The Binnacle

February 2022 Volume 44 Issue 2

Ken Lockley on the tug Queen, the tug Master, and progress on his model of Cervia.

Figure 1: The Steam Tug "Master"

Edward White on the “Mary Rose”

On the Radar

Start your Planning.

This damn pandemic has to end soon, and we are betting that this coming spring is the time. So for a start, we are going to try to run our Battle of the Atlantic parade at Harrison Pond on the first weekend in May. (So that'll be either May the First or the Seventh.). So if you have a model relevant to that theme than needs building, completing, or just fettling up into working order, try to plan now for the work to happen by the end of April. It would be really good to come out of our limbo with a really great show on the Pond. Static displays are going to be very welcome as well, anything to commemorate those who gave their lives in that terrible conflict.

Beyond that, we haven't settled on actual dates as yet, but we do want to run a Denton Cup competition and a tug/barge regatta this year, so let's all plan to be there and have a bunch of fun.

General Meeting.
On Zoom again this month. Thurs. 10th. 7:30 pm.

Harrison Model Yacht Pond
Dallas Road. Sundays 9 – 11.

The Langford Lake Navy
Wednesdays 9:30 ish
Langford, Leigh Rd. At Trillium.

2022 Executive Committee

President: Dave Nelson	812 1942
Vice-Pres: Mike Claxton	479-6367
Secretary: Ron Hillsden	479-5760
Treasurer: Mike Creasy	888-4860
Director @ Large: Calvin VanElsakker	477-5830
Binnacle Editor: Edward White	385-6068
Quartermaster: Vacant	
Membership: Bev Andrews	479-2761

All above area code (250)

Victoria Model Shipbuilding Society

General Meeting
By Zoom
Jan 13 2022

Welcome &Call to order:

- Time 7:35
- Number present 9
- New Members or Guests? No

Reports

- Outreach – None
- Financial - Website fee has been renewed

Old Business

- Lighted Boat Parade was a success. Confirming our position on masks at Harrison Pond; we are encouraging all members and guests to wear masks as many of our members are vulnerable due to age. It also reflects well on us as a responsible organization.

New Business

- Arnold McCutcheon sent a letter thanking us for his enjoyment of our hobby, but explaining he is unable to continue. It was decided to award Arnold with an Honorary Membership.

Donations

- None

Upcoming Events:

- It appears this pandemic is waning and we may be able to return to normal activities soon. We believe May will be a good place to start as weather will be improving and there will be clarity from Provincial Health. The events we plan to start with are:
  - Battle of the Atlantic float (first weekend in May)
  - Powell/Denton Cups (Ken Lockley has cards and chips – we just need a date)
  - A tugboat/barge regatta (more planning required)
- All regattas events will start at 09:00 and end at noon as most members leave before 12:00.
- Executive will decide from month to month whether general meetings will be in person or by Zoom.

Entertainment and Round table

- Calvin demonstrated and explained some of his 3-D printing products and offered to consider making custom parts .

Adjournment

- Zoomed out at 8:15

Arnold is leaving us.

To David Nelson, President of VMSS;

With no desire to just 'not show up' as a long time club member, I choose to leave on a 'high'. The time has come with failing abilities, not driving and not sailing at Langford Lake or Harrison Pond; to cease my membership but not forget the joys and learning since Bill talked me into joining. The last couple of years have been tough for obvious reasons, but prior to that the learning and camaraderie have been priceless. Just to go back in time and remember this green prairie guy who had never built or sailed a boat, got taken under the wings of old timers like Dave Denton, now deceased, and Bob Rainsford to not only help with my builds but uncritically coach the basics of skippering not once but many times. Then there were the many times club members rescued my sailboat from the weeds or a motor boat from a drowning near the dock at Langford Lake. I also want to express appreciation to the various club executives that planned interesting meetings and training events, but also club events in the community where I could sail my boat in the club pond and often find young budding sailors who gladly took one of my boats home to further their experience at a home pool or Harrison pond.

