POOLE MARITIME TRUST

50TH ANNIVERSARY YEAR

NEWSLETTER SEPTEMBER 2022

Committed to recording and preserving the history of Poole Harbour, It's people, surrounding environs, trading links, industries and all matters maritime related.

Welcome to the Poole Maritime Trust Newsletter. Contributions are invited for future editions. Please send any material to be considered for inclusion to : poolemaritimetrust@aol.com or Tel: 01202-706673

IMPORTANT INFORMATION - ACCESS TO THE ARCHIVE, LIBRARY AND TRUST OFFICES.
THE LIBRARY BUILDING IS CURRENTLY BEING EXTENDED. THE ONGOING WORKS HAVE, REGRETTABLY, BLOCKED THE DOOR TO THE TRUST PREMISES. TEMPORARY ACCESS IS POSSIBLE VIA THE LIBRARY DOOR THAT OPENS ON TO WESTERN ROAD (BEHIND THE TALL HEDGE). THURSDAY MORNING VISITORS SHOULD RING THE BELL AND A MEMBER OF THE TEAM WILL BE ALERTED AND GRANT ADMISSION. ALTERNATIVELY, PLEASE CALL 01202-706633. THESE ARRANGEMENTS ARE LIKELY TO REMAIN IN PLACE UNTIL THE END OF THE YEAR.
WE REGRET ANY INCONVENIENCE .

CHAIRMAN'S QUARTERLY REPORT – September 2022

As everyone will be well aware, we have all experienced a long hot summer. For the Trust this has not prevented work from continuing with the task of cataloguing the large amount of material that continues to be generously gifted. This includes some interesting items such as a cannon ball, probably dating to the 16th century, and a large model of the former ammunition depot at Holton Heath. The latter is somewhat too large to be put on display just yet and so storage has been arranged locally until an appropriate venue can be established.The programme of events, including some potentially very interesting presentations, has now been established for the autumn/winter period and is published on the website. Sadly, the summer excursion to Portsmouth Historic Dockyard had to be cancelled due to lack of numbers wishing to make the journey. The Trust also established a stand at the Maritime Perspectives Lighthouse Poole on 3 September. This attracted considerable interest from visitors and a number of potential new members. On the subject of membership, this remains healthy at around 240 members. The website has now been completely redesigned and updated. The task of including all relevant information takes time but is

well on the way to being achieved on a regular basis. As mentioned previously, finding a future site for the Trust offices and space for the ever-expanding archive, remains under careful consideration. For the present we will remain over the Canford Cliffs Library but space to exhibit our material is limited and hence larger spaces will be required. It should be noted that over the winter months the library itself is undergoing expansion in terms of space and hence access to the Trust offices, while still possible, will be temporarily complicated by the building work. It would be helpful if potential visitors phoned in advance to give a time of arrival while this work is undertaken.

Commodore G H Edwardes OBE, Chairman

LIBRARY AND ARCHIVE NEWS – Peter Lamb

The main function of my fellow volunteers and I is to assist the Trustees of Poole Maritime Trust build up an excellent museum and resource centre: one of which will reflect all aspects of life, history and business in and around the environs of Poole Harbour and, to a lesser degree, the maritime world at large. At the same time we have set out to develop a library that is comprehensive, both in books, pictorial material, video and tape, in order we can provide for the public a first rate service for research, reading and investigation. This is something that has already been partly accomplished and we look forward to constantly seeking to develop and expand the collection over the coming years.

The Trust is always seeking images, ephemera, books, charts, manuscripts and anything of historic interest. History, of course, begins yesterday ! We will be happy to collect.

Please consider joining the archive team. We have vacancies in all areas. If you can spare a couple of hours on a Thursday morning or prefer to work from home.
No specific skills are required as there is something to suit all talents.
Please contact : poolemaritimetrust@aol.com or call, leaving a message, on 01202-706633

We are indebted to the following who have recently made significant donations to the Trust's archive collection :

A large collection of Coastal Cruising records from the late Alan Bruce archive - *courtesy John Megoran*

David Saywell for valuable addition to the Trust library of maritime books.

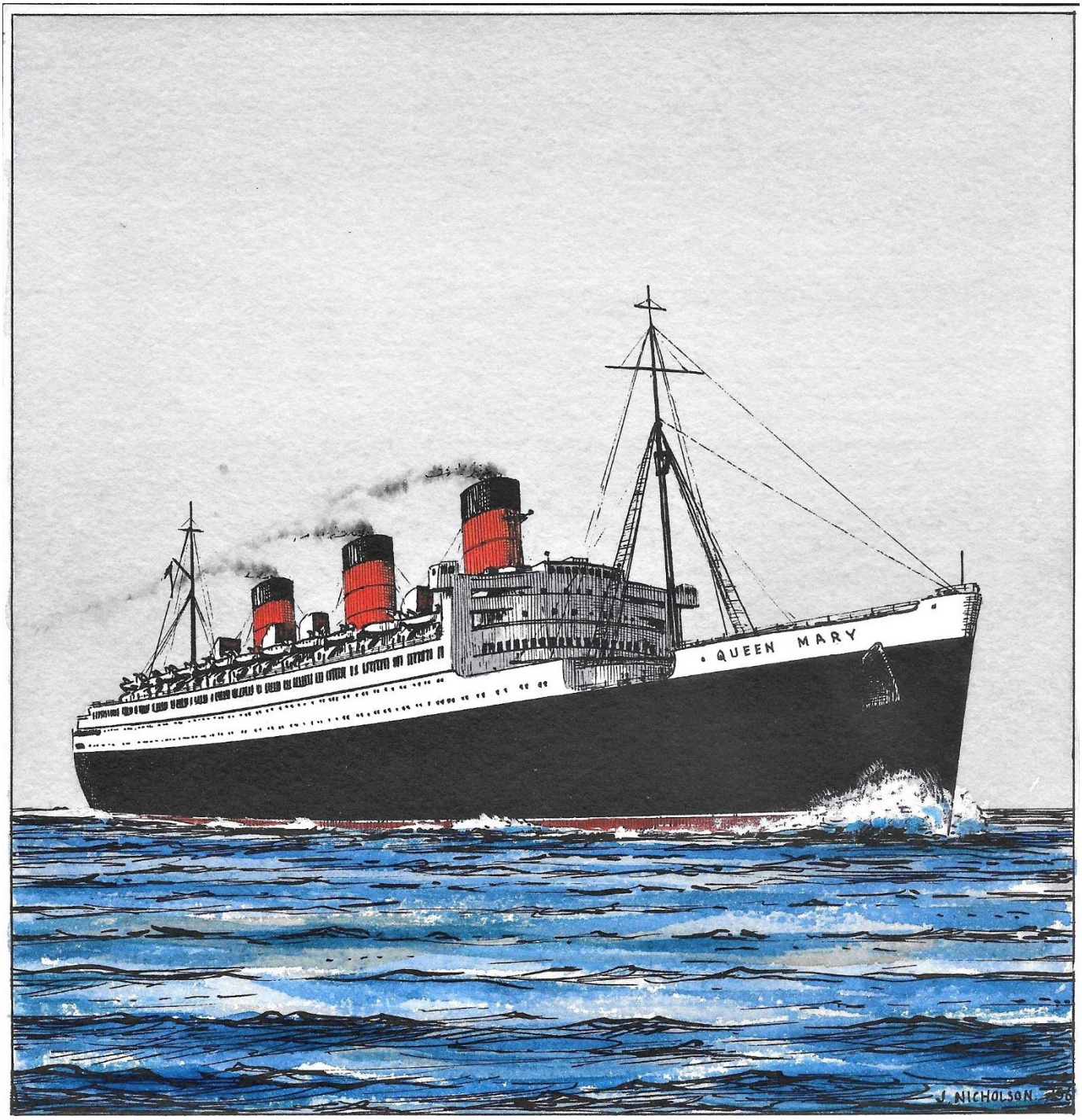
A collection of non-related, collectable, books donated by Douglas Munford for sale in aid of Trust funds.

