# Review of Information on a Shipwreck Site in Cardigan Bay, West Wales,

# Designated under the Protection of Wrecks Act 1973, and known as the "BRONZE BELL WRECK"

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#### **Introduction and aims**

The "Bronze Bell" site was one of the first to be Designated under the Protection of Wrecks Act 1973. Its name was chosen as one of the first objects seen on the site was a bronze bell. Its location is 400 meters off the beach of Dyffryn Ardudyr, near Talybont, North Wales. At the time of writing the name of this shipwreck is not known and her date of sinking is uncertain.

At Barmouth, is a museum which is entirely dedicated to this shipwreck and holds a collection of artefacts from the site.

The aim of this review is to suggest what shipwreck is lying on the designated site.

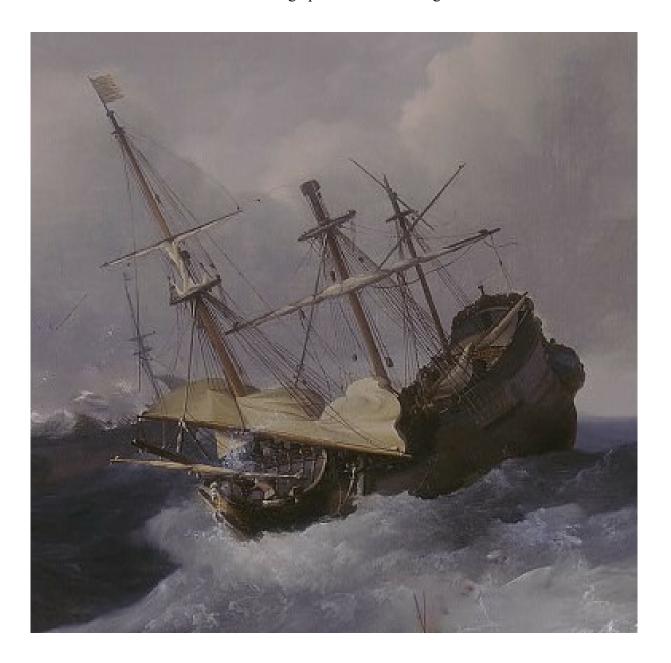
Of the known 435 shipwrecks in the area, there are very few recorded as being lost before the eighteenth century. Thus we have to start with what has been identified from the wreck site. The artefacts in the: Bronze Bell Wreck Collection, the anchors, the cannon, the pewter plates, coins and seals, and above all the main cargo of marble blocks, all are a part of the jigsaw puzzle needed to be researched to find the name and date of sinking of this mystery ship. A general picture emerges that this wreck happened somewhere between 1671 and 1714. Dates of 1701 and a date of 1709 have been suggested, for the sinking.

One of the confining factors of this review is that it has been conducted from information, newspaper articles, Archaeological reports, and photographs entirely available on the internet and in the public domain. The author has not seen the artefacts displayed at the Barmouth Museum. In fact the only artefact seen from the site was a pewter plate shown to me by Sid Wignall soon after the discovery date.

Wessex Archaeology in 2006 wrote a Full Repot on the site, I should have read it thoroughly at the beginning, which would have put me in the direction of a Genoa vessel lost in 1709 rather than a French vessel lost in 1701. Albeit, looking at a different angle may have had its advantages.

Part of a painting at the Rykes Musuem of a ship in distress in 1690 painted by Ludolf Backhuysen

The Bronze Bell wreck breaking up on the Sarn Badrig would have looked similar.





A Museum is dedicated to the artefacts found, donated by Gwynedd County Council. The Bronze Bell Museum is on the upper floor of Ty Gwyn, a building older than the wreck itself. It is on the quayside at Barmouth and has a sign outside UNSOLVED MYSTERY.

The aim of this review is to unfathom this mystery.

Researching shipwrecks prior to 1800 is difficult and time consuming. Here we are looking at a vessel lost one hundred years before that date, a time before newspapers and a time when the majority of the population could not read or write. Church and Manorial records, and the letters and reports written to Parliament are some of the few historical records of early shipwrecks around the Welsh coastline.

The cargo carried by the Bronze Bell Wreck was 43 blocks of Italian white marble. This gives us some tangible evidence as to what size the vessel was and where it had come from. Dates from other recovered items from the wreck gives us a date of her loss as after 1703.

I thought finding out the name and date of the wreck was going to be an easy matter of searching the loading cargos of ships in the port of Leghorn. That was problematical to say the least as those records were deliberately destroyed in 1887.

It had been thought that the shipwreck happened sometime after 1703 - due to no coins being found from a later date, and in November 1703, one of the worst recorded storms hit Northern Europe and Britain. This was documented by Daniel Defoe as 'causing havoc on land and at sea' during the three days it raged.

Leaving Leghorn or Genoa, the ship would have headed through the Straits of Gibraltar, into the Atlantic, avoiding the Bay of Biscay, then swing into the English Channel, where the storm would have whipped it up the West coast and into Cardigan Bay, along with many other 'lost ships'. In 1999, records came to light, that revealed that the shipwreck had occurred 6 years later than thought, and now a loss date of 1709 is thought more likely. The name of the ship remains a mystery, as does the destination and purpose for the marble.

A variety of disciplines, knowledge and research skill is needed to investigate the identity of our Bronze Bell wreck and the date of her sinking.

- 1. A close look is needed on what was happening politically throughout Europe at the time.
- 2. A study of Church and Manorial Records to see if any documents exist.
- 3 A study of predominant gales or unusual weather
- 4 A thorough examination of shipwreck lists already published.
- 5 An examination of the marble cargo
- 6 An examination of the cannon and their number found at the site.
- 7. Identity and innumeration of all the coins found
- 9 A look at the seals and artifacts recovered.
- 10 Appreciation of why shipwrecks occur at Sarn Badrig'
- 11 A study of artifacts and timbers at Cor y Gedol hall
- 12 Investigation of Juan Benedictus.
- 13 A study of the size, dimensions and shape of the three anchors.
- 14 A study of the bell, its foundry and significance

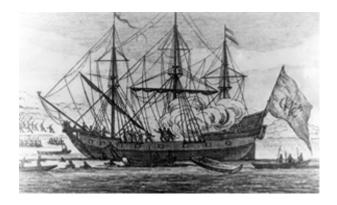
Much thought and study has already been carried out on the above list. There is an acceptance that the marble has been identified correctly and the artefacts at the museum relate to this shipwreck site.

## **Historical Background**

The whole of Europe, from 1700 to 1710 was in a state of upheaval. Most countries were at War with one another. A retrospective view in broad terms, confirms that these wars were to do with religion. France, Spain, Italy were predominantly Catholic While Britain fifty years before had gone through a Civil War and now a Protestant country which allies to the Reformists in Holland and the Rhine. It is a time when Britain was forming an immigration policy to encourage European Protestants but paying for the extradition of those with Papal persuasions. (See later).