So it is 'so-long' but not goodbye as I'm sure to see some of you at the pond or somewhere in Victoria.

Arnold McCutcheon

If you haven’t already done so, got to our website, the Binnacle Archive, and read the September 2018 Binnacle. In it there’s a story “Arnold and the Helicopter”, in which Arnold tells us a little of his early life.
Edward.

Bob and Margo Rainsford just celebrated 70 years of marriage.

Bob served as the Quartermaster of the Club from the early 2000’s till a couple of years back, storing most of the club’s gear and literally doing the heavy lifting to get Club events underway all those years. An active member and always very ready to help any of us. He and Margo deserve all of our best wishes.

SHIPS, BOATS AND MODELS

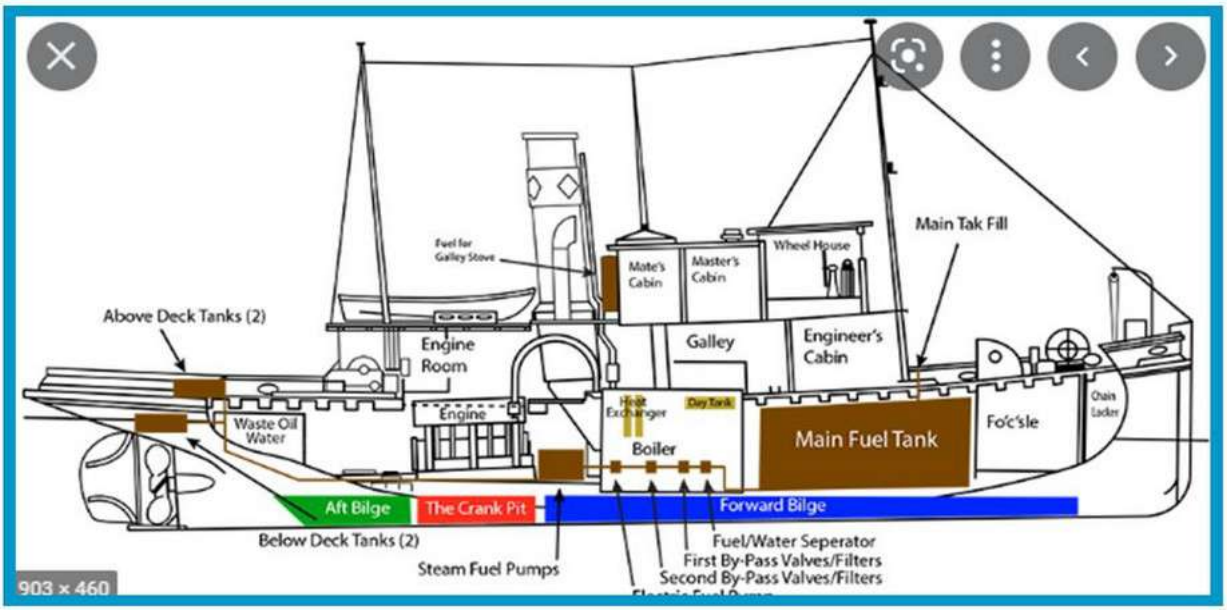
Ken lockley Febuary2022

British Columbia Nautical History
Al Hoskins · 11h ·
I worked on the Queen for a bit around 1969.... A really heavy 88 foot wood tug with a big direct-reversible Cooper Bessemer 5 cylinder engine that ran at a top speed of 550 rpm, she was so quiet that while underway the loudest thing in the wheelhouse was the clock!
It was a bit of an adventure yarding a log tow together, because of course to change propellor direction and speed you used the telegraph handle in the wheelhouse to send a signal down to the corresponding telegraph in the engine room, where the engineer had actual control of things. He would acknowledge the signals using his own telegraph handles and then shut down the engine, start it up in the opposite direction, and adjust the fuel rack to get the requested speed. All this moving of handles and levers was attended by a system of loud bells and jingles in both telegraphs, interspersed by brief periods of silence while the engine