Colin Page, of Birmingham, for a remarkable collection of ephemera to be added to the shipping archive.

J. Terry Sylvester – For a comprehensive collection of timetables and leaflets in respect of the preserved paddle steamer "WAVERLEY". The "WAVERLEY", of course, has recently operated from Poole.

Richard Clammer for a further donation of valued maritime publications.

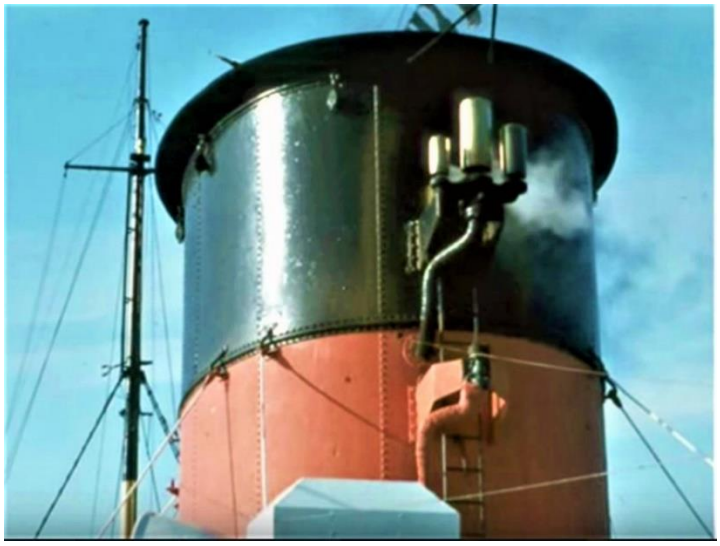
Duncan Nicholson who has generously donated some wonderful copy prints from his late Father, the very talented marine artist John Nicholson. One of John's excellent paintings, of the R.M.S. "QUEEN MARY" at speed, is copied herewith :



STEAMSHIP SHIELDHALL BASED IN SOUTHAMPTON

An annual visitor to Poole, the "SHIELDHALL" always attracts considerable interest with her remarkable and now, almost unique, steam whistles. A heritage cargo-passenger ship, included in the National Historic Fleet, SS Shieldhall was built and launched on the Clyde in 1955, to a classic pre-Second World War design. She had a long and successful first career with Glasgow Corporation – year round, carrying treated sludge out to sea and, in the summer, taking passengers 'doon the watter' on pleasure trips. Bought in 1977 by Southern Water she was finally withdrawn from commercial service in 1985 – but saved and purchased for £20,000 in 1988 by the charity that still operates her now. Today the 2,000 ton Shieldhall is a unique seagoing 'time capsule'. She provides a working example of steamship machinery both above and below deck, typical of the cargo and passenger ships that plied the oceans of the world between the 1870s and 1960s, after which they became all but extinct.Whilst other heritage ships are held permanently in dry dock, Shieldhall remains active, with a cruise programme that allows passengers to access the engine room with its two impressive 800HP steam engines at work andthe bridge, complete with traditional instruments and gleaming brasswork. An image of the "SHIELDHALL" at Poole appears in Kevin Mitchell's

port report. Talking of steam whistles, Peter Rolf has highlighted the remarkable whistle combination installed on a series of Isle Of Man steamers



TRIPLE BELL SIRENS: - Peter Rolf

"SOUNDS LIKE AN AMERICAN RAILROAD TRAIN WHISTLE"

The Isle of Man Steamship Co. built five near identical sister ships between 1946 and 1955. They were all stunning vessels with a Cunard funnel and profile. They all sported deafening triple bell sirens, a navy hooter and a steam whistle on the rear of the funnel.

POOLE MARITIME TRUST – ON THE ROAD.

Maritime Perspectives at Poole Lighthouse – Saturday 3rd September.

We are indebted to Trust stalwarts Jack Hawkins, Pat Woodruff, Robert Heaton & Margaret Morris who set up and manned a very impressive display at the very successful event at Poole Lighthouse.

Babs Plumbridge introducing the Mayor and Mayoress of Poole to our stand at Poole Maritime Perspectives at the Lighthouse

Poole Maritime Trust Newsletter September 2022

Port Update by Kevin Mitchell

At the beginning of July the former PHC dredger *CH Horn*, now owned by Jenkins Marine, was spotted away from home working in Dover's Wellington Dock. This photo of her was taken by Darren Holdaway.

Also in early July the cargo ship *MY Melody* arrived at the port from the Egyptian port of Alexandria to unload its cargo of steel beams. She sailed on 15 July to the Spanish port of Aviles. Channel Seaways' *Trinity* was overhauled and repainted in Rotterdam during July, and returned to Poole on 7 August. Her duties were taken by *Shetland Trader*, both vessels owned by Faversham Ships. On 24 August the *Atlas Wind* was in port for the first time to load Purbeck ball clay destined for the Spanish port of Castellon.

This trade is normally handled by ships such as *Celtic Commander* or *Celtic Fortune*, but on this instance the *Celtic Commander* was unavailable. The Greenpeace vessel *Arctic Sunrise* also made an appearance at Poole at the start of September, as did Condor Ferries' relief freight ferry *Arrow*, which arrived from the Isle of Man on 12 September before taking up sailings between Portsmouth and the Channel Islands.

A new landing pontoon has been constructed on Brownsea Island for use by the John Lewis Partnership passenger ferry *Castello*. Installation was carried out by Jenkins Marine. Works first involved the removal of around 100 tonnes of rock armour on the seabed, installed for scour protection in this area of strong tidal currents. The new pontoon has been designed to be held in position by four steel tubular piles, which are driven into the seabed. nThe steamship *Shieldhall* made its annual visit to Poole on 29 August to coincide with the Bournemouth Air Show, but was also open to the public whilst alongside Town Quay. A visit is well recommended to see the engine room and original bridge fittings, and hear her very distinctive steam whistle. The paddle steamer *Waverley* also came to Poole in September during its 75th anniversary year, unfortunately this coincided with a period of unsettled

weather so its first visit scheduled for 7 September had to be cancelled. She did though make it on 12 September for an overnight stay, which was repeated the following day.

It has been a lean year for cruise ships, with only two visits so far by *Deutschland* and *Amadea*, with *Amadea* due to return on 2 October. Other planned visits by *Seaventure*, *Sea Cloud Spirit* and *Ocean Odyssey* were all cancelled. Hopefully next year will see more cruise ships back in Poole. No pleasure boats ran from Poole Town Quay on 19 September as a mark of respect for the funeral of Her Majesty Queen Elizabeth II.

LOCAL PIRATE – WILLIAM PARROTT.

