth and we reached comfortably northwards for a while, but we were in the wrong place again. We were on the edge of the north-going stream and there was a row of impressive whirlpools where the current slid past the counter current in the bight of Ampenan. We managed to evade a couple of whirlpools by steering away from them, but then one opened up right in front of us. What would happen now? ANTARTIKA was swirled round to starboard, went about, we cleared the backstays hoping to sail out of the whirlpool on a broad reach when we got to that heading. But she couldn't do it. The whirlpool was too strong. We

The whirlpool was too strong. We gybed and went about again ...



gybed and went about again ... round and round on the spot. Eventually we used the jib, backing it to slow the gyration as we came up into the wind on starboard tack long enough for the mainsail to drive us slowly from the whirlpool which was probably coming to an end of its natural life anyway. Twice more we had to repeat the whirlpool manoeuvre during the morning.

The following year, Pak Kendri, Ketut's father, told me that as a young man he had sailed on a Chinese junk that traded to Benoa and that they had been caught in the whirlpools of Lombok Strait for three full days. The men wept, he said.

Compared to the junk, we were lucky and by evening we were quietly becalmed off the north coast of Lombok, clear of the treacherous currents of Lombok Strait.

We were becalmed off the north coast of Lombok the following evening, and the evening after that ... each day a few miles further east. There was very little wind. ANTARTIKA was beginning to trail longish tendrils of weed. I dived under her and scraped some away but it didn't come off easily. It would have scraped off more easily had we not replaced the lime cement below the waterline with hard gloss paint. Anti-fouling paint was just not available in Indonesia in those days.

I think it took us three days to make the fifty miles along the length of the north coast of Lombok. On the third afternoon we were somewhere near the northeastern corner of Lombok. It was hot and still. Closer to the land there were small rain squalls half-heartedly chasing each other around. We watched a big perahu pinis close to shore, dodging through the squalls and then anchoring under an island.

In the early evening a strong southerly wind came blowing from the Alas strait with a clear sky and no threat of a squall. The same strong wind blows up Alas strait most afternoons and evenings but we didn't know it at the time. ANTARTIKA raced away to the northeast under full sail, our first exhilarating experience of how fast a Bonerate lambo could go with a good breeze aft of the beam. She became quite heavy to steer but held a reasonably true course (an Indonesian crew would have flattened the jib to ease the steering and sacrificed a little speed but we didn't know that). The

lights of a small ship moving very fast, perhaps a naval patrol boat, appeared to port and then seemed to change to a converging course. We couldn't easily manoeuvre to avoid her.

In that half-a-gale we couldn't safely gybe and we were carrying too much sail to come hard on the wind, so we got out the signals book and used a flashlight to signal a repeated morse D "we are manoeuvring with difficulty, please keep clear". It seemed to work. After a while the vessel altered course and quickly disappeared over the horizon.

The breeze gradually diminished during the night. By dawn we were becalmed again, close under Pulau Madang. We'd made as much ground in that night as in the previous three days and nights. A little ahead of us and standing north towards Makassar Strait was a tanja-rigged palari, her big tilted rectangular sail made of woven kororo palm fibre and her hull all unpainted. She must have been about the last of those large tanja rigged vessels of the type that had sailed to north Australia to collect and process trepang every year for two centuries until banned by the Australian Government in 1906.

A little further ahead was another lambo with a very raked mast, I thought I recognised her from Benoa. During the morning she got a catspaw of breeze off the land and slipped away around the end of Madang while we sat stewing. The palari seemed to be moving slowly north under oar power. Eventually we must have got some sort of breeze. By the next day we were a few miles east of Madang, under the massif of Mt. Tambora. We were getting a little too far offshore to catch the diurnal breezes that perahus rely on in that windless season, but that was one of the things we didn't know about.