Transporting traded goods out of the Mediterranean in the years 1700 to 1709, was particularly hazardous. The seas were full of pirates and privateers. A modicum of safety was had if the merchant ships were in a convoy having the protection of their own Naval vessels sailing with them. In the years 1700 to 1705 the English Navy only provided cover for one such convoy from the east Mediterranean each year. This was highly unsatisfactory for trading in the Levant area. Often the merchant ships had to run the gauntlet of privateers by sailing alone, thus they needed to be well armed ships.

A Dutch West Indies armed merchantman built about 1670



#### Two Wrecks at the wrecksite?

A Government based educational website <a href="http://education.gtj.org.uk/en/item10/25499">http://education.gtj.org.uk/en/item10/25499</a> "Gathering the Jewels" is to inspire and enthuse people into understanding British history and culture through Museum collections.

I copy below what is on that website as it is suggesting two wrecks on the site.

In the summer of 1978, members of a local sub-aqua team discovered the wreck of a heavily-armed galleon off the shore of Dyffryn Ardudwy (between Barmouth and Harlech, Merionethshire). It is thought that the ship foundered there in 1709, followed by a second ship, years later, which lay on top of the first wreck. Among the many finds were a fine bronze bell which bears the inscription 'Laudate Dominus Omnes Gente' (All people praise the Lord), and the date 1671. One of the ships was also carrying a large cargo of precious Carrara marble from Genoa, Italy.

Anomoly; the bell date here is given as 1671, it actually moulded (not inscribed) and reads 1677.

The two wrecks theory has been muted a few times, especially in the early days of the research.

Indicators suggesting that the site holds two shipwrecks are as follows;

- 1 The large number of cannon (over 35) discovered
- 2 The fact that three anchors were seen
- 3 The bell date seems a lot earlier than the suggested date of sinking.
- 4 Shipwrecks tend to happen in the same place, especially at St Patrick's Causeway

It is agreed that, like car accidents regularly crashing at the same corner, ships do get wrecked in the same place, and at many wreck sites there are wrecks on top of other ones. Most clues suggest this is not the situation here. By studying the tonnage, dimensions, armaments and destinations of ships around 1680 to 1700 it is clear to me that this is a well armed merchant ship and not necessarily even a naval frigate. The vessel could well have carried another two anchors, not yet found. Although ships usually have a life of less than 17 years, some well built ships were still trading 100 years after being built. There is a suggestion that the ship was built in Croatia which was building some of the strongest merchant ships in the world.

If a mark on a chart says "Genoan ship lost here in 1709", we have to presume that this statement has more than a modicum of truth. There is no debris or other cargo beneath the marble blocks, suggesting they fell through the bottom or side of the hull when the ship was being wrecked or that if two wrecks then the marble wreck was the first. As the only evidence of a later date of wreck is the coins and those dates, there may not be a later wreck. Coins are easily transported underwater and the scenario could be that rogue coins have arrived at the same site a few years after the Bronze Bell ship sinking.

One report in 1999 suggests a date of 1709 for the Bronze Bell wreck date. The author has read that the mark on the chart says 1709 which is where this 'new' date has come from. It may also be tied up with what has been seen in the documents relating to the construction of St Paul's. (See later)

When merchant ships are heavily armed they may be carrying up to half the cannons (guns) of a similar tonnage Naval vessel. This not only means they are slower but have less cargo space, both factors make them more prone to capture from specialised pirate and corsair vessels. During the years 1704 to 1708 ships carrying goods from Italy to Northern Europe were susceptible to piracy in three distinct areas. One was near the Straits of Gibraltar where Algerian pirates in swift light galleys could board and capture the ship. The second was a pack of hunting French corsairs, perhaps three or four well armed ships in the northern Bay of Biscay and the area up to the Channel Islands. The third area was in the English Channel itself. The French corsairs would capture the British and Dutch merchant ships and take them into Dunkirk as a prize. According to the size of the vessel and an estimation of the cargo value, a considerable ransom had to be paid to the French before the ship could continue.

The English, the Dutch and the Austrians formally declared war in May 1702. By 1708 the Duke of Marlborough and Prince Eugene of Savoy had secured victory in the Spanish Netherlands and in Italy, and had defeated Louis XIV's ally, Bavaria. France faced invasion and ruin, but Allied unity broke first. With the Grand Alliance defeated in Spain, and with its casualties mounting and aims diverging, the Tories came to power in Great Britain in 1710 and resolved to end the war. French and British ministers prepared the groundwork for a peace conference and in 1712 Britain ceased combat operations with France. The Dutch, Austrians, and German states fought on to strengthen their own negotiating position, but defeated by Marshal Villars they were soon compelled to accept Anglo-French mediation. By the terms of the Treaty of Utrecht (1713) and of the Treaty of Rastatt (1714) the Spanish empire was partitioned between the major and minor powers.

As France was still at war with England in the suggested year of 1709, this still does not eliminate a French ship from being our Bronze Bell wreck. Genoa at this time was was in the region of Naples, under French rule. There is also the theory that our vessel is a French ship captured by the British and then used as a merchant ship for trade to and from the Mediterranean. For three years the French maintained a squadron at Rochefort with the sole intention of capturing or causing an embargo on English trade.

By using a French ship the British could deceive the French naval vessels by flying a French Flag whilst they sailed across the Bay of Biscay. It was a cunning way to avoid capture. During these years the vessels sailing north for England from the Straits of Gibralter would be forced to sail well offshore when crossing Bay of Biscay to clear the enemy ships lying closer to the French coast.

The French had numerous ships waiting off the Isles of Scilly and in the English Channel, often between five and seventeen armed ships, all intent on capturing English and Dutch vessels. This in itself would tend to take incoming ships further north to the Welsh coast. Some vessels came into the Irish ports to avoid the English Channel, and then wait for a convoy to take them to Portsmouth. If the cargo was wool, there was an added advantage of no import taxes to be paid in Ireland. However one vessel with a wheat cargo was forced to wait so long for a convoy that by the time she arrived in Portsmouth her cargo was rotten.

The French at this time were clever at misinformation. They would send out word via their sailors that the squadrons on the French coast were twice as large as they really were. This not only put concern into the British navy and mercantile fleets, but meant that the French ships could lie at anchor on the coast instead of battling hard at sea, capturing English vessels!

An Admiralty report to Parliament in 1707, gives some alarming figures of losses and captures of British merchant vessels. Over the previous five years no less than 1,400 of British merchant vessels had been captured or sunk by the French including 14 British Naval vessels.

There was another problem for the British at this time. Although they had the naval vessels they did not have the manpower to sail them. Even the Press Gangs could not get enough men to man the navy vessels. Every conceivable way was devised to provide sailors for the Navy. Privateer ships boarded merchant outgoing ships and demanded one out of every five of their crew be pressed into Navy service. This did not go down very well with the merchant captains who sometimes had to return to port unable to sail because they were then short of crew. It is no wonder the merchant captains sailed alone without waiting for a convoy with a Naval escort. Life aboard a merchant ship was tough but conditions on board a Naval vessel were far worse.