Taken from: "Pride of Poole 1688-1851" by Derek Beamish, John Dockerill and John Hillier pp. 209 & 211

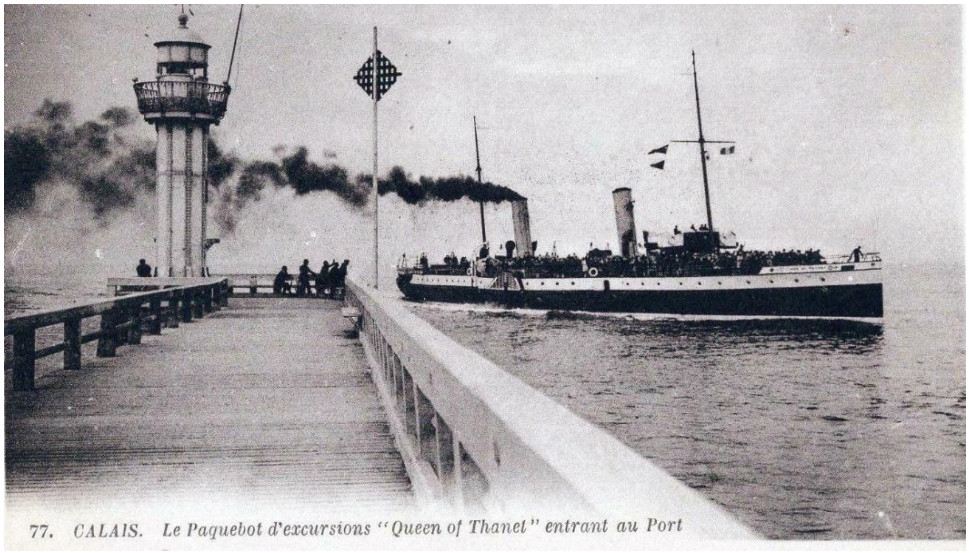
George L Parrott, said the pamphlet *["An epitome of the Biography of the Magistrates of the Borough of Poole]*, was the son of William Parrott a most desperate pirate who lived at Purewell near Christchurch. With a dozen depraved characters he became the terror of the neighbourhood. He landed his smuggled goods quite openly, the revenue officers being frightened to intervene. The people of the neighbourhood had, in 1784, applied to the Government for help in seizing the gang and the Government sent a sloop, the Orestes, to Christchurch. The Orestes in a hurry to catch the gang, who had just run two large lug-sail vessels filled with smuggled tea and spirits on to the shore, ground itself on a sandbank at Havenhouse. As the Gazette reported, the ships in the customs service were then "most violently and forcibly resisted by William Parrott and a large body of smugglers armed with fire-arms and other offensive weapons…who fired upon upon the officers, and killed Mr William Allen, the master of the said sloop of war, the Orestes, and also dangerously wounded the boat's crew…" Knowing that retribution would follow if they stayed in Christchurch the gang split up. One of the gang was later caught and hanged at Winchester. Parrott was outlawed and a reward of £250 was put on his head, but he escaped to Holland.It was while Mr Parrott, Snr., lived in Holland and continued his smuggling that George Lockyer was born. The French became in possession of Holland in the Napoleonic Wars and the two Parrotts, father and son, became employed as pilots to shipping in the Scheld with which they have become acquainted through their smuggling activities. In 1804 the Dutch and French fleet was moored in Scheld and George Parrott was sent over to England by his father to inform the Government of the position of the French and Dutch fleets and an offer to conduct British ships into the Scheld to attack the enemy ships in exchange for a free pardon. It was said in the pamphlet that eventually the Admiralty paid the Parrotts' demand and fitted out a fleet which "Capt. Harvey", alias G. L. Parrott, piloted the Walcherin expedition into the Scheld to attack the enemies' ships. "The unhappy fate of this expedition is well known to all"; says the pamphlet, "and what could be expected from such a diabolical origin, and with a man of such a character for a its pilot? Heaven recoiled at the foulness of the dead and overwhelmed British valour with misfortunes".Mr Parrott thus settled in England with a Masters half-pay. After w while he was made master of a merchant ship and later became clerk in a Newfoundland Merchant's office. He turned to the Reform Party and "was appointed leader and spokesman, by acclimation, by the political cobblers and dissenters of Poole, and was used as a utensil by the aristocratic Whigs, to push them into power and place…"

MEDWAY QUEEN
PRESERVATION SOCIETY

Two more queens – research project

One of our readers, Richard Halton, has asked the following be included and invite members to contribute material about these remarkable ex WWl paddle minesweepers. Richard is Chairman of the "MEDWAY QUEEN PRESERVATION SOCIETY". The "MEDWAY QUEEN" will be etched in history following her very active part in the evacuation of Allied troops from Dunkirk in 1940. This little paddle steamer is credited with making, no less, than seven crossings between Kent and Dunkirk.

Besides PS *Medway Queen*, the New Medway Steam Packet Company ran other ships on a variety of routes. These included two very similar twin funnel paddlers named *Queen of Kent* and *Queen of Thanet*. Richard Halton, who has written a number of books detailing the history of PS *Medway Queen* and, recently, PS *Ryde* is now researching the history of these two vessels with a view to possible publication.



"QUEEN OF THANET" on a day excursion to Calais

The decision to publish will depend on the amount of historical material discovered and successful negotiations with a publisher – of course. If the project gets that far then proceeds from publication and sales will be passed to the Medway Queen Preservation Society (registered charity 296236). Any material gathered will be shared with the PSPS Collection to ensure its long-term survival. This is fitting since the 2 ships were operated by NMSPCo although not on the same routes as *Medway Queen*.Both ships started life in 1916 as purpose-built paddle minesweepers: HMS *Atherstone* and HMS *Melton*. After the war, in the 1920s, they were purchased by the New Medway company and converted for civilian use as PS *Queen of Kent* and PS *Queen of Thanet*. They operated under that flag until 1939 when they were requisitioned and became minesweepers again – under their new names as the original names were being used for existing naval ships. They returned to civilian use afterwards and were hastily converted back as stop-gap vessels while new build motor vessels were on order. In the late '40s they were sold to Red Funnel in Southampton for use as ferries. They were renamed *Lorna D*oone and *Solent Queen* respectively, but this proved to be a short-term reprieve and they were scrapped in 1951 and 1952. Material, especially personal recollections, is expected to be harder to find than for Richard's previous projects as these ships disappeared before cameras were in widespread use and so long ago that few people will now have first-hand memories of the ships. If you can help with any information or images, please contact Richard Halton by email on richardhalton1502@gmail.com or by post at 2 Drury Close, Hook, Royal Wootton Bassett, SN4 8EL.

Richard Halton - *Contact details in respect of this request :* richardhalton1502@gmail.com

POOLE HARBOUR DEVELOPMENT

Rob Williams Writes :

BCP have dismantled the 'hammerhead' section of the WW2 fuelling pier at Lake, Hamworthy ,Poole. There used to be pipes running up to a huge underground fuel reservoir at the top of the hill. I believe this was targeted by German bombers who succeeded in causing a leak that allowed 1000s of gallons of fuel into the harbour. The pipes were removed several years ago, just the brackets remain. I think this was the refuelling pier for the barges coming from the Naval cordite factory at Holton Heath. I hope they do restore it as it's a very little known part of Poole's wartime history (and site of many of my misspent teenage hours!) I'm sure someone will enhance my sketchy knowledge of its history.

HAPPIER TIMES

The “BOURNEMOUTH BELLE” makes a winter call at Lake Pier whilst on charter to the Coastal Cruising Association

OLDEST ENGLISH SHIPWRECK GIVEN GOVERNMENT PROTECTION

'Exceptionally preserved' wooden hull from 13th century and cargo including marble grave slabs found off Dorset.

A diver examines one of the marble grave slabs the ship was carrying.

Photograph: Bournemouth University/c/o Historic England

The oldest shipwreck to survive in English waters, dating from the 13th century, has been given the highest level of protection by the UK government after being discovered in Poole bay in Dorset. The ship, along with its stone cargo including two beautifully carved marble grave slabs, was discovered by a local charter boat operator in 2020, after storms disturbed the seabed close to a busy maritime route. Excavation revealed the "exceptionally preserved" timber remains of one side of its hull, which had been weighed down and protected by the ship's cargo of worked and unworked Purbeck marble. Archaeologists were able to identify that the overlapping timbers were made of Irish oak and – using tree ring analysis – came from trees felled between 1242 and 1265, during the reign of Henry III.While the sites of a small number of bronze age shipwrecks are known from their remaining cargo, their timbers have long gone, making this the oldest wreck in England whose hull survives. Prior to this discovery there were no known wrecks of any seagoing ships in English waters between the 11th and 14th centuries.