A day or two later, the volcanic cone of Sangeang island loomed ahead and a really big squall was developing out to the northwest. It was a huge squall under a colossal thunderhead reaching up to the stratosphere. As with all good squalls, the wind came well before the rain. Two large lambo about half a mile from us took off on a beam reach to pass north of Sangeang. We had decided to go into Bima for some R&R, or some better provisions, so we ran before the squall with the jib set to port and the storm trysail set as a flat spinnaker to starboard. The squall had blown itself out before we reached the entrance to Bima's long fiord-like har-



bour and we wallowed through a windless night. The next morning an easterly had us tacking along the shores of the bay to the west of Bima's entrance, and then as a northwesterly set in we ran along close to the jungle clad coast with another lambo following astern and a low lean sloop-rigged palari ahead. The palari followed the curve of the bay staying very close to shore and, hoping we were taking advantage of local knowledge, we followed her. As she came up to the headland separating the bay from Bima harbour entrance, her sails suddenly flogged and a moment later she was sheeted in and beating to windward in a stiff breeze. We almost ran past her with the following wind before the same thing happened to us. There was a little whirlwind: for a second or two the top of the sail was bellying the opposite way to the lower half, then we got the head wind. Following the palari, we set to the task of tacking into Bima, standing on and off shore, tacking every ten or fifteen minutes. Each time we rounded a headland and thought the wind would be slightly more favourable it shifted right ahead, then in the early afternoon there was a light squall and the sea breeze came in from astern. As dusk approached we still hadn't reached the narrows before the town of Bima, so we decided to sail over to the eastern shore and spend the night at a village where we could see several lambo anchored. We sailed in as the sun set. Crews from a couple of perahu helped us set the anchors in a good spot. I knew the lambo RAHMATIA from Rajuni which sometimes sailed to Benoa. She was a fine looking perahu, more-orless a sister of BINTANG MAS which I greatly admired and which Peter Walker bought a couple of years later.

Tim and I went ashore at Nae causing tumultuous excitement. We bought all the goodies available — tobacco and biscuits — then went back out to ANTARTIKA to prepare our usual soggy rice and noodles. I think we'd been hoping to eat in a restaurant that evening and we hadn't cooked any lunch.

We didn't sail into Bima the next day, we set out to sail around the end of Sumbawa and down Sape Strait towards the Sabu Sea and Indian Ocean. We still hoped the winds would be better to the south of the islands. Early in the day we ran out of Bima Bay with a land breeze and

reached a few miles along the Sumbawa shore before meeting an easterly head wind. We tacked on and off shore helped by an east going current in the strait between Sumbawa and Sangeang. In villages along the shore, huge perahu pinis were being built. They towered over the thatched cottages on that flat grassy stretch of coast. As we got to the end of the land, the breeze went round southerly for a while and then stopped. Becalmed, we were drawn south over the reef that projects from the northeast end of Sumbawa into Sape strait. There seemed to be enough water under us as we drifted over the reef, then the water got deeper again and we picked up a light southwesterly. But soon the tide turned and although we were reaching on a southeasterly course we started going backwards towards the reef we'd come across, faster and faster. We anchored on the northern edge of the reef rather than get swept back to Sangeang strait where we'd come from. It was after dark when the current eased and started to set gently south again. We weighed anchor and sailed gently and blindly into the bight between Tanjung Naru and Tanjung Lando. Around midnight we could see the sandy bottom in the moonlight so we anchored again, figuring that the tide would turn against us soon.

At dawn we weighed anchor once more and began to sail slowly around the headland to Sape Bay. We caught up with a standing gaff rigged palari or djengki bound for Sape. She was a big clumsy looking thing, bluff bowed, laden with the hold full and a piled up deck cargo of kerosene in forty-four gallon drums. Two of her crew launched their dugout and came over to talk with us. We had a light following breeze and enjoyed a relaxed sail close to the shore round the coast to La Mare village. At one point we met a large open perahu being rowed by about a dozen men going the other way against the light wind. She was dark timbered and unpainted, with high stem and stern finials, a little like a viking vessel; the muscular men wore only dark sarongs and headbands. A small ship that would not have looked out of place in the time of the Pharaos or when Vasco da Gama first brought western savagery to the commerce of the Indian Ocean.

We anchored at La Mare and went ashore to make sure there was nothing worth buying there. The people were much calmer and more hospita-



ble than they had been at Nae near Bima. They were Bugis, proud maritime people who often traded to Singapore and were quite used to foreigners. We bought some fish at La Mare and after an attempt at a reasonable meal settled in for a good night's sleep. Mosquitoes were a problem that night.