The marble cargo has been identified as from the Carrara quarries in northern Italy. The quarries are no longer in operation as the marble has been all dug out, but it was once the premium marble, the best of the best.

From this and other scraps of evidence previous researchers have surmised that the ship was Italian, maybe from Genoa, and was maybe wrecked in 1701. In that year a three-day storm ripped across the whole of Britain destroying ships and buildings alike. The English fleet was torn from its moorings on the East Coast, the ships driven across the sea to Norway.

Finally in 1901 an old chart was found in an archive, with a mark, just where the wreck was found, saying, "Genoan ship wrecked here in 1709". I have since read that this chart was discovered in 1999 and the annotation on the chart also says vessel about 700 ton and with marble and paper cargo. This is a realistic date and appears to be accurate. Whoever wrote this seemed confident of the fact that it was a vessel from Genoa. However we must be keep an open mind and realize that the writer may have assumed it to be a Genoan vessel as it had a cargo of Italian marble on board. The Italian connection is further endorsed when we learn that an Italian was buried in the local churchyard some 21 years later in 1730. Juan Benedictus was thought to be one of the surviving crew from the Bronze Bell wreck. He may have been illiterate but even if a crew member he would have known the name of the ship!

Apart from a cargo of marble we are also told that paper from the wreck washed up on the shore. We do not know if this means a paper cargo or a pile of documents. I have yet to find in what form a cargo of paper looked like, certainly not in large rolls as we are accustomed to seeing today. I assume this paper is hand made in large rectangular sheets and thus would be boxed flat in crates that could be carried by two men.

There are also stories of timbers from the wreck site being used in buildings at Cors-y-Gedol, the local manor house, which was extended by Richard II Vaughan after 1711. Richard Vaughan (1665-1734) was High Sheriff of Merionethshire in 1698, and Caernarfonshire 1699-1700. He was a Tory member of Parliament for 33 years and constable of Harlech Castle 1704-16. After 1710 he was less active at Westminster and was said to be spending more time fitting out his house with wall panelling and rebuilding. These dates do coincide with timbers coming from the wreck in 1709. In 1705 his religious persuasion was said to be "Low Church" ie Anglican Church that emphasizes evangelicalism and lays little stress on the sacraments, church rituals, and church authority.

I have to digress to tell you that the first Richard Vaughan of Corsygedol was exceedingly fat and must have been one of the first to have fat removal surgery. The operation was not a success as he died shortly afterwards in 1636. A descendant, Griffith Vaughan built "Y Ty Gwyn in Bermo" where the Museum of the Bronze Bell is held.

## How many cannon seen at the wrecksite?

The answer to this determines the size and character of our ship. One would think this was going to be an easy sum, especially as so many surveys have been done on the site.

Wessex Archaeology wrote the most definitive report on the site in 2006. This report can be seen on the coflein.go.uk/pdf/AEN17\_02/ website. The report mentions earlier reports and measurement of cannon conducted by Sid Wignall in 1979. What it also mentions is an unconfirmed report that there were originally three or possibly four bronze cannon also on the site, three of which were recovered and sold prior to 2003. If detailed photographs are existing of the marks on these cannon or if they have not been scrapped, and their present location known, vital information could be gleaned.

The foundry where Bronze cannon are made and the date of manufacture is relatively straightforward and it is disappointing that these marks are not known to aid the identification of the ship and its nationality.

26 guns were seen by Wessex Archaeology on the site in 2006. When I first started writing this review I thought we were looking at a 28 gun vessel, now it seems to be a vessel of about 38 guns, or possibly more. Many European naval vessels were armed with 40 guns or more. My original assumption of a well armed merchant vessel was based on the premise that the vessel had 28 guns.

By 1986 there were known to the Gwynedd Archive Service three swivel guns, one Saker cannon and an additional swivel gun being restored at the Armoury Department at the Tower of London. This makes five known to be recovered by the Museum authorities. Wessex Archaeology in 2006 saw 26 on the seabed, but this only adds up to 31, when all previous estimates are for 35 to 38 guns. The easiest guns to salvage are the swivel guns because of their smaller size and weight. Apart from the possible three or four bronze cannon it appears that two more swivel guns may have been recovered, their whereabouts or dates of recovery, now a mystery.

If Sid Wignall (died 2012) was involved in recovery of any bronze cannon, then he would likely have sold them to American buyers and they will still be in existence. Sidney Wignall, self declared Executive Director of the Atlantic Charter Maritime Archaeological Foundation is more well known for his expeditions to look for the *Bonhomie Richard* off Yorkshire and Francis Drake's lead coffin in Puerto Bello, Panama He had a good time but he failed to find what he was looking for.

Naval vessels of the this period usually had more than 35 guns (cannon), although there was a French 6<sup>th</sup> rate frigate named La *Friponne* 14 guns (later 20) guns, launched November 1670 at Rochefort – captured by the English Navy in December 1690.

All artefacts found at the wrecksite appear to be around the same date and the number of cannon suggest just one large merchant ship rather than two ships.

Although artefacts suggest a French vessel if we are looking in detail at State Papers in 1702 to 1710 it is noted that England is at war with France, but is also sending money and troops out to Holland and Portugal. If the vessel was wrecked in those years it is unlikely to be a French vessel manned by French nationals but it could be a ship taken from France as a prize and manned by Italians, Portuguese or British seamen. When a prize vessel was captured, if it was a merchant ship it may be resold back to the host nation and the captured crew, if imprisoned (and not executed) were usually exchanged for other prisoners. Foreign crews from a vessel captured as a prize were a hindrance and an expense to feed and keep in prison. Letters to the Privy Council at Westminster wanting direction of what to do with such foreigners, gives us an insight into both shipwrecked and prize crews of this period

At this time many vessels were captured as prizes and reused by a different nations.

I have at last found something about marble and St Paul's in 1707 but it unfortunately has little connection to our Bronze Bell Wreck. The Privy Council issued a licence to a London merchant to go to Le Havre to fetch some black Irish marble. A French privateer had captured a British ship *Unity of London* which was transporting black Irish marble from Dublin to St Pauls. The captured marble cargo was taken to Le Havre and a licence to go and buy it back from France was being issued to Francis Collins. As the two countries were at war he needed this licence otherwise trading would have been tantamount to treason. This licence was granted in Dec 1707. It is assumed that a ship was sent to Le Havre to pick up this marble, probably early in 1708 and that it successfully ended up in St Pauls.

Seen in Reports from Commissioners 1707. A similar search through the same records is devoid of marble stories in the year 1709. It does however give us an insight into the complications of how some marble got to St Pauls.

Some naval captures during the year 1709

HMS Adventure (Kingdom of Great Britain Royal Navy): The 44-gun fourth rate was captured on 1 March by the French Navy.

HMS Blackwall (Kingdom of Great Britain Royal Navy): The 50-gun fourth rate was captured by the French Navy.