Planks of wood from the hull.

Photograph: Bournemouth University/Historic England

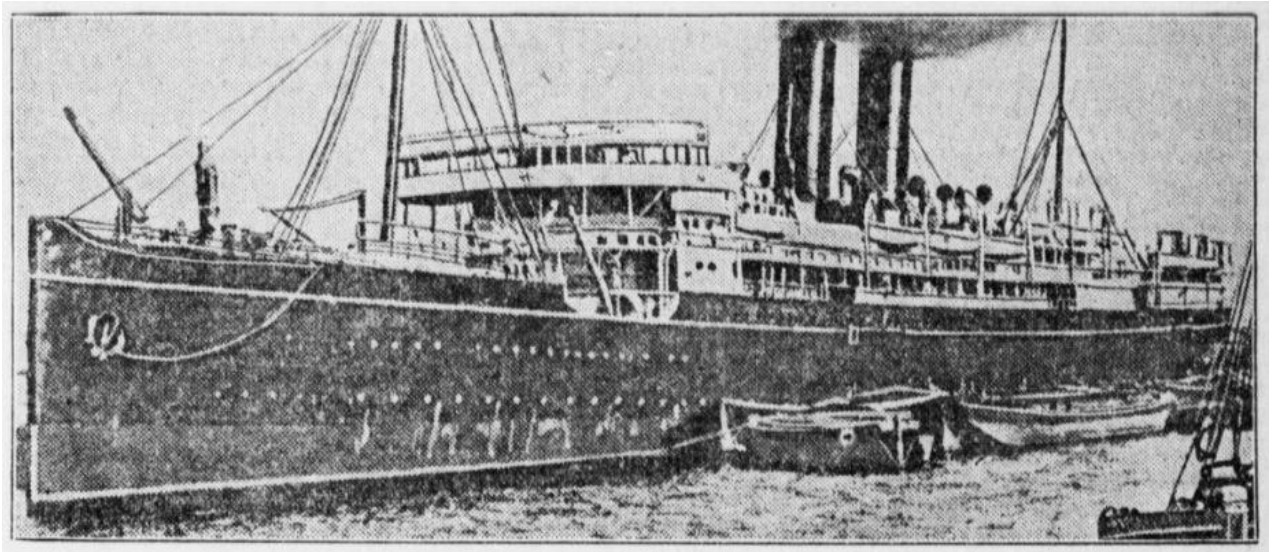
“This is a really, really important discovery,” said Hefin Meara, a maritime archaeologist with Historic England, which oversees protected wrecks on behalf of the Department for Digital, Culture, Media and Sport. “This is a ship loaded with cargo on its way out somewhere. It’s a cliche but it’s a time capsule – this is a ship doing exactly what it was intended to do. And we can learn so much from that. ”The two carved grave slabs are similar to examples still seen in churches of the period, but unlike them are in pristine condition, with their chisel marks still clearly visible. Each is decorated with a different style of cross, which until now archaeologists thought dated from different periods, says Meara. “But this goes to show that actually these designs were contemporary and in use at the same time. And so the question is: are these things that have been made to order? Or are they speculative and being sent out? “This is evidence of industry – they’re quarrying the stones, carving them, dressing them. And it shows that these are really desirable products [being] exported far and wide, all around the coast of England, to Ireland, to the continent. And this gives us a really interesting indication that it’s not just the stone itself that was desirable. It’s the skills of the local craftspeople.”

Items found on the wreck.
Photograph: Bournemouth University/Historic England

Two other newly discovered wrecks have also been given the same level of protection by the government. Both were found on the Shingles Bank near the Isle of Wight, a well-known navigational hazard for ships sailing past the Needles into the Solent. While these wrecks are not as old – dating from the 16th and 17th centuries – they are also “exceptionally rare”, according to Heritage England. The older ship, labelled NW96, was carrying a cargo of lead ingots dating from before 1580 and stone cannon balls. The ingots, of a fixed size and weight, would have been used as a currency for trade and later made into anything from bullets to lead pipes or roof flashing. Several cannon were found on the other Shingles Bank vessel, NW68, one of which was cast in Amsterdam between 1621 and 1661. Archaeologists believe the ship was probably Dutch in origin, and may have been involved in the Battle of Portland in 1653 during the first Anglo-Dutch war. Like the Dorset wreck, both these vessels were found by local divers with a detailed knowledge of the sea, which Meara said was “just really exciting”: “It’s great to have this partnership between ourselves and recreational divers, boat keepers and archaeological companies. It just goes to show what happens when we’re all working together. We make these fascinating discoveries.” This article was amended on 20 July 2022. Archaeologists say the timber used to build the ship came from Irish oak trees felled between 1242 and 1265, which was during the reign of Henry III, not Edward III as an earlier version said.

Guardian is well placed to deliver it because unlike many others, we have no shareholders or billionaire owner. Our independence means we can investigate what we like, free from commercial or political influence. And we provide all this for free, for everyone to read. We do this because we believe in information equality. Greater numbers of people can keep track of the global events shaping our world, understand their impact on people and communities, and become inspired to take meaningful action. Millions can benefit from open access to quality, truthful news, regardless of their ability to pay for it.