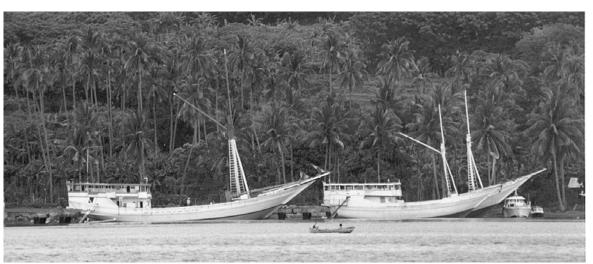
Next morning, up early, we set out across the bay to Tanjung Mabalang. During the crossing of the bay we had a light following wind and I rigged the spare mainsail as a spinnaker. It got slightly torn coming down, the cotton was rotted in places. As we tacked around the tanjung we saw huge rays swimming under us in the cyrtal clear water. During the afternoon we tacked down the coast, tucking into bays and staying close inshore to avoid being carried north by the current. It was a wild

mountainous coast with dark green jungle right down to the water's edge and no sign of any habitation.

In the night we were able to get an offing, I think there was a squall, and the next morning we were out in the middle of the wide Sumba Strait in hazy conditions: you could just make out the bulky mountains and plateaus of Sumba in the distance. I think it was that day I started to get feverish, and soon I was very ill. We reached Sumba and kept going down the Sumba coast for a couple of days. Tim and Shane standing all the watches, me sweating and shivering in the cabin and helping to take in sail during the occasional squalls. By the time we were approaching the southwest tip of Sumba I was obviously seriously ill: very fevered, losing weight and strength fast. So we turned back to Waingapu, the main town on Sumba, and fortunately a light southeasterly got us there fairly quickly.

We sailed into Waingapu harbour at high tide and anchored not far from the jetty. A few hours later the harbour dried out and ANTARTIKA lay over on her bilge in the mud, but I didn't really care. I went ashore to get medical treatment. At the hospital they said I had bad malaria and gave me a barrow load of chlorquine. The chlorquine, which I had to take in huge but gradually decreasing doses, quenched the fever in a day or two, but I was terribly weak and emaciated, and very vague too. I obviously wasn't going to sail anywhere for a while. Even if I'd wanted to sail, neither Tim or Shane were ready to continue. Tim wanted gone as soon as possible and left after a day or two. Our visas had been cancelled when we sailed from Benoa and we had almost no cash, so we began to ask about selling ANTARTIKA. After a day or two we sold her to a Haji for about half what we'd originally paid for her. It was just enough to get Shane and me home. I spent about ten days recuperating in Waingapu before I tried to go anywhere. Eventually I flew back to Bali, then Singapore, and from there I flew on Aeroflot via Moscow, home to my parents in wintry Eng-

What had I learned from my first failure? It was detail rather than the basic seamanship that I'd got wrong. How to provision for a reasonably healthy and enjoyable diet given the limited resources of canned and preserved foods then available in a Bali market. Malaria prophylactics, keeping out of the midday sun. And while we'd managed to sail ANTARTIKA safely and half-way-efficiently, handling anchors and moving around in an anchorage or harbour had been difficult and traumatic, only to be done if absolutely necessary. Getting that right would take a good deal more practice and tuition from the Indonesian crews.



Indonesian trading vessels

Photo: Peter Worsley



Ships of the State Shipping Service

The tenth in the series by World Shipping Society member Jeff Thompson

No.10 Giang Ann Official Number 156345

By 1939 the Cliff Street premises of the Service were becoming overcrowded and moves were made to alleviate the problem by seeking alternate accommodation elsewhere. The Government of the day were reluctant to lease any additional office space so the Cliff Street building was altered and enlarged to cater for extra personnel.

With the Japanese invasion of South East Asia at the beginning of 1942 many ships left the area for safer waters. One of these that fled was the Singaporean owned *Giang Ann* which arrived at Fremantle on 3 March 1942. In the course of a short time other vessels were also to seek refuge at Fremantle. Some of these ships were to be taken over in some form or another to meet the needs of the Allies war effort. One of these was the *Giang Ann*, which was taken over by the State Shipping Service at the request of the Royal Australian Navy and operated on an agency basis from April to 19 May 1942.