Coventry (French Navy): The 50-gun fourth rate was captured on 17 March by the Royal Navy's HMS Portland (1693).

Dryade (French Navy): The 46-gun ship was captured by the Royal Navy.

HMS Falcon (Kingdom of Great Britain): The 32-gun fourth rate was captured by the French Navy's Sérieux.

Gloire (French Navy): The 38-gun ship was captured by the Royal Navy.

HMS Gloucester (Kingdom of Great Britain Royal Navy): The 60-gun fourth rate was captured on 26 October by the French Navy.

Lion (French Navy): The 4-gun hoy was captured by the Royal Navy.

HMS Pembroke (Kingdom of Great Britain Royal Navy): The 60-gun fourth rate was captured by the French Navy. 1709.

William Blathwayt was an important civil servant working for the Treasury and the Admiralty, in 1697 to 1703 he organized consignments of white marble from Genoa .He was conversant in Italian and in December 1696 he had problems with the Genoese Bank of St George, over a consignment of blocks of marble and some wine he was exporting.

William Blathwayt was a civil servant working at Scotland Yard he ordered six tons of white marble from Genoa in 1709 for somebody's tomb. This was destined for London but no more information found. William Blathwayt's papers. The Bronze bell cargo was ten times this amount, so they are probably unconnected. However it does confirm that Carrara marble from Genoa was being transported to Britain in

## A few ships names around that time.

The only vessel known to have been wrecked in Cardigan Bay in 1703 to 1704, is one 23 August 1704 when the **John & Ann** carrying a cargo of lemons was wrecked somewhere near Cardigan. She appears to be a British vessel with a cargo from Lisbon.

On 26 th November 1703, was a hurricane of immense destruction, devastating shipping from Bristol Channel to the North Sea. Over 15 British Naval ships were destroyed and thousands of seamen lost. In Milford Haven alone in excess of 30 ships were lost and although we have no names of the ships, there would undoubtedly have been a few ships lost on St Patrick's Causeway.

Sainte Croix 40 guns (Spanish Santa Cruz captured 1696) - deleted 1699.

*Christo* 44 guns (Spanish galleon Santo Christo de Maracaibo captured January 1697) – captured by the Dutch in June 1697 [Apparently sold back to Spain by the Dutch, she was captured by *HMS Monmouth* (English Navy) at Vigo in October 1702 and renamed Monmouth's Prize] on 27<sup>th</sup> October when passing thro a south channel she passed the *Monmouth's Prize* which had foundered on a rock, as nearby vessels saw what was happening only two lives were lost. During 1702 the French had 17 Men Of War stationed at Dunkirk, thus any British or Dutch ship wished to avoid that area for fear of being captured.. If our ship was laden with marble cargo destined for London she may have been informed to take her cargo to Bristol or to Liverpool and avoid the English Channel. The year before the Squadron at Dunkirk was commanded by a disillusioned Englishman, John Dubart who had tried working himself up through the Naval ranks in Royal Navy and Dutch Navy and then, so disheartened, defected to France, where he was very successful in taking British prizes for France up to his death in 1702.

When fighting the Spanish in the Caribbean in 1701 the British recaptured a small English ship named *Ann-Galley*. The Spanish had captured her from the rock in Lisbon. *Ann* was sent to Port Royale (Jamaica?). Seen in free book as follows

http://books.googleusercontent.com/books/content?req=AKW5QadOIJ6xhRZg-AhRn3qeXtktUIHcayWFs4hQBQsHtekTo7i\_DdD2y0pIR-vXFqEwdMM1LrKb11ZgUr535PxIne5VhRE\_w4bQVTy2fBU3nco9ct1sNIzO\_tecj8UsgQxnLBX60GqI-2W02gdNIXcRI\_\_8YmsAAuZ123vCcV5ypV-vhtd51d2x0BUI0cnxRitcZdcskkKuoSu24IRIjMkmBtAREd\_M3ruiTammT2XGdnsKEgXgR8jONyJJLpJJ7h0fHVhhoNVCR71hpqhS1jNZmdV5Yx05A

Throughout 1704 although Britain had similar Naval power in ships to both Spain and France, they were distinctly short of seaman to man their ships. Within the Lansdowne Manuscripts in the British Museum is a letter from M Spanheim, the Prussian Embassador's memorial concerning the shipwreck of a vessel belonging to the Prussian African Company on the English coast 12 Aug 1702 (In French).

The portuguese Embassador to Sir Charles Hedges, with a memorial concerning the capture of a Genoese vessel at Lisbon by the English. 28 October 1704 (in French) fo 226.

22 March to 2 April 1705 about the capture of some Dutch ships

French sink their squadron of 50 ships to prevent their capture, also relinquish their Mediterranean dominance to the British .

Although some 40 years later The following is worth a mention as it is a marble ship from Leghorn and shows the complexities of different nationalities and their prize ships. unknown].http://discovery.nationalarchives.gov.uk/details/r/C14883384

Documents: 37 personal letters (in French) written on 20 and 21 July 1745 by the crew of the French ships Le Mars and St Michel which had captured a British ship about 100 leagues from Brest, 70 leagues from Ushant. The crew took the opportunity of their prize being taken to Brest, to send letters home with her, but their prize was retaken before she reached her destination. Clues to the identity of the prize (from the letters): 130 tons, coming from Ligorne/Livorne [Leghorn, Livorno] with cargo of wine, oil, soap, ladies' hats and marble; *Le Mars* is the best sailer of the squadron after *La Renommée* (so they were sailing with La Renommée, and possibly L'Argonaute). Another letter says 250 tons, 16 guns, 32 men, coming from Lisbon, so were there two prizes? 250 tons isn't a"little" prize, which is what several of the letters call their prize. This date is 1745 but is included as background information.

The Coflien site http://www.coflein.gov.uk/en/site/1015/details/BRONZE+BELL%3B+TAL-Y-BONT/ gives the following details

One of these platters is shaped like a cardinal's hat with a hallmark stamp of Lyon dated 1700. Coins from 10 countries suggest a date of post 1702 for the wreck. Other finds include navigational dividers, fine cutlery, a dental plate, a seal, remains of pistols and a rapier, and a gunner's rule.

The weight of the marble blocks calculated at 66 tonnes, suggest that the vessel was not large despite all the armament. The origin of the guns and majority of coins suggests that the vessel was a French trader, and was carrying marble from the Italian quarries of Carrera exported via Genoa or Leghorn. There is a strong location tradition that artefacts from the wreck found their way into everyday use within Cors y Gedol Hall. The ship's timbers were incorporated into a building in the hall's grounds. A survivor called Juan Benedictus may also have lived as part of the local community. His death is entered in Llanenddwyn Parish Register in 1730

#### Arms found on board

Sword hilts and one breach loading cannon have been recovered from the site. The Royal Armouries Museum has conserved the one breach loading gun recovered. There is still another one remaining on the seabed at the site together with another 26 iron cannon. The foundry of the cannon can only give us an indication of the vessel's nationality. A large number of cannon found on European ships at the time were actually made in Sweden at Hendrik Trip's Cannon Foundry in Julitabruk, Sweden.