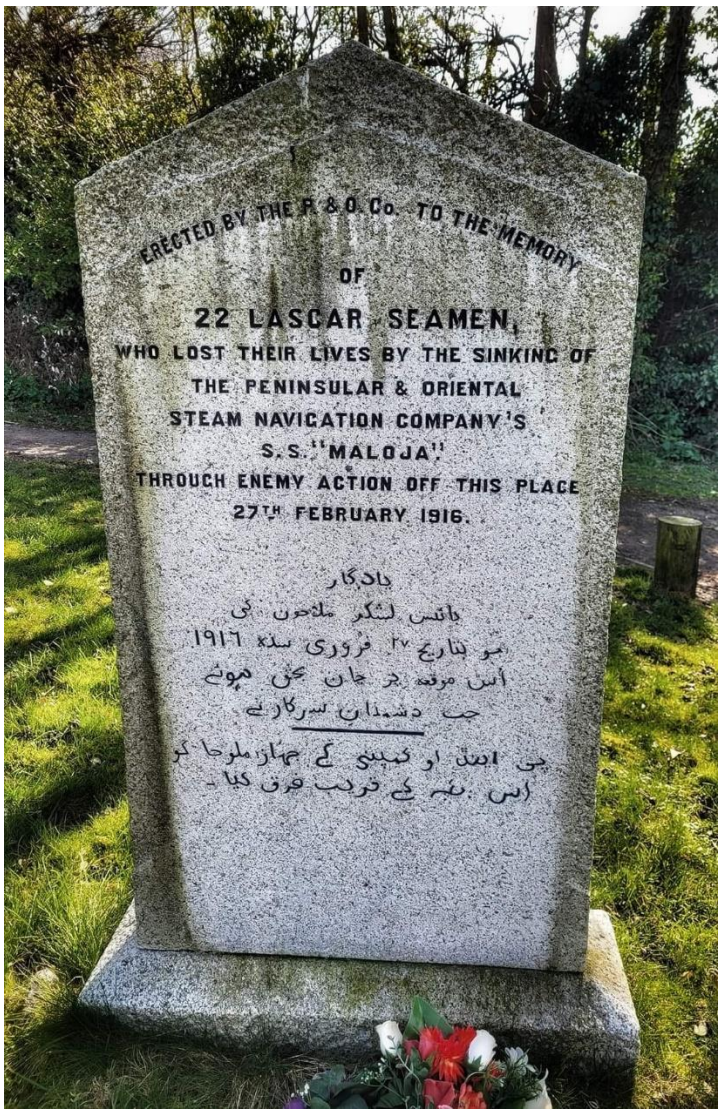
THE TRAGIC TALE OF THE S.S. MALOJA

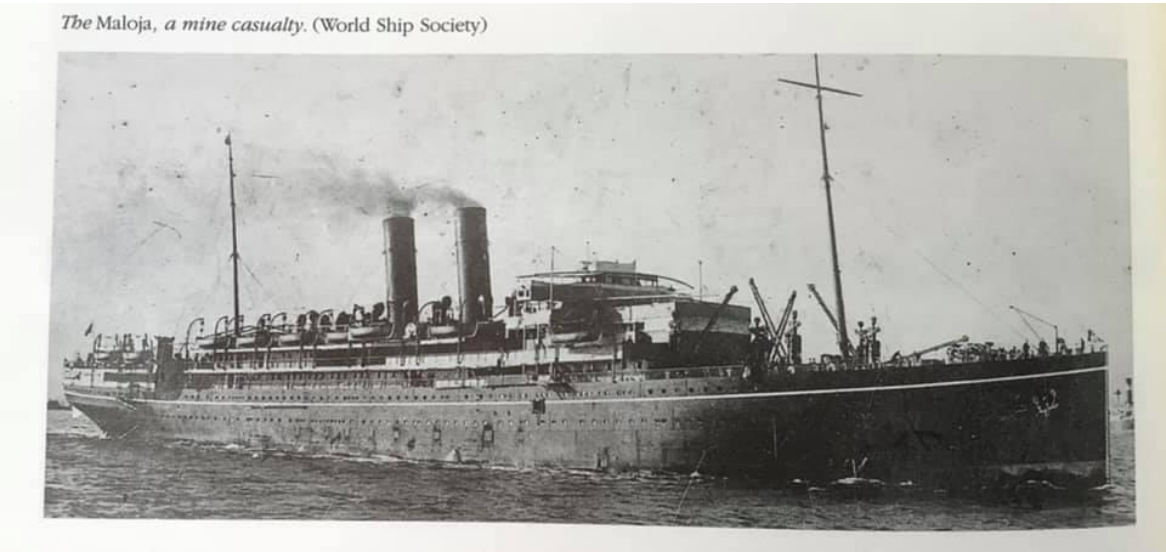


The Peninsular and Oriental line steamer Maloja that was sunk by a mine in the Straits of Dover, with a loss of more than 150 lives.

Maloja was one of P&O's M-class passenger liners,[2] the first of which had been RMS Moldavia which was completed in 1903. Harland and Wolff Ltd built Maloja, completing her in 1911. She had twin screws driven by twin quadruple expansion engines that were rated at 1,164 NHP and gave her a speed of 19 knots (35 km/h). She had capacity for *670 passengers[3] plus a quantity of cargo.At 1500 hrs Saturday 26 February 1916[4] Maloja sailed* from Tilbury for Bombay carrying 122 passengers (less than a fifth of her capacity) and a general cargo. Her passengers were a mixture of military and government personnel, and civilians including women and children.[4] Following normal P&O practice, her complement of 301 comprised British officers and Lascar crew. On the morning of Sunday 27 February Maloja approached the Strait of Dover at full speed and overtook a Canadian collier, Empress of Fort William. Under wartime conditions each ship would have to be examined by a patrol boat before being allowed to proceed. The German Type UC I submarine SM UC-6 had recently mined the strait. At about 1030 hrs Maloja was about 2 nautical miles (3.7 km) off Dover[1] when her starboard quarter[4] struck one of UC-6's mines. There was a large explosion, and the bulkheads of the second saloon were blown in. Empress of Fort William was still in sight and immediately went full ahead to assist, but while still 1 nautical mile (1.9 km) astern the collier also struck one of UC-6's mines and began to sink.[4]As a precaution against enemy attack, Maloja was steaming with her lifeboats already swung out on their davits so that they could be lowered more quickly.
Her Master, Captain C.D. Irving, RNR, immediately had her engines stopped and then put astern to stop her so that her boats could be lowered.[4] She also sounded her whistle as a signal to prepare to abandon ship.[4]Irving then tried to order her engines be stopped again for the ship to be evacuated, but flooding in her engine room prevented the engines from being stopped and she started to make way astern[4] at about 8 to 9 knots (15 to 17 km/h). She also developed a list to starboard[4] which steepened to 75 degrees. Passengers started to board the starboard lifeboats but the ship's speed and list prevented all but three or four of them from being launched. Small vessels headed to assist her including the Port of Dover tugs Lady Brassey and Lady Crundall, trawlers, dredgers and a destroyer.
As Maloja steamed astern and unable to stop, the rescue vessels were unable to get alongside to take off survivors. A heavy sea was running and the hundreds who crowded her decks could only don a cork lifejacket, jump overboard and try to swim clear. A number of her rafts either were launched or floated clear, and some of her survivors managed to board them. Maloja sank 24 minutes after being mined, followed by Empress of Fort William which sank about 40 minutes after being mined. Many of the deaths were from hypothermia, either in the water or after being rescued. Most of the people who survived were recovered from the water. Several survivors, including Captain Irving, I had been immersed for half an hour. The Second Officer, Lieutenant C Vincent, was in the water for an hour but survived. The small vessels taking part in the rescue took many of the survivors to the hospital

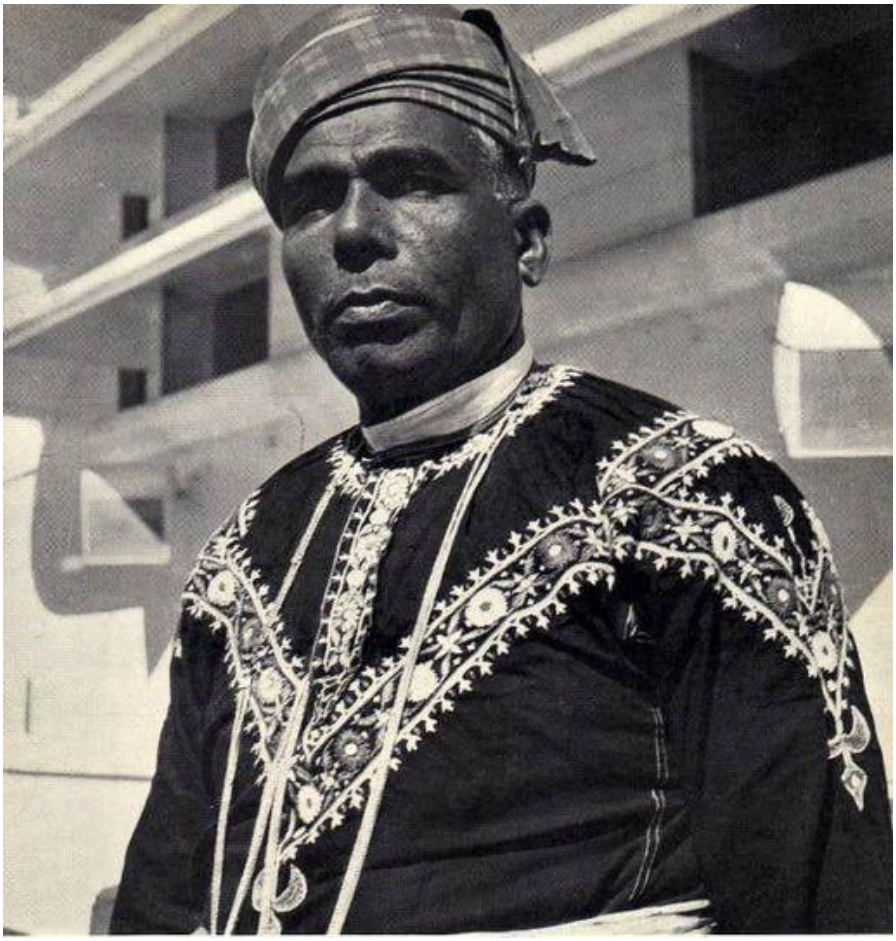
ships Dieppe and St David. Others were brought ashore and Royal Navy ambulances took them to the Lord Warden Hotel. Survivors were later taken by special train to London Victoria. At about 11.30 vessels started to bring bodies ashore. The chief constable of Kent took charge of the dead and designated the Market Hall below Dover Museum as a temporary mortuary. 45 bodies were recovered[6] but about another 100 people were unaccounted for.