Great picture of the painting "The Queen" by Bill Maxmick of Courtney B.C.

was stopped. Then there would be a tremendous FOOFAH!! – KACHUFFA - KACHUFFA from the air start system, and the engine and propellor would hopefully be running in the right direction. Of course in the grease pit the engineer was busy as a one-armed paper hanger making all this happen, sometimes emitting a string of violent blue curses which wafted up through the skylights and could be heard and seen for miles around.
Up in the wheelhouse the skipper (Herb Steele) grunted away with maneuvering the boat by spinning the huge 8 spoke steering wheel; 44 turns hard-over to hard-over, often muttering a kind of prayer that went "turn you bitch, TURN"
Meanwhile, down on the log booms and on deck the mate and deckhands would keep a wary eye and ear on those proceedings, ready to run away to some bigger logs or other semi-safe spot in case things went sideways on the tug.
But I seem to recall we only had one such incident in Beaver Cove where the engine was a little slow starting in reverse, so the Queen made a hard landing alongside and kind of bounced off the side stick before I managed to throw a tow hook into a boom chain and flip some wraps around the side bitts to stop her up before her bow smashed into the tail stick on the next boom. .... Good times! ....
This painting of the Queen was done by Bill Maximick who is a mariner-turned-artist with a shop in Courtenay.

The picture above is Brian Calverley's 60 inch model of the "SS Master". Brian is based in the Nanaimo area and the model is featured in the magazine "Model Boats " web site. Another view on the next page. The "Master" is maintained and crewed by members of the "SS Master Society" of Vancouver. Great model Brian !!!!!!



Another picture of Brian's "SS Master"

The magazine "Western Mariner" have had a great two part article on the "SS Master" written by Robert Allen P. Eng. According to the writer, the "Master" is the oldest wooden vessel still steam powered and puts the vessel in a very special category. The vessel is now in it's hundredth year thanks to many volunteers and firms like Seaspan Vancouver Shipyards Ltd who have just completed a through cleaning and repainting of the vessel while out of the water. It is a emblem of what our early years of log and barge towing by these types of vessels. She was commissioned by Capt. Herman Thorsen and delivered to his Master Towing Company in December 1922. In 1933 she was sold to the Home Oil Co and in 1940 she was sold to Marpole Towing Co. The livery she wears today is of Marpole Towing Co.

In the Workshop:

It's been a busy month progressing on "SS Cervia", another steam tug being saved by volunteers in the UK. The only difference, it is a steel vessel which also has it's problems to maintain but easier I believe than wood. The next page shows a few pictures and the progress to date. This month of February I really want to make some good progress as Spring is such a busy time without side activities garden jobs etc.

Picture #1 shows the hull still on the building board. It's sanded and spot filled ready for the two part epoxy.

Picture #2 shows the frames all cut out and ready for the epoxy treatment inside. I did two coats inside and outside

Picture #3 is me cutting out part of the sub decking at the deck level in the stern. This was done to give access the rudder post.

Picture #4 Shows the product I use purchased at Industrial Plastics Ltd. Also in the picture is disposable brushes and they were purchased at "Lee Valley" 10 for $7.75

Picture #5 shows the deck beams being put into position.

Picture #6 The hull is just off the building board before cutting out the frames.

Mary Rose.

Nowadays we know a great deal about the Mary Rose. The "Mary" is for Henry the 8th's sister Mary, (no, not his daughter Mary, later Queen Mary). The "Rose" is for the Tudor rose, the family emblem. Together, the Mary Rose was a warship, reputedly Henry's favourite.

Henry's father, Henry the 7th. had started rebuilding the English navy as soon as he took the throne by killing Richard the 3rd., putting an end to the Wars of the Roses. (Battle of Bosworth Field, "a horse, a horse, my kingdom for a horse" and all that. 1485.)

So when young Henry, tall, good-looking, multi-lingual, a great archer, competent musician, and just a whiz at pushing other armoured aristocrats off their horses, succeeded him in 1509, he straightaway ordered the restoration of one of his father's great ships, the 800 ton Sovereign, and ordered two new ships built, of 400 and 300 tonnes burthen. These two were to be built to the latest European designs, to carry the newest technology, cannons.