#### Marble Blocks

The marble blocks at the site provide one main source of enquiry. One block was recovered from the site and a local artist has carved it into a public monument to be seen outside the Barmouth Museum.

The main cargo lies amidships and consists of approximately 66 tonnes of marble, comprising 42 blocks ranging in size from 80cm (31in) cubes to blocks measuring 2.8m x 1m x 0.8m (9ft x 3ft x 2.5ft). It must be remembered that we do not know if any marble blocks were salvaged in the year the ship was wrecked or indeed subsequently. One would think that if blocks had been salvaged then a salvage team would have recovered the entire cargo, or rather would not have left so many blocks still on the seabed. It is assumed that what we see now is the marble cargo in its entirety, minus two blocks, I have read somewhere that two blocks were recovered prior to the carving.

The total weight of blocks seen on the seabed, represent a total tonnage of 66 tons. As the ship is also carrying cannon we can assume the minimum tonnage (burthen) of the vessel would be about 200 ton. The British East India Company would only use merchant vessels in excess of 200 ton after 1670 date. More realistically the tonnage of the ship is probably over 400 ton burthen. It must be borne in mind that tonnage over the years was measured and calculated in different ways and the size of a ship and her identity was more accurately described in the number of cannon, termed guns, that were carried on board.

The marble has been identified as originating from Carrara in Italy. It is of the highest grade white marble in the World and in the trade referred to as Statue Marble, as it is so pure and lacks fault lines, thus the preferred material for sculptors. The quarries no longer have this marble as it has all been worked out. The blocks found are already cut into standard sizes and must have been destined for some eminent or expensive building. Many large buildings and palaces were being constructed at that time throughout Europe, from Liverpool to Amsterdam. One researcher has suggested that the blocks were on their way to London in the reconstruction of St Paul,s Cathedral. The Coflein site suggests that the blocks were loaded at Genoa or Leghorn. My research suggests it was Leghorn (Livorno), but as yet I have not found any loading details or port entries.

Coins 1702 and the pewter plate mark of Lyon with 1700 on it. This suggests a French vessel and that it was wrecked after 1702 and before 1730. I had previously looked in detail at State Papers domestic for ships lost in that region for the dates 1705 to 1709 and finding nothing of interest, realize I must now concentrate on the dates 1702 to 1705. The St Paul's Cathedral building work indicated that marble blocks for the un-built altar would be bringing in white marble in 1703 or 1704.

#### • Odds and sods seen in the State Papers, pity to throw these notes away so they are included here.

Two men fined1701 for stealing Navy rope 20 fathom long 3 inch rope. The navy knew it was theirs because it had a white cord stretched the contrary way ie twoven through it opposite to the lay of the other threads. 1701 Prefixing: (a) Order of the Queen in Council dated St. James's March 4 for the taking off of the embargo from all ships and vessels whatsoever trading between this kingdom and Ireland without taking their quota of men save in the case of privateers. Out Letters (Customs) XIV, p. 248.

The like for a like order in Council for permission to the ship Anthelope (24 seamen, 8 landsmen) to sail for Leghorn with her lading of fish: on the petition of Richard Perry on behalf of himself and the owners and freighters. Ibid.

To March 1702

Same for 1000l. to Samuel Edwin, Usher of the Receipt, for necessaries delivered to the officers of the Receipt: to be issued out of Civil List moneys. Ibid., p. 173.

William Lowndes to the Prizes Commissioners. The Navy Commissioners have represented to the Lord Treasurer that the ship Gracieux which was taken by the Queen's ship Rochester now goes by the name of the Rochester Prize in her Majesty's Fleet and by order of Council of August 6 last is declared to have been a frigate belonging to the French King: and by the Lord High Admiral's order of August 11 last a bill is made out for the gunnage and tonnage of the said ship, amounting to 260l. The Lord Treasurer directs that you [claim and] receive for the said ship no more than what is [thus] due for the gunnage and tonnage.

Money sent out to pay troops in Bahamas and in Holland.

March 1703 William Lowndes to the Customs Commissioners enclosing (a) infra.

Appending: (a) letter dated March 23 from Secretary the Earl of Nottingham to [the Lord Treasurer Godolphin]. "Mr. Methuen writes that a great deal of French wine will be brought home in our next ships that come from Portugal, to which place it is brought from France and put into Portuguese casks." Out Letters (General) XVII, p. 157.

Same to the Prizes Commissioners. You are to proceed according to the Queen's Declaration in the matter of the guns and powder taken out of the galleons lately brought from Vigo. Ibid., p. 162.

Same to the Navy Commissioners. As to your query of the 9th inst whether the galleons taken at Vigo are to be esteemed ships belonging to the Crown of Spain or to private persons, the Prizes Commissioners affirm that same belonged to particular men and merchants, subjects of Spain

Same to the Customs Commissioners. My Lord Treasurer is informed that 2 years accounts 1694 June 24 to 1696 June 24 of the Four and a Half per cent. Duty in Barbados miscarried at sea in the time of the late war and that by reason thereof the Comptroller General of the Accounts of the Customs cannot make up the accounts of said Duty. You are to send over to Barbados for duplicates of the said accounts. Ibid., p. 165.

Treasury reference to the Customs Commissioners of the petition of John Fleetwood, merchant, for delivery of a seizure of 8 tons of wine part French and part Navarre, mixed together, seized at Bristol 20 month since in the pink Violet. Reference Book VIII, p. 51.

Same to the [Principal] Officers of the Ordnance concerning the appraisement of the 26 iron guns and 4 brass guns &c. in the Santa Cruz and Borboncaro prize ships which the Victualling Commissioners have taken into the Queen's service. These guns &c. being taken in private ships are to be paid for according to the appraised value. Ibid., p. 176.

Same to the Navy Commissioners. You refused to pay the charge of condemnation of the prize Gracieuse man-of-war when the Receiver General for Prizes came to you to demand the Gunnage and poundage of the said ship. The Lord Treasurer thinks it reasonable that you should pay said charge. Ibid.

Same to Richard Crawley, Receiver of Salvage money and other Droits and Perquisites of Admiralty, to pay (out of the money adjudged to be paid for the salvage of the Dutch ship Juffrow Hellena a very large ship richly laden from Curaçao for Amsterdam and taken by Sir Thomas Hardy, Commander of the Queen's ship Pembroke, after she had been 28 hours in possession of the enemy, which salvage is a perquisite of Admiralty and in the Queen's disposal by virtue of a deed signed by Prince George of Denmark July 27 last) the sum of 688l. 6s. 0½d. to the said Hardy representing five-eighths of the said salvage for the share of him, his Officers and ship's Company, which the Queen is graciously pleased to allow. Ibid., pp. 39-40.