The Maloja, *a mine casualty.* (World Ship Society)

LASCARS from the “VICEROY OF INDIA”



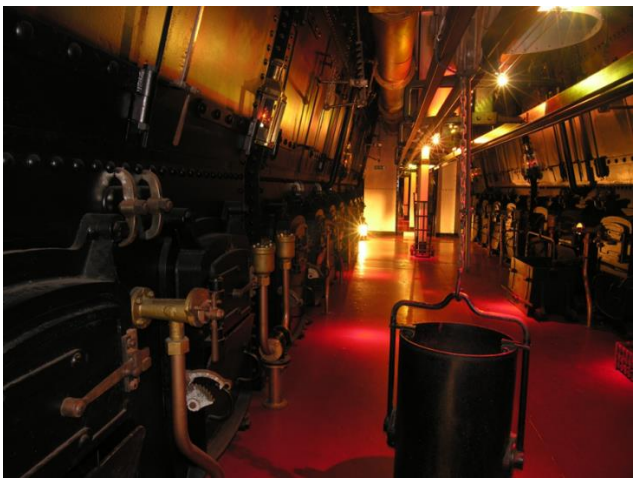
Trevor Coppock writes

My most treasured possession..... a genuine tree-nail from Admiral Lord Horatio Nelson's HMS. Victory (yes, I do have the provenance). It was presented to me by the photographic staff on my last day while working at The “News” newspaper in Portsmouth in the mid-1980's.

The Integration of Steam into the Royal Navy

By Michael (Jack) Hawkins

Steam engines had been trialled on board vessels since the early 1800's but was never really taken up in earnest in the Royal Navy until the mid-19th Century. These earlier vessels were small River Boats using reciprocating engines taken up from the industrial applications of the Mills and Beam Engines used in Pumping Stations. Afloat these engines would work large paddles on each side of the vessel. Or as in the case of the renowned Mississippi River Boats a large horizontal cylindrical paddle on the stern of the vessel. Steam was supplied by a very conventional boiler at low pressure but would demand large quantities of fuel and fresh water. On rivers this was readily available but to go to sea for long periods was a different environment. To develop using Steam Power at sea consideration had to be given to the power to weight ratio required to move a large vessel through the water, and the amount of logistics in fuel and fresh water that was required to make this form of propulsion a viable solution. This meant that engineers had to work out how to change the reciprocation motion into a linear motion to turn a shaft. Then develop a propeller that would sit on the end of the shaft to give enough thrust to move the vessel both ahead and astern at speed. Also new technology was required in the development of efficient boilers and the auxiliary machinery required to support the steam plant. Ship Designers had to be able to consider the manufacture and commodity of the hull and the effect this extra machinery would have on the overall displacement and stability of the vessel. Also, to ensure this extra equipment on board coupled with eventual pay load that it would require to make the ship a useful and fully functional fighting platform that was stable and achievable. Therefore, the emphasis on hull design had to change from wooden ships to ships of iron and eventually steel or a combination of both. The integration of steam on board ship would also require a cultural change within the Royal Navy as the birth of the new branch of engineers would need to be established and how they would be managed within the Executive Branch of Seaman. This detail would have to include a whole new skill of ship handling, and there would need to be a communication system established to convey orders from the ships conning to the engine room and boiler rooms. It was also realised that Steam on board could improve the overall welfare of all the ships company in terms of ship cleanliness, personal hygiene, and cooking of food. Apart from down in the Stoke Hole that is. The overall responsibility for achieving this was taken on by Admiral Sir Baldwin Walker Surveyor of the Navy in 1858. He summoned Isaac Watts Chief Constructor to the Navy to produce a design for an armoured corvette of 5600 tons. However, debate of hull structure between wooden hulls and iron hulls within the Admiralty was raging, even though the evidence from encounters during the Crimean War suggested the superiority of steam ships exposed the vulnerability of wooden hulls was compelling. This was mainly down to cost which is still a major issue designing new ships up to the present day.



Boiler Room HMS Warrior

The Boiler

This was the source of the steam plant which would require an enormous amount of fresh water, fuel and working 24hrs a Day 7 days a week when in use. Several British engineering companies in the early 19th Century prided themselves in the development of their boilers. As time progressed, they moved from solid fuels to liquid fuels and from low pressure Saturated Steam to the demands of Steam Turbines which required High Pressure Superheated Steam. This was developed to meet the demand for bigger, faster, and more manoeuvrable ships Alfred Yarrow of Yarrow & Co (London) Shipbuilders and Engineers realised the requirement for more efficient lighter boilers for

Marine use and trialled many different theories. Their Yarrow boilers were widely used on ships and particularly warships. The Yarrow boiler design is characteristic of the three drum boiler Two banks of straight water-tubes in a triangular row have a single furnace between them with two smaller water drums at the base of each bank. This allowed circulation upwards and downwards within the same tube bank This coupled with the use of straight tubes was a distinctive feature of Yarrow boilers. The early use of water tube boilers within the Royal Navy was controversial and in 1900 gave rise to The Battle of the Boilers. Boiler makers strived to produce the ultimate solution. In the beginning the first boilers like Bellville and Niclausse were large tube designs with straight tubes of 4-inch diameter, at a shallow angle to the horizontal. These tubes were jointed into cast iron headers but were susceptible to leaks at the joints. The assumption was that this was due to thermal expansion. The straight tubes were putting a strain on the joints. These boilers were large and although many were fitted to the Pre-Dreadnought Battleships, due to their size they could not be fitted to the new class of destroyers and smaller torpedo boats under development at the time. To provide lighter boilers for the smaller vessels the Express types were developed. The concept of these was to use smaller 2-inch diameter vertical tubes designed to give greater ratio of heating area to volume and thus decrease the overall weight. Most of these were of the Three drum pattern like the Du Temple and Normand designs. This more vertical arrangement of water tubes encouraged thermosiphon circulation in the narrower tubes. The previous problems of tube expansion were still theoretical but to combat this, tubes were either curved or convoluted into hairpins and S Shapes to increase the heating area. However this led to problems in cleaning the tubes and with forming a reliable joint into the water drums particularly where the tubes entered the drum at a variety of angles. Alfred Yarrow developed his boiler as a response to competition from others that had already developed water tube boilers. Working on his theories work began in 1877 and it took 10 years to produce his final commercial boiler. Despite this long gestation his boilers origins appear to have been most direct. It has been recorded that at a meeting with William Crush the Head of the Boiler department Yarrow Said, “We must wake up about water tube boilers” “Why not a boiler like this” and he placed his fingers together as if in prayer and “Straight Tubes” With this he had already expressed three basic design principles. The early water tube designers had been concerned with the expansion of the boiler’s tubes when heated. Designs were made to try and allow those tubes nearest the furnace to expand freely compared to those tubes further away. This was achieved by the tubes being installed in looping curves as for the Thornycroft boiler. However, these were difficult to manufacture and required support when in use. Yarrow determined that the temperature of a water filled tube was held relatively low and was consistent providing they remained full of water and boiling was not allowed to occur within the tubes. High temperatures and variations only arose when tubes became steam filled which disrupted circulation. Therefore, the conclusion was straight tubes were acceptable and had the added advantage of being easier to manufacture and clean Obtaining tubes capable of withstanding the increasing boiler pressures was difficult and most makers had experienced problems with the welds in the tubes. A benefit of straight tubes was that they could make use of the newly developed seamless drawn tubes being produced for the manufacture of bicycles. It was established that a water tube boiler relied on continuous flow through the water tubes and that this must be by a thermosiphon effect rather than impractically requiring a pump. The heated water tubes were a large number of small diameter tubes mounted between three large drums. Two water drums below and a steam drum above, smaller diameter tubes could withstand far higher pressures than large diameter tubes. Also the drums could withstand high pressures by virtue of their robust construction. Flow through the water tubes would be upwards owing to the heat from the furnace and that the counterbalancing downward flow would require larger diameter external pipes from the steam drum to the water drum. These larger diameter pies were a weakness owing to their rigidity and reduced reliability. Yarrow experimented with the U tube and after several attempts was successful in proving that the U tube could dispense with external down comers and that flow could be maintained upwards with the tubes closest to that furnace and downwards through those tubes in the outer rows of the tube banks. This breakthrough was the birth of what we came to know as the Admiralty Three Drum Boiler which was finally developed between the wars and further developed to use the gasses to superheat the steam for use with turbine engines and converted to liquid fuel oil. Heavy oil known as FFO was initially used and eventually Diesel oil which was lighter and more efficient. These boilers were also fitted with feed water regulators to maintain the water level to ensure the correct level into the boiler. The first ships to be fitted and trialled in the Royal Navy were HMS Horner in 1893 a Havock Class destroyer which was fitted with the Yarrow boiler and HMS Havock also 1893 the lead of the class which was fitted with an up to date current Locomotive boiler. This was so that a comparison could be made. The first Yarrow boilers were intended for small destroyers and filled the entire width of the hull. In the early classes three boilers were used in tandem, each with a separate funnel. The later sets supplied for capital ships used multiple boilers often grouped together into sets of three, sharing an update.