Right there is the fascination and importance of the Mary Rose. Because this was the period in which the focus of naval warfare shifted from close quarter, hand to hand combat, to the sinking or crippling of enemy ships by gunfire. And Henry himself illustrated part of the change.

You see, Henry the 8th. was the last of English Kings brought up with the expectation that he would fight with his army. He was a fully trained and equipped armoured knight, and he was a master of the Welsh/English weapon that had dominated the battlefields for the previous three hundred years, the longbow.

But the writing was on the wall for the end of archery. The change was in the foundries of Europe.

The earliest firearms were formed by binding rods of iron with hoops to form tubes. They could be made with consistent strength this way while large castings were still very unpredictable, liable to cracks and voids. But they still weren't very strong, and therefore the power of the shot was limited. Castings, if they could be made consistent, offered a much stronger potential, and in Europe there was furious development of both casting procedures and metal formulae to get better results. By the 1450's land based cast bronze cannon began to outrange the longbow, and the dominance of the archer in the Hundred Year's War was ending.

The transition was long. Small hand cannon were being made, but they were still very heavy and the first mechanism for setting them off while still aiming, the matchlock, was only coming into use in the late 1470's. Archers and crossbowmen were still to be an essential part of an army through to Napoleonic times.

Big guns on ships had another couple of major problems. The ship's structure had to stand up to the recoil, and the massive weight of the guns and their ammunition had to be kept as low as possible in the hull if the ship were not to capsize. Watertight gunports had to be made, or waves would swamp the gundeck in heavy weather, especially as the ship leaned under sail. These issues were being solved in France and Italy, hence Henry's insistence on European designs. The Mary Rose had these watertight gunports, but thirty five years after her launch, she was lost because the crew failed to close them as she sailed to attach the French. We'll get to that!

The next point I want to make is the expected use of these ships. We tend nowadays to think of naval action on the open sea. But wars don't get settled at sea! Trafalgar was one of the most decisive naval battles in history in 1805. But Waterloo was ten years later!

And the open sea is big. For two fleets to engage they first have to find each other. And that's not easy. Nighttime, fog, storms, even low cloud and heavy rain. And the earth is round, so there's always a horizon. You can't fight what you can't see! What ships do best is turn up unexpectedly with a large raiding force protected by artillery and put some real hurt into enemy coastal installations. Ask any Viking!

So you are a young, feisty, king of a small island country with a long tradition of beating up on the French. You want to reclaim that "glory" but money is far from unlimited. It's a much more personal business than government today. These ships were to be Henry's personal property, and would spend most of their lives at anchor with a tiny maintenance crew. There was no Admiralty, no Pentagon, no standing Army. The majority of your fleet was going to be rented or pressed merchant ships with a load of soldiers and archers and maybe one or two small guns aboard. (For several centuries previously, kings had kept bow and stern “castles” made up to fit onto merchant ships to equip them for war.)

What do you really want your new special war-ships to do?

Carry and protect an invasion force across to the enemy shore, anchor and bombard coastal defence forces while the soldiers get ashore and then capture a port.

Protect the port from counter-attack and help the reinforcement of your forces there. A ship anchored in a sheltered position is a lot better platform for gunnery than a ship butting through a rough sea.

If you happen to know that you are being invaded or raided by your enemy, then you want your ships to get to a position where they can interfere with the incoming fleet, and be capable of doing so.

Long distance travel was not a big priority. Mostly your enemy was just 21 miles away by sea. And the flow of ocean trade from Spanish North America and Portuguese India had not yet begun. It was privateering against these lucrative trade routes that produced the fast, manouverable, heavily armed ships that Drake and Raleigh used to fight off the Spanish Armada under Henry's daughter Elizabeth.