Same to Mr. Burchett [Secretary of the Admiralty]. The Lord Treasurer has directed William Goslin, one of the Principal Commissioners for Prizes, to go along with Sir Cloudesly Shovell's squadron in the intended Expedition, to take care of such prizes as may be taken by same. Please desire the Lord High Admiral's Council to order entertainment for him, his clerk and 2 servants on board a proper ship in said squadron and to appoint a boat to attend him as often as he shall desire same. Ibid.

Order of the Queen in Council dated Hampton Court July 8 to the like effect ut supra p. 344 relating to prize goods fished up at Vigo by Robert Bartholomew, master of the Owners Adventure, Henry West, master of the Brethrens Love, John Brook, master of the Mayflower and Thomas Young, master of the Hatley Frigate employed as transports in her Majesty's service at Vigo: said goods being cochineal, hides, indigo, annetta, &c., books, skins, 10 small pictures, some old colours &c. taken up in four fathom water with great labour

Appending: schedule of said goods.

(The like warrant dated July 30 for goods similarly fished up by Richard Hudson, master of the Dixwell ketch. Prefixing: a like order of the Queen in Council dated Windsor July 18). Warrants not Relating to Money XVIII, pp. 55-56, 69-70.

Warrant by same to Samuel Travers, Surveyor General of Crown Lands, to cause the meadow (meadows) and studd at Hampton Court to be wholly fenced off from the bargeway there with a close pale bank and quick sett within to shelter said meadows from easterly winds to which they are exposed, and to preserve the mares and colts of said studd from any mischances which may happen from rude careless fellows and their horses that tow barges up the river: the same being about 450 rod and may be done for 500l. Ibid., p. 59.

As to Mounthope (the acknowledgment to her Majesty being 7 beaver skins for the grant of that territory) I have writ to Col. Dudley, Governor in Chief of that part of New England, who will give the necessary directions therein.

Appending: (1) State of the accompt of the Duty of 4½ per cent. arising to her Majesty in the Carribbee Islands and paid into the Exchequer from 24 March 1701-2 to 24 May 1703: and of the issuing thereof: pursuant to the address of the House of Commons of 24 March 1701.

.Aug 8<sup>th</sup> 1703 Report to the Lord Treasurer from William Blathwayt [as Auditor General of the Plantations] on the petition of Lord Fairfax and partners as referred July 20 last supra p. 343: petitioners praying a grant of wrecks which before 1 April 1702 have been or before 20 Aug. 1705 shall be between 15 & 18 South Latitude in the West Indies. Hereon Blathwayt reports that in 1686 James II granted to the Duke of Albemarle such wrecks on the north side of Hispaniola.

In 1687 the said Duke intending a second voyage to discover gold &c. wrecked as aforesaid offered to defray the charge of his Majesty's ship Foresight as a convoy and at a royalty of a fifth to the Crown up to 150,000l. and a third thereafter. The King thereupon granted a patent to said Duke for same.

In Sept. 1687 James II granted to the Earl of Feversham all wrecks towards the north side of the mainland of America on conditions set out.

In 1691 William III granted to the Duke of Leinster the like in America between the latitude of 12 and 40 degrees north on the like conditions. There are also several other grants of wrecks heretofore made on like conditions.

In 1687 Mr. Constable made application to King James concerning gold and silver taken up from the wreck to the north side of Hispaniola (granted to the Duke of Albemarle) by persons not grantees. The then Judge of the Admiralty and the Judge Advocate reported thereon that besides the tenth royalty to the Crown a moiety was due to the Lord High Admiral by the ancient ordinances of the Admiralty, and directions were sent to Sir Robert Robinson, Commander-in-Chief in the Bermudas, to detain in his hands such moiety arising in the Bermudas.

It is therefore submitted whether the royalty on such grants should be one tenth, one eighth or one fifth or a moiety. I take it the grant desired is not intended to exclude others from taking up gold or silver. "But whereas the pernicious trade of stockjobbing ought to be discouraged, more especially at this time as much as possible" I advise that the petitioners satisfy your Lordship by good proof of the truth of the information which they have received of this wreck, least some of the petitioners be surprised by the others into a society of stock jobbing instead of a real and well grounded undertaking.

Since the closing of this report the petitioners pray that instead of the limits afore petitioned for, the grant may extend to the 26th degree of North Latitude. Out Letters (Plantations Auditor) II, pp. 122-6.

Same dated from Windsor Castle to the Attorney General to report his opinion on the enclosed memorial [missing] which has been laid before the Lord Treasurer by the Commissioners for Prizes, touching the proceedings of the Admiralty Court at Lisbon in restoring a Neapolitan ship taken as prize by the Queen's ship *Montague* and carried into Lisbon. Please report your opinion thereon as soon as conveniently may be. Ibid.

Same to the Customs Commissioners. The Lord Treasurer apprehends that the revenue, especially in the outports, may suffer by officers that want skill, diligence or honesty. You are to cause a strict examination to be made in all the outports concerning the present state of the same especially of the officers' qualifications, beginning with those in the North. Ibid., p. 243.

Sept 9<sup>th</sup> 1703 Treasury reference to the Customs Commissioners of the petition of the Queen's waiters in Bristol port for additional allowances of salary, which does not exceed 40 pounds per annum each, with which they are not able to support their families. Reference Book VIII, p. 70.

Same for 1177l. 17s. 4½d. to William Roberts, Paymaster of the Works at Windsor: out of Civil List moneys: towards the debt for works in last Michaelmas quarter at Windsor Castle. Ibid., p. 18.

Same for 10,259l. 14s.  $7\frac{1}{2}$ d. to the Navy Treasurer: out of loans on the Land Tax anno 1704: and is to satisfy bills of exchange payable to Samuell Shepard Esq. for wine and oil furnished at Leghorn for the service of the Fleet lately in the Mediterranean under Sir Cloudesley Shovell: and is to be taken as part of the proportion allotted to the Victualling anno 1704. Ibid.

William Lowndes to the Navy Treasurer to apply to the head of Wages 70,000l. of the moneys in your hands received on the orders registered in your name on the Land Tax anno 1704: to wit for the pay of the wages and bounty money of the ships cast away in the late storm. Ibid.

#### Treasury Books, Calendar Calendar of Treasury Books, Volume 18, 1703 (1702 to Dec 1703)

Bundle 21. No. 24. 2 Jac. II. 1686. Inquisition on a view of the body of one Robert Thomas, who was killed by a bell in the belfry of the parish church of Saint Andrew's, when the ringers were ringing the three bells.

1679 Trial of two Catholic priests, Father Philip Evans, a Jesuit, and Mr. John Lloyd, a secular, both Welshmen. For an account of their origin, adventures, trial and heroic deaths the reader is referred to the "Oates Plot" volume of Brother Foley's "Records of the English Province of the Society of Jesus." These two priests were executed as traitors at Cardiff, 22 July 1679, the mode of execution being as follows: First they were dragged on hurdles to the gallows. Then they were hanged for a few moments. Before they were dead they were cut down, disembowelled alive, and dismembered. Although these men underwent the terrible punishment of high treason, it is important to learn, from the Indictments, that what they were charged with was simply that they, being Catholic priests.