Admiralty 3 Drum Boiler

Main Propulsion Unit and Shaft

With the development of the steam boilers came the development of the main engines and shaft. Penn Engineering developed their 1250 NHP double acting twin cylinder single expansion horizontal trunk engine with associated jet condenser. This was fitted in HMS Warrior in 1859 and was a lead in the transition of sail to steam. This engine drove a single shaft with a two bladed propeller. The shaft was 108ft long and 17 inches in diameter made of solid wrought iron and supported by four brass lined Plummer blocks. Since the propeller had to be lifted out of the water when the ship was under sail the lifting block hampered the progression of mechanical steering gear. However in the next stage of the evolution this was not a requirement and therefore mechanical steering gear was developed and introduced.

HMS Warrior

An engineer C A Parsons from Newcastle upon Tyne developed a steam turbine with an integral condenser. This turbine could provide a greater more efficient method of propulsion with a greater degree of control. It also eventually incorporated a closed feed system returning condensate from the condenser back into the feed system thus cutting down on fresh and feed water losses. The first ship to be fitted with this power pack was that Turbine launched in 1894. When the Royal Navy saw this it quickly decided that this was a success and so in 1987 C A Parsons & Company was set up to supply these turbines to the Navy. The first two ships powered by Parsons steam turbines were HMS Viper and HMS Cobra. These were Destroyers launched in 1899 and powered by Parsons Steam turbines.

H.M.S. VIPER

Alas, both these ships came to grief in 1901.

This was not due to the propulsion pack which was deemed a success by the Admiralty. HMS Viper struck rocks on the 3rd August 1901 and broke up. HMS Cobra broke her back in a storm in the North Sea on 18th AUGUST 1901. The Royal Navy's first Battleship using Steam Turbines fed by three drum boilers was HMS Dreadnought. The process of the steam plant was. Steam would be produced in the boiler at 450 psi and superheated to 850 Degrees. The steam then passed through to the throttle valves, ahead or astern which directed it to drive the turbine. The turbine consisted of a series of static blades directing the steam onto blades spinning on a shaft inside a casing. The steam once passed through the turbine was drawn into the condenser by a vacuum and then passed over a copper tube nest which was filled with circulating sea water. This cooled the steam back to feed water which was then transformed to a hot well tank and then back to the feed system. This was the basis of the Closed Feed System. The drive from the turbine then went through a series of gearing to drive the shaft. Although the design of the propellers changed the shaft and shafting design had very little change. The last Royal Navy warship built using Parsons Steam Turbine pack was HMS Glamorgan a County Class Guided Missile Destroyer in 1964. Where HMS Warrior was a mix of sail and steam HMS Glamorgan had a propulsion mix of Steam and Gas Turbines. This then set the precedent for a new concept in main propulsion for the following 30 years.

HMS Glamorgan Falklands veteran 1982

In the interim the Leander build programme led to a change to the Y100 & Y160 two drum boiler with steam turbines. These ships were renowned as the work horses of the fleet. This was the end of an era. These were replaced by Type 21 and Type 22 Frigates.

Auxiliary Machinery

The Auxiliary machinery was the link between elements of the steam plant . This would incorporate feed pumps that would pump the fresh feed water from the feed tanks to the boilers and around the main feed system. Circulating pumps would move sea water cooling around the condensers and evaporators. The evaporators would take in sea water and boil it off to make fresh water. As the boilers developed this would also include forced draft blowers which would force air into initially the boiler rooms where the boilers were open front and the boiler room had to be a positive air pressure to then into the furnaces. Also oil pumps and fuel heaters which would improve combustion and the efficiency of the boilers. Again manufacturers looked at the requirements as the Marine Industry grew both in the military and merchant shipping companies such as Wiers who were renowned for their pumps and auxiliary machinery produced the equipment to fulfil the need. With the development of the steam turbine and the eventual need for electricity on board steam driven generators and alternators were included within the plant and were fundamental to the progress of the sophistication of weapon systems and navigational aids.

Conclusion

So in the space of 70 years the integration of steam propulsion in the Royal Navy was a catalyst for change in Warfare at Sea. The increased power enhanced by instant manoeuvrability compared with sail meant that different strategies were now possible. Steam brought electricity on board which improved navigation, communication, weapon systems and improved welfare. But it was still down to the skill and professionalism of the sailor to make it work and that never changes.