So Mary Rose was in herself a ship in transition. At the beginning of her fighting life, archers were her most deadly weapon, with guns the glamorous and scary newcomer. By her end, she could hope to kill more people by drowning them as she sank their ships. To accomodate her archers, she was built with very high fore and stern "castles" from which they could shoot down onto the enemy's main deck. (And, one of the serious drawbacks of the longbow is a minimum ceiling height of close to 9 feet before you can draw it properly!)

Those high "castles" might be built lightly, but they were a major drag on her sailing qualities because of the windage. So although Mary Rose was accounted a good sailer among her fellow warships, it's doubtful if she could make any better than 90 degrees to the wind, no matter what.

Three separate inventories of Mary Roses' guns were made, in 1514, 1540, and 1546. In 1514 she had only between 5 and 9 guns that would have been effective against enemy ships, the rest of her 78 guns were less powerful anti-personnel pieces. By 1546 she was up to 91 guns in total, with 24 of them powerful enough to penetrate enemy hulls. She mounted both cast bronze muzzle loading cannon and the earlier hoop reinforced iron bar breech loaders in what we would now call her broadside. The iron guns were much less powerful, they carried the name "murderers" and likely would be using either stone shot or grape shot as anti-personnel weapons.

Figure 2: Cast Bronze Cannon

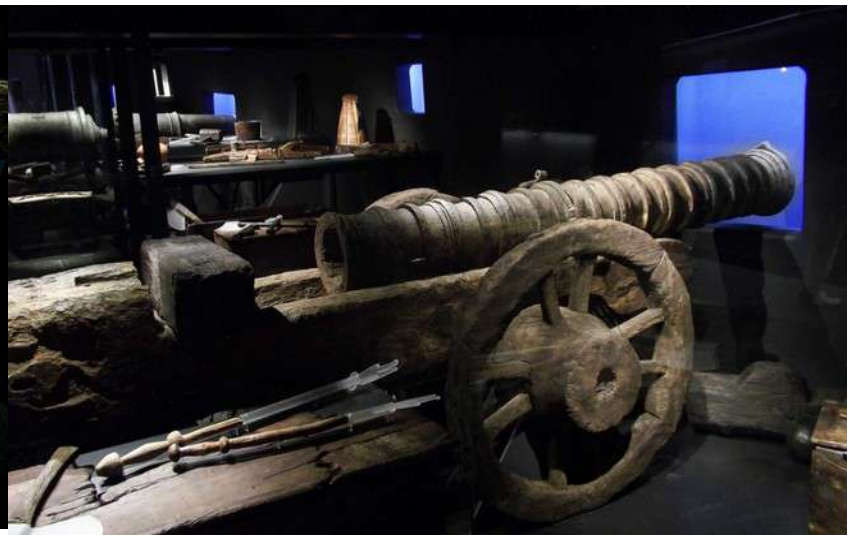


Figure 3: Iron "Murderer"

On the Mary Rose Trust web site there are two short videos showing the loading and firing of these guns. The breech pieces of the murderers are especially interesting, showing that they were wedged into and supported in place by the wooden gun carriage structure. In use, there were two breech pieces supplied with each gun, so one could be loaded while the other was in action.

Throughout her life, the deadliest of her opponents were the mediterranean galleys. These were lightly built, carrying only one or two significant guns, but those guns were mounted in their bows and aimed simply by steering the whole ship. If there was not enough wind, the galleys were faster and more steerable than the sailing ships and could stand off and pound them. If there was a good wind, then the galleys were very vulnerable. And of course, galleys were unusable in heavy weather, swamped by waves.

Mary Rose's first period of action was in 1512-1514, commanded first by Sir Edward Howard as Lord High Admiral. The first expedition of the campaign was a fleet of 18 ships led by the Mary Rose whose job it was to clear French Warships from the French Atlantic coast to make way for a Spanish invasion of southern France.

The second was an attack on Brest which led to a battle with the combined French and Breton fleet. The English burned 27 French ships and landed a raiding force near Brest, but were forced back to England by storms before they could establish a real foothold.