The Giang Ann was built in 1902 as Gouverneur Generaal Daendels by Nederland Schps Maats, Amsterdam, for Koninklijke Paketvaart Maats (K.P.M.), Batavia, for service in South East Asia

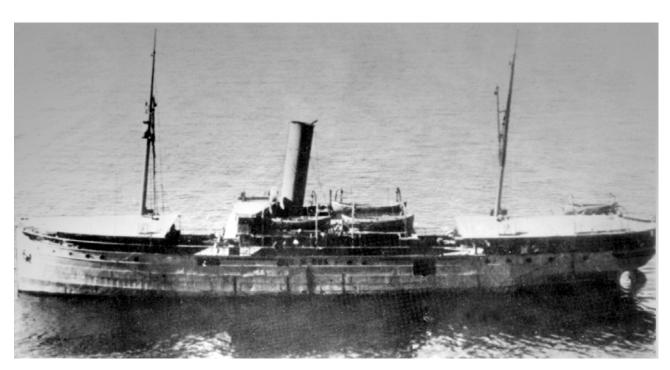
waters. She was 1,063 gross registered tons, 817 deadweight tons, 67.9 metres overall, 11 metres breadth, and fitted with a coal fired triple expansion steam engine.

During 1932-33 the vessel was sold to Heap Eng Moh S.S. Co Ltd of Singapore, and renamed *Giang Ann*.

The vessel left Fremantle on 18 April 1942 for Port Hedland with 567 tons of cargo to assist in relieving food shortages. The voyage then continued to Broome to pick up cargo for the RAN and RAAF. On the return voyage south, 1,054 tons of cargo and a total of 107 passengers were carried. On the 19 May 1942 in Fremantle the *Giang Ann* was handed back to the owners agent in Western Australia, Dalgety & Company.

On the 4 August 1942 the *Giang Ann* was requisitioned by the Australian Shipping Control Board for use as a transport. Her wartime service has not been able to be traced.

In 1950 the *Giang Ann* was sold to Pang Kwok Sui of Hong Kong and renamed Jeep *Hee*. Later in 1950, *Jeep Hee* struck a mine and sank in the Yellow Sea, 31.12N, 121.48E.





Kathleen & May

An article by Brian Lemon on his model of this three-masted schooner.

he *Kathleen and May* was built and launched in 1900 at Connah's Quay on the Welsh side of the river Dee. Her original name at launching was *Lizzie May* after the two daughters of the original owner, a Mr John Coppack. At this time there were hundreds of like schooners plying the Irish Sea and English Channel, carrying coal, china clay, fertilizers, in fact any cargo that was on offer, averaging about two hundred tons a voyage.

Like almost all her kind she was built for the small local companies. She was built of pitch pine on oak frames at a cost of two thousand seven hundred pounds. On her maiden voyage to Rochester in Kent she carried 226 tons of firebricks. In 1908 Coppack sold her into Irish ownership, which did not alter her pattern of trading. The new owners altered her name to *Kathleen and May* after their two daughters. In 1931 the Jewell family brought her back to England. At this time she was equipped with an 18 h.p. engine and her topsail

yards were removed. The Jewell family kept her in excellent condition for the next 30 years. Surprisingly enough, she traded during the Second World War with a Lewis machine gun and a rifle.

In 1970 she became the first vessel acquired by the newly formed Maritime Trust. She has since been restored to her original rig, as a three masted topsail schooner.

The Model

The actual plans that I had depicted the *Kath* as she possibly was in her last few years, single pole masts, minimum rig. I was loaned quite a few articles and a great number of photos showing her throughout her illustrious career. One of the pictures I had showed the vessel in 1954, squares on the foremast removed, straight fore and aft sails and easiest of all for a modeler, wooden battens in place of normal rope ratlines. All the supporting shrouds and most of the standing rigging is fine wire fishing trace. All the blocks are commercial

items with a lot of reworking, as are the dead eyes.

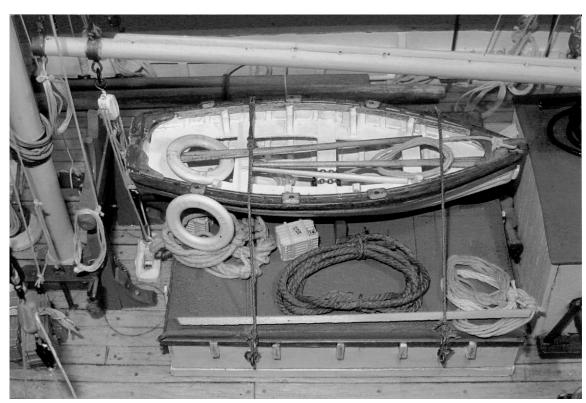
The scale of the model is 1:36 which was a comfortable size to build on my kitchen table. As with my other models the keel, stem and sternpost, were cut from one piece of 6mm 12-ply. There were 12 frames, also cut from this size piece of These were kept wood. solid as I felt there was no need to cut the centres out. These frames were set to the keel at the appropriate sta-A series of quarter tions. inch square stringers were set into these frames approximately one inch apart from stem to stern up to the deck level. This skeleton was then sanded thoroughly to create a smooth mould