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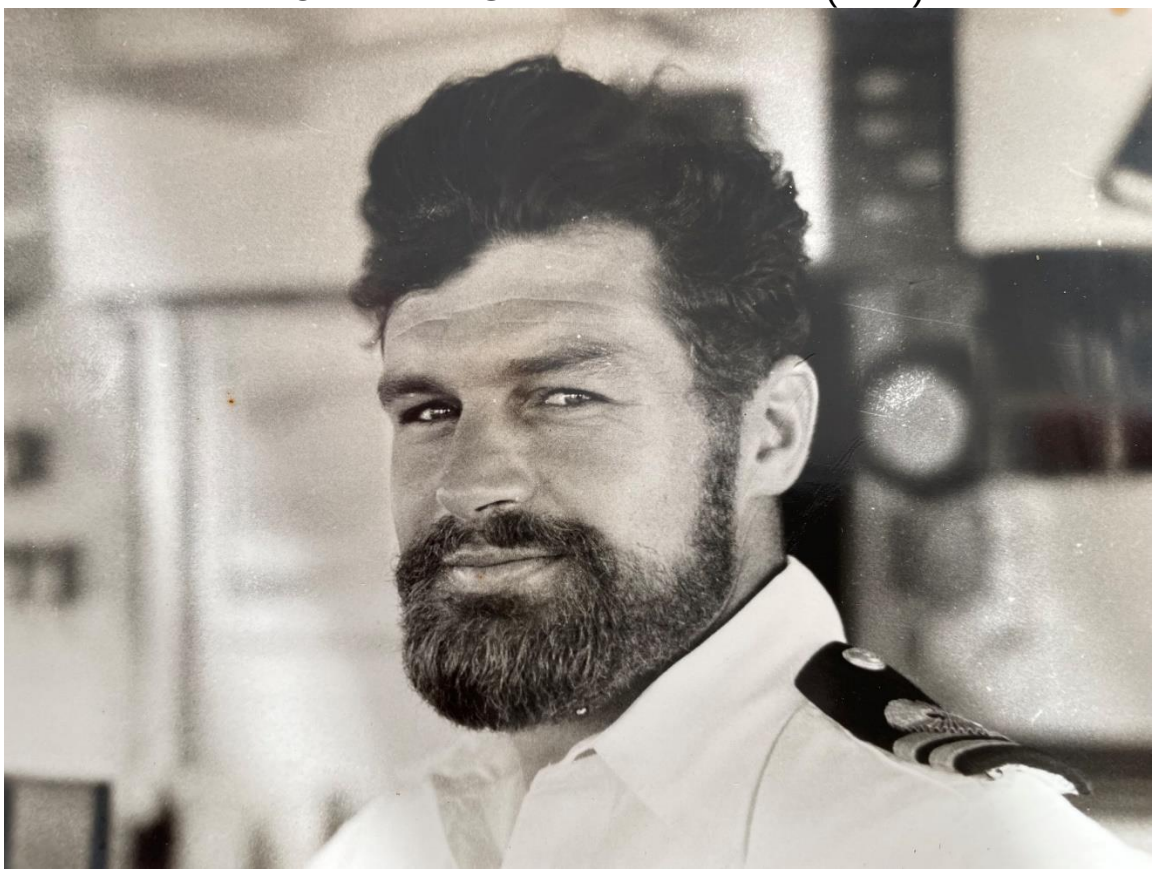
OBITUARY

LIEUTENANT GERRY WAREHAM (R.N.)



Gerry on the bridge of HMS Berwick in the Far East.

It is great sadness we record the death or Gerry Wareham who had for many years, been a leading figure in the Maritime Trust until his retirement a couple of years ago as a result of failing health and eyesight. Gerry was born in June 1932 in Durweston, nr Blandford. He attended Kemp Welch school and in Jan 1947 he joined the Training Ship *Mercury* on the Hamble River. In 1948 he formally entered the Royal Navy as a Boy 1st Class at *HMS St Vincent*. He was a Leading Seaman by 1953 and Commissioned as an officer in 1958. He served mainly in frigates, being a Gunnery Officer, and spent a lot of time in the Far East, which he loved. He resigned from the RN in the early 1970s and went to work for Wessex Water, becoming their Training Officer before finally returning to Poole as, initially, Deputy Harbour Master. Gerry loved the harbour and landing the role of Harbour Master was, his dream job after being in the RN. On a topical note, Gerry was one of the seamen pulling the gun carriage at the funeral of George VI. Gerry will be fondly remembered by his many friends for his hospitality, wit and extensive knowledge. Gerry is survived by his son Tom, daughter-in-law Chris and his brother Pete to whom we extend our sincere condolences.

Gerry's funeral will take place on Wednesday 5th October at the Poole Crematorium at 11.30 followed by a buffet lunch at the RNLI building at Poole. It would be appreciated if those planning to attend will e-mail : poolemaritimetrust@aol.com in order sufficient service books and lunches can be catered for.

It is, also, with great sadness we record the passing of

John Blackwell .

John was an enthusiastic member of the Trust for more than 40 years and he will be sadly missed. We extend our sincere condolences to John's family.

FORTHCOMING MEETINGS AND EVENTS.

POOLE MARITIME TRUST

Autumn/Spring Programme 2022/23

All are welcome to attend unless flagged 'PMT members only'

6th October 2022	Speaker: John Megoran
	'Paddle Steamers at Weymouth 1946-1966'
20th October 2022	Buffet at Brownsea Castle (Limited to 60 places)
24th November 2022	Speaker: Michael 'Jack' Hawkins
	Little Ships of Poole, Dunkirk to D Day
5th January 2023	Poole Maritime New Year Supper at RMYC (PMT Members ONLY)
	Speaker: Mel Rees
	'A Funny Thing Happened on the Way…'
12th January 2023	Speaker: Jonathan (JLP Historian) TBC
	The History of Brownsea Castle
2nd February 2023	Speaker: Mike Curtis
	Defence of the British Realm
	National Forces - Royal union of England and Scotland
	English Civil War, beginnings of the Royal Navy, Elizabeth 1st
	and Armada, Cromwell's new model Army.
2nd March 2023	Speaker: Jonathan Clark Engineer Officer (BI and P&O 1962-76)
	'The Tyser Legacy, the Foundations of the Port Line Ltd (in service
	1937 to 1982

PADDLE STEAMER PRESERVATION SOCIETY
Local Wessex & Dart Branch Meetings

ALL ARE WELCOME TO ATTEND AT NO CHARGE

Saturday 5th November 2022 – 2pm. - From the Archives.
Richard Clammer illustrates a selection of treasures held by the PSPS Archive.
Holiday Inn, Herbert Walker Avenue, Southampton. SO15 1HU

Saturday 3rd December 2022 12 noon for 1pm
Christmas Lunch at the Suncliff Hotel, East Overcliff Drive, Bournemouth. BH1 3AG
See enclosed leaflet for details

Saturday 4th February 2023 – 2pm.- Film Show
Presented by Chris Wood
South Coast Paddle Steamers and
Anymore for the Skylark Part 1 passenger boat sailings from Bournemouth, Poole and Swanage.
Suncliff Hotel, East Overcliff Drive, Bournemouth BH1 3AG

Saturday 25th February 2022 – 2pm
Presented by Chris Phillips
The Story of the River Dart Steamers and Kingswear Castle's heritage.
Holiday Inn, Herbert Walker Avenue, Southampton. SO15 1HU

THE SOCIETY FOR POOLE

PROGRAMME 2022/2023

Meetings are held at : Royal British Legion, 66 North Road, Parkstone BH14 0LY and are open to all.
COMMENCING : 19.30 COST: Members £3.00, Guests £4

18th October 2022
Alleyways and Lanes of Old Poole - Don Nutt
15th November 2022
Wildlife of the Dorset Jurassic Coast - Brian Petit
December - No meeting
17th January 2023
Dad's Army – Fact and Fiction - Steve Roberts
21st February 2023
The true story of the African Queen - Kevin Patience
21st March 2023
Treasures of Dorset - Christopher Le Grand
18 April 2023
AGM
16 May 2023
A Labour of Love – East Dorset Hospitals in World War I
Jan Marsh

ST JAMES' CHURCH POOLE

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Registered Charity No.: 1133726
Rector: Rev Canon Lucy Holt

12th September 2022

Dear Friends

SERVICE OF THE SEA, Sunday 16th October 6.30pm

We are delighted to extend a warm invitation to our annual Service of the Sea on Sunday 16th October 2022, at 6.30pm. We recommend early arrival as the Church will be full. As usual, the Parish Church will be decorated in keeping with the occasion with nets, buoys and lobster pots.

It is always a pleasure to welcome representatives of the seafaring community and those connected with our Church to this Service.

We trust you will regard this letter as an invitation to yourself, members of your family, and all concerned with any organisation you represent.

POOLE MARITIME TRUST

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