Howard tried again in 1513, with another attack on Brest, where the French fleet had been re-inforced by galleys. He landed a force but could not quickly overcome the Brest defences. He then personally led an attack on the galleys in a fleet of rowing boats, but got cut off after boarding a galley and was killed. The English fleet was short of food and demoralized by the loss, and Mary Rose returned to Southampton. In August the Scots allied with the French and invaded England but were defeated disastrously at Flodden Field. Mary Rose took part in a brief follow up attack on Scotland early in 1514 but without any known significant battles.

The summer of that year saw small raids by both sides, but these ended in a peace treaty sealed with the marriage of Henry's sister Mary, to Louis the 12th of France. Mary Rose was laid up in July with a skeleton crew. Her next outing was a token voyage in 1520 "scouring the seas" before Henry crossed the channel to meet peacefully with France's next king, Francis 1st. at the "Field of the Cloth of Gold".

That eternal friendship lasted almost a year before England allied with Charles 5th. the Holy Roman Emperor, and Mary Rose was part of another invasion fleet that captured the Breton port of Morlaix. She was laid up again and stayed in reserve right through till 1545. Although in 1535 she appears to have been extensively rebuilt, (Henry was flush with money from the Dissolution of the Monasteries).

Then in 1545 The French assembled an invasion fleet in the Seine Estuary to invade England and Mary Rose became the Flagship of the opposing English fleet at Portsmouth. When the French arrived, there was a rare dead calm over the Solent, perfect conditions for the French galleys to attack. Thirteen small English galleys, or "rowbarges" were put to oppose the French advance in something of a "forlorn hope". But suddenly the wind picked up and the English fleet, led by Mary Rose and the Great Harry weighed anchor. Henry 8th himself was watching from the shore at Southsea as something went very wrong. The Mary Rose heeled over towards her starboard side and didn't recover. Instead she quickly sank, only the tips of her masts, still heeled over, showing above water. On board her, all kinds of nets had been rigged to prevent enemy boarders and protect from falling rigging. But these turned into obstructions that prevented almost all of her crew from getting clear. There were something like 500 men aboard, only 25 or 30 were saved.

The majority of accounts from the time say that Mary Rose sank because her starboard gunports were still open as she attempted a turn and was laid over by a gust of wind. The condition of the remains now recovered in the Mary Rose museum is consistent with this, showing no evidence of gunfire damage.

In any event, from that point both fleets behaved quite cautiously, and after a few landings in the Isle of Wight, not pressed inland, and another at Seaford bay, to the east of Portsmouth, the French withdrew.

Immediately, the Secretary of State, Sir William Paget organized attempts to raise and recover the Mary Rose using two ships anchored above her, first to set her upright by pulling on her still visible masts, and then to raise her by cables slung underneath her hull by divers. They failed, the masts broke under the strain and although a gun or two was recovered by divers, the main ship was unmoved and quickly sank deeper in the mud. As we now understand, she had sunk in a position where the tidal currents were quite strong, and the mechanism of tidal scour would deepen the holes each side of her hull with every reverse, and carry more mud inside the hull to settle her further. So she was lost, there were no accurate measurements recorded of her position, and the world knew no more of her for 291 years.