prior to the starting of the wood planking. These various sizes of .8mm 'plates' were then glued to half the stringers and half the frames. The adjoining plates were glued to the other half of each stringer and the other half of the frames. Once this was complete and fully sanded the deck of single planks was secured to the deck beams using very finely pointed 'toothpicks' (trenails). There are over 900 of these in the model. The various positions for the deck houses was marked and made and fixed permanently. The masts would be permanently secured much later. The one inch high gunwale was now laid and fixed to the hull. The rudder was now made and secured with pint-The bowsprit was now made but not les, etc. fixed at this stage. The hull was given a final light sanding and fully painted. The names were made by my local sign writer on a special selfadhesive tape.

The next item to be built was the forward winch which is what I call 'Rocking Arm' type. This was built up from clock gears, brass section and other bits and pieces. Next came the ship's dinghy. This was clinker built and fully detailed and fixed permanently to the top of the forward hatch. It measures just four and a half inches long. The forward winch house was next and fully detailed inside with a model of the engine that drives the winch. This house lifts off to show this detail. The final main item on deck was the wheel house. This can be lifted off also to show the wheel, compass, toilet and the mechanism for operating the rudder. About this time I started to create the deck 'atmosphere' as some of this would be impossible to do once the rigging, etc was finished. The three masts and bowsprits were now fixed permanently. As part of the rigging system many small bow shackles, bottle screws and thimbles were made as the rigging the rigging progressed. Eventually the rigging was finished, over several weeks the atmosphere of a trading schooner was created. When finally satisfied with the project it was mounted on a piece of suitable wood with the appropriate engraved plaques giving the necessary information.



A deck view showing the detail of the dinghy

Photographs by Brian Lemon

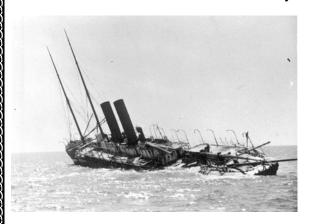
Editor's note: The *Kathleen and May* was built by Ferguson and Baird, and was the last British merchant schooner to trade, making her last commercial voyage in 1960. In 1947 she was hit by a trawler and her bow severely damaged. After rebuilding the bow her figurehead was restored from its various broken pieces and refastened on to the repaired bow.



QUIZ

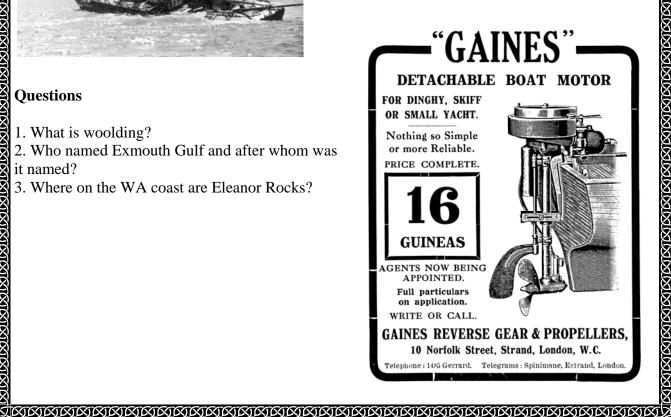
Answers to December 2006

- 1. All the features mentioned are either on or adjacent to Rottnest Island.
- 2. The housing of a mast is that portion of a mast which is below the deck. It is normally square or octagonal to facilitate wedging at the partners where it passes through the deck.
- 3. The Orizaba was wrecked on 17 February 1905. The photo shows the *Orizaba* a week later.



Questions

- 1. What is woolding?
- 2. Who named Exmouth Gulf and after whom was it named?
- 3. Where on the WA coast are Eleanor Rocks?



Maritime Heritage Association Inc.

23 State Street, Victoria Park, Western Australia, 6100.