These notes were made from looking through State Papers of 1703, rather than throw these notes away I include them here for background reading.

William Lowndes to the Commissioners of Victualling to pay to the Prizes Commissioners 2290l. 12s. 2<sup>3</sup>/<sub>4</sub>d. for the value of the Queen's moiety of the provisions distributed to the fleet out of the 3 prizes taken by the Orford under Capt. Norris. Out Letters (General) XVII, p. 243.

Appending: (a) Report dated Aug. 10 from the Postmasters General on Dummer's proposal for the above contract. He proposes boats of 160 tons sailed with 35 hands. Such boats may perform that service very well but he has been mistaken in calculating the charge of the boats at present made use of, the same not amounting to near so much as he computeth, though the said boats being of greater burthen than those proposed by him do necessarily require greater number of hands, their complement of men being 200, whereas the complement of the boats to be built by him is but 105. His demand of 7s. 6d. per ton for wear and tear per calendar month including guns and gunners' stores seems reasonable but we cannot agree to his demand for 8 per cent. interest on the prime cost of the vessels: but we agree to a payment of 2,000l. on account as above. The Commanders of the boats are to be under the direction of the Postmasters General and of their agent at Falmouth.

(b) An enquiry into the present charge of the Post Office in relation to the postage of letters between Falmouth and Lisbon by sea and propounding to build 3 new vessels for that service and to save about 4,000l. per an. of the present expense: dated 1703 June 24 and signed by E. Dummer; estimated present expense 9705l. 5s.0d. per an.; proposed expense 5362l. 1s. 2d.; estimated saving 4343l. 3s. 0d. Money Book XVI, pp. 424-6.

Mention is made of loans on Coal Duties. The tax on coal being the way St Paul's Cathedral was built.

Same to the Lord Treasurer [at the Bath], The Council to the Lord Admiral desire your directions to the Prizes Commissioners for stopping the payment of Capt. Littleton's share of a French East India prize until such time as he shall give an account of all the plunder seized by him that was on and above the gun deck of the said ship when taken and how the Customs have been secured for same. Please signify your pleasure therein. The Speaker of the House of Commons wrote to me for your authority for recovering a parcel of treasure trove belonging to her Majesty concerning which he has good information. I enclose a warrant for this purpose for your signature.

William Plomley as a tidesman Bristol port loco Daniell Carter lately dismissed for not being qualified according to law.

Order by same to the Receiver of the Rights and Perquisites of the Admiralty to observe (a) infra.

Prefixing: (a) order of the Queen in Council dated St. James's April 24 last for the payment to Thomas Newman and George Kingston of three eighths of a moiety of the French ship *Lewis* of Havre de Grace, William Devall master, laden with oranges and lemons, which was seized by them, she being forced ashore by stress of weather near Salcombe and condemned in the Admiralty Court: which said three eighths part doth amount to 90l. 0s. 3d. as is certified by John Dodd, Receiver of the Rights and Perquisites of the Admiralty. Same to the Victualling Commissioners of the petition of the master workmen belonging to the Victualling Office at Tower Hill shewing that there is above 4000l. due to them for building &c.: that their work has had several surveys and statements by Sir Christopher Wren and others and have had bills made out by certificate and brought into the Office to Xmas 1702: therefore praying payment. Ibid.

Warrant by Treasurer Godolphin to the Receiver of the Rights and Perquisites of Admiralty to make the distribution of the profit of the French prize ship Eagle and Crown to the owners, captain and company of the Larke frigate which took the said ship without a letter of marque; Dr. Bramston, Surrogate to the Judge of the Admiralty Court, having reported that during the late war such captures without letters of marque have been as beneficial to the owners, captain and company as if under letters of marque.

When searching through State Papers for a wreck, it is essential to search using the names of those in the Admiralty and Treasury and the Lords of the Manor and the Customs Comptroller in Merionethshire.

#### **Anchors**

HMS Dartmouth sank in Scotland in 1690. Her anchor is more rounded on the palm than the anchor picture on the Bronze Bell wreck, suggesting they were manufactured at different places. To me the anchor on the Bronze Bell wrecksite looks more French, Spanish. Portuguese, Italian and/ or older than the anchor of HMS Dartmouth which was probably made at Chatham dockyard.

Someone has remarked that the Bronze Bell Ship appeared to be running ashore when she hit the rocks of Sarn Badrig. If she was hit by the hurricane of 1703, she would have been going maximum speed into that corner of Cardigan Bay, with all sails gone (or no sails up) and completely out of control. Letting go of her anchors or streaming yardarms with sails over her bow, allowing her bows to receive the waves and acting as sea anchors is her only chance of slowing her down, and keeping her bow into the waves.

Three anchors have been seen near the wrecksite. The author has only seen one underwater photograph of one of these anchors and would need accurate measurements and angles of the V or "palm" to produce any meaningful conclusion as to their nationality or tonnage of ship they came off. In general terms, although anchors could be picked up in any country, it was only the British that had the rounded palm anchor. Mediterranean based vessels and especially the Spanish had very sharp V shape between arms of the anchor. The three anchors seen have no flukes, also suggesting a Mediterranean ship. The photo seen of the Bronze Bell wreck anchor also shows this sharp V shape, to me indicating it was not a British anchor, but more likely belonged to a Genoan or Albanian ship, or at least one trading from the Mediterranean. Foreign going merchantmen of this date would have at least five anchors and the fact that three have been seen in no way suggests two vessels were lost at the same place, but strongly favour the theory of just one vessel.

To understand old anchors, A Treatise on Ship's Anchors, by Cotsell 1856, is available as a free ebook on the internet. The anchors need further research looking at the angle of the V in the Palms.



Bronze Bell Anchor. Note the pronounced V, British anchors had a more rounded palm. This anchor suggests the ship was built primarily for Mediterranean trade, where anchors are needed to cut into sea grass weed and silt rather than hold on a rocky substratum.

#### Weather

1709 The winter and spring of 1709 saw particularly cold weather throughout France. The coastal strip surrounding Britain froze over and even the Adriatic and Mediterranean sea around the coast was frozen from Marseilles to Genoa. As Genoa was iced up it is assumed that cargoes at Leghorn could not be loaded between Jan and March 1709. The Seine above Paris for three months was frozen in, no ships could get fresh food along the Seine to Versaille. The ground was frozen up to 9 ft in depth, crops, shrubs, vegetables were destroyed, wheat prices doubled, Olive trees in the South of France were decimated, the finest citrus and orange groves in Italy were destroyed. and 24000 people were meant to have died of cold and starvation in Paris alone. The death toll throughout France was about 2.5% of the population. Toulouse temperatures were one degree colder than Paris. They were sub arctic temperatures. Even Louise XIV in his luxurious palace in Versailles was feeling the cold, (serves him right for building big rooms). He was, however putting the final touches on his exquisite Chappel Royale, one of the finest religious buildings in the world. Cargos could not be loaded in Genoa or be unloaded near Versaille during the first three months of 1709.