On the 16th. of June 1836, John Deane, wearing a diving helmet attached by hose to an air pump on a boat above, his own invention, (There's a great story right there, follow it on the internet, you'll love it!), was working to recover bronze cannon from the wreck of the Royal George. The Royal George sank off Spithead in 1782, a great tragedy at the time, but the government was paying John Deane and his brother half the going price for scrap bronze for each piece recovered. Quite near their diving boat a Gosport fishing boat came to a sudden halt as her nets caught on a bottom obstruction. The fishermen marked their caught gear with a buoy, and came to ask John Deane to recover the gear and whatever might have snagged it for a half share in any value it had. Deane agreed to try, and moved his boat, the Ramsgate smack, Mary, over to the fishermen's buoy. On the bottom he found the snag to be a wooden timber, but one of a series that looked like the ribs of a wreck. A little further, and he found the end of a cylinder, coloured green, sticking out of the mud. The green could be bronze, so he attached a line and hauled it up aboard Mary. It was a bronze cannon, but not like any other he had seen. And cast into it was an inscription from an Italian foundry stating it had been made for Henry the 8th. as well as a Tudor rose. Deane continued to dive on the site until 1840, in which year he first recovered a number of cannon, both a great bronze culverin and a number of the built-up bronze and iron cannon and then finally got permission to use six condemned bomb shells from the Portsmouth gun wharf to blast away some mud from the wreck site and thus dig deeper. This move let him recover objects other than the guns, 8 bows, both cast iron and stone cannonballs, a bunch of timbers in good preservation, and even 15 feet of the main mast. The guns still belonged to the Board of Ordnance, but the other objects were Deane's and he held an auction of them in November 1840.

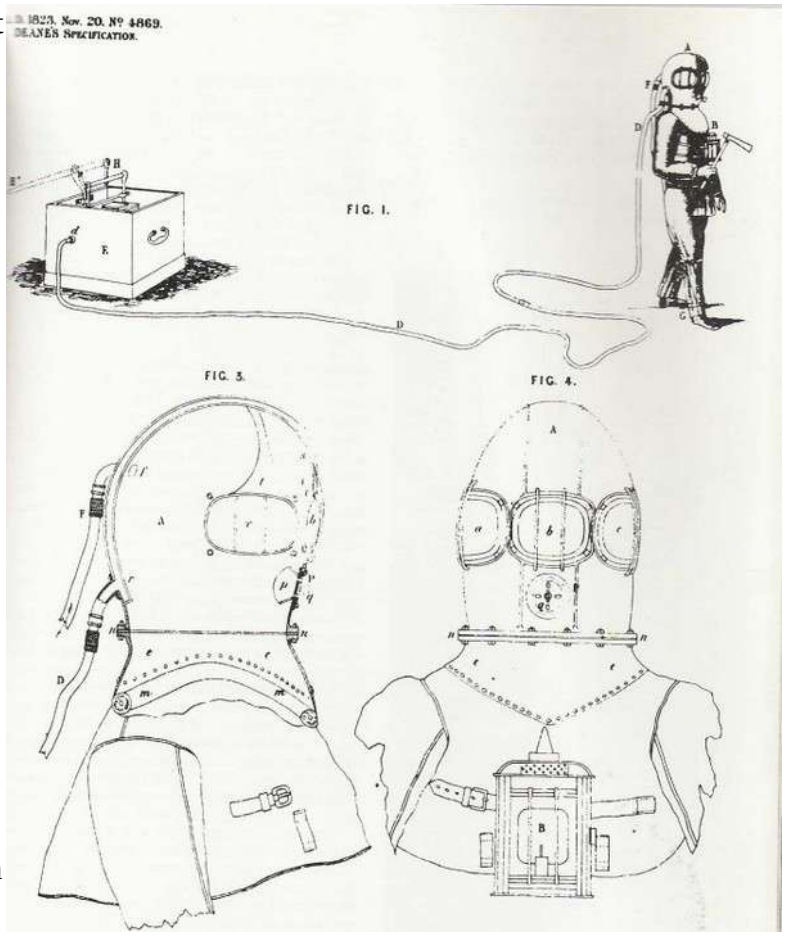
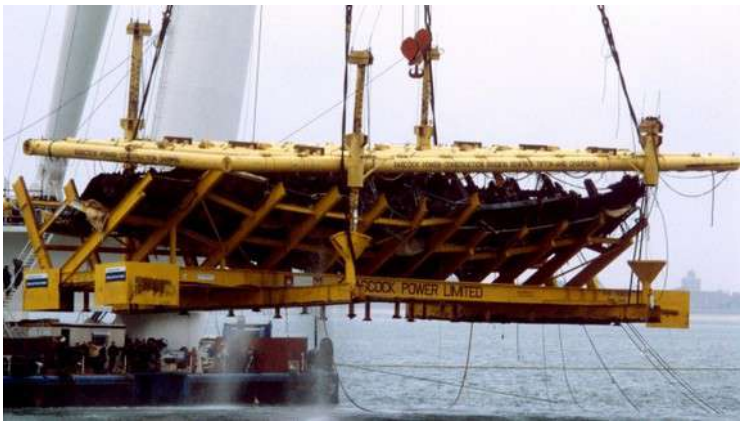


Figure 4: John Deane's Diving Gear

That was the end of Deane's diving on the Mary Rose, and the beginning of another forgetting about the Mary Rose site. Part of it was that a team of Divers and Sappers from the Army (now the Royal Engineers) were employed to blow apart the remains of the Royal George, as a hazard to shipping, and mud re-covered the whole site, part was that Deane never published his planned book and the manuscript and illustrations were lost. Even Deane's invention of the diving helmet was forgotten and the invention ascribed to a colleague, Augustus Seibe.

A hundred and twenty five more years passed by, and then on the 24th of April, 1965, five members of the British Sub-Aqua Club, Southsea Branch, got into a fifteen foot open boat and set off to find the remains of the Royal George. One of them, Alexander McKee, had persuaded the rest to start a project to identify wrecks all around the Solent. Actually he was totally obsessed by only one, the Mary Rose.

Seventeen years after that, about half the original hull, preserved by the mud of the area, was lifted intact from the seabed and towed into Portsmouth harbour. Today, she is on exhibition in her own museum close to the Victory and on the web at the Mary Rose Trust. Those years are a great story in themselves, told in McKee's book "How we found the Mary Rose".



What about modelling the Mary Rose. Well, you have a good range of choice. There's "Airfix" style plastic kits, one is even a real beginners model, then there's a full wooden kit for a model around 750 mm long, static, but convertible to a working model with a false keel and additional rudder. And then there's plans. Plenty of them. None of these can be called completely authentic, because a lot of the Mary Rose had rotted away before she was recovered so we don't know, for example, her real length, how far her "castles" extended beyond her basic hull, how high they actually were, or the length of her bowsprit. Her rebuild, incorporating many more heavy guns, must have involved significant structural changes, and surely the "castles" would have been rebuilt differently. So there's quite a lot of room for your own interpretation.

Maybe even some of you submarine fans could think of a way to simulate her sinking!

This month's Websites

Our own: vmss.ca is our website. And in the next couple of weeks I should be able to load up the Binnacle Archive with all the remaining back issues of the Binnacle I have been able to find, some 30 of them thanks to Mike Wheatley. In all we'll have them going back 40 years, the collective memory of our club. So make sure you can find your way there and keep your eyes open for the Archive update as 2003 and 2004 turn blue. Then take a quick look at the posts we have there and ask yourself if you might have anything to contribute.
I am very happy to receive just pictures and an outline of what you want to say about them. I can and will pretty them up for you, for both the Binnacle and the Website itself.

The Mary Rose Trust site: https://maryrose.org. This is the online home of everything about the Mary Rose. It's a brilliant site, the best thing short of an actual visit. And there's lots more research results to come from the Mary Rose finds yet.

The website for the steam tug Master: http://www.ssmaster.org/. Another great site but this is right close to us, Vancouver, you remember that's just the other side of the ferry. Great inspiration to anyone who's just decided to build a tug for our tug/barge regatta this summer.

As every month, Wikipedia just goes on getting better and better. It's the best starting point for almost anything you want to know and it almost always leads you on to more. One of the biggest difficulties I have each month is avoiding all the follow-up leads I find as I write stuff for the Binnacle, especially as every month one or two of them pay off in something I had no inkling of before.

Finally

You may have noticed a change in the look of the Binnacle last month and this. After a hard drive of mine committed suicide, I have found I had to change the software in which I produce it. So I am still going up the learning curve of LibreOffice Writer, the free and open source equivalent of Microsoft Word. It's going to be good, and I am going to get better in time.