A Habsberg seal from the wrecksite. It is not known if it is a Government mark or a shipping or merchants mark. This would be used to mark goods (tobacco, paper, barrels of olive oil etc) to identify the owner or to show that a tax has been paid on the goods.

PPGC letters surround the emblem and it could be a berath seal. .

Below is a hand seal . It is not known whether the above seal and this hand seal were made for each other. The figurine is held in the hand and designed to look like a bellringer . What he is holding in his other hand could be anything from a penis, a bagpipe or a hatchet used by a Custom's man. Is he a Merchant, a Burgermaster, a Customs Controller, a Town Crier or musician? His hat looks Dutch or Italian, but is of a ubiquitous design from any European country. His right hand is holding what looks like a bell, but is actually a much smaller seal.





The figurine looks like a musician with a bagpipe. He has a large beard and a hat similar to the Ragusan Merchant of the same date.

# **General Hostilities in Europe**

The hostilities between the Ottoman Empire and the Holy League (1683-99) were resolved in 1699 by the signing of the Treaty of Karlovci (Carlowitz), which contributed to the settlement of a number of controversial international issues. These newly-created conditions in Western Europe, known as the Spanish War of Succession (1701-1714) The small Republic of Dubrovnik, balanced itself between opposing pow ers - France and the Kingdom of Naples on one side, and Austria with the Senj Uscocs on the other - Ragusa's delicate position, if neutral, was often imperilled. Despite being on the very verge of conflict, the Republic managed to maintain its integrity and sovereignty. The Republic of Dubrivnic liked to think of itself as a neutral country not showing its allegiance to either Austria or to Spain. Between 1701 and 1710 it had many diplomatic instances having to appease both warring fractions. Sometimes the French would capture their ships and threatened to bombard the port when they considered Dubrovnic was erring on the side of the Austrians. The Ragusan government tolerated such an act nominally, but considered that the Republic had to be excepted of such a rule, being an inseparable part of Spanish and Austrian spheres. The senators forwarded letters to their agents in Naples and Vienna with detailed instructions of how to secure these privileges. Persistant demands resulted satisfactorily. They were granted authentic documents by Emperor Joseph I himself, who recommended to his vice-kings Daun and Grimani (16 May and 21 August 1708) the protection of Ragusan interests at Naples. Confirming loyalty and lasting devotion of the Republic to the Habsburgs, Spain and Naples and its accept able general conduct, the Austrian pretender to the throne Charles III, later to be the Austrian Emperor Charles VI, also assented to the privileges granted to the Ragusans in Barcelona on 22 September 1709, by ordering vice-king Grimani, "to see to the regular endorsement of all the privileges once enjoyed by the Republic of Dubrovnik, considering the honourable politeness and zeal with which the said Republic showed at all occasions related to the accepted protection on behalf of the Royal House," and that "it is my duty, within the protectorship always performed by Kings, my predecessors, to ratify that all the privileges and outcoming profits which the Republic had enjoyed in the past in this Kingdom for special and just reasons should be granted. Such is my will."

# Albania, Ragusa, Dubrovnic and Dalmation coast connection

The Ragusan Government had recently been on the wrong side of the French who considered they had been allying too much with Austrian interests. In **1706**, the French King Louis XIV addressed a note to his agent in Dubrovnik, to reverse an edict of hostilities of France against Dubrovnic. They were not to harass or take ships any more and let them trade as before.

It may be a far fetched idea and I have no proof but the Ragusan Government may have been so strongly indebted to Louise X1V that to show gratitude for free trade they collected the Italian marble blocks as a present to the French King at his Palace in Versaille. The Ragusan Government was continually using every diplomatic tactic to remain allied and neutral to each and every other surrounding nation.

A French ship could always trade with the kingdom of Naples and take marble blocks from Italy to Versailles, and a Ragusan ship was allowed to do so from 1706 to 1709. The French of course could have captured a Dutch ship with marble from Leghorn, brought the ship into Dunkirk and unloaded the cargo and put the blocks into a French ship to take them to Versaille. Likewise the blocks could have been transferred from a captured English ship and stored at Dunkirk for a year or so before being conveyed by ship in 1709.

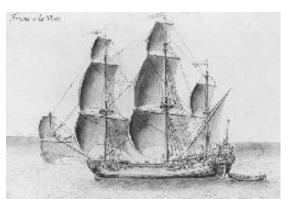
At the beginning of the eighteenth century we see the plurality of legal contracts, one being the legal contract of Europeans (non Muslims) and the other via Beraths, a legal format whereby Muslims can trade with their European partners. This was increasingly important for the Levant and Ottoman trade. If Muslims wanted to trade in Europe they needed to purchase beraths or have agents to supply such. All Muslim trade from Syria, Turkey to Albania was done through such contracts called beraths. One of the cargos from Leghorn at the time was silk which would have meant Muslim trade and thus a Berath agreement.

http://aalims.org/uploads/Cihan%20Artunc%20Berat.pdf

#### Beraths and seals.

Yanni Mavrogordota was a beratlı of Sweden. An unnamed beratlı Mavrogordato had two beratlı partners in Izmir and merchant houses in Izmir, Chios and Amsterdam. These partners did "a quarter of trade of Holland in the quality of commissioners and a lot of business in other places of Italy." Gio Mavrogordato and Gio Anastasio were beratlı partners whose firm, Gio Mavrogordato, Gio Anastasi & Co., did business with a partnership of two Swedish beratlıs, Petri Petrocokino and Catansino, and had signed consignments to the Dutch merchant De Bok for their merchandize in Amsterdam. Looking at the seal with PPGC I was conjecturing that it maybe something to do with Petri Petrocokino and Catansino. They in the eighteenth century were shipping agents for Dutch goods coming out of Smyna and destined for Amsterdam. Ships with a marble cargo out from Leghorn at this time also carried silk. Silk arriving in Levant, Smyrna or Leghorn would have come overland via the Silk Road route from China. To trade silk in the West from Asia required the use of a Berath. The seal found could be a Berath seal of these Swedish partners acting on behalf of a Dutch ship. If this theory is correct then our Bronze Bell ship could be Dutch or Ragusan (Croatian) as an object as small as a seal is unlikely to be unloaded and then transferred to another vessel at Dunkirk. The variety of coins found on the site may also suggest an Albanian vessel. Like Filipinos today are found on most merchant ships, in those days Croats were found on most vessels trading around the coast of Europe. Likewise the Ragusan built ships were highly regarded as well built ships. There is one reference that Oliver Cromwell had ships built for him in Ragusa. (Roucek, in Kerner (ed.), Yugoslavia, p. 136; Adamic, Native's Return, p. 152) I would guess that Ragusan ships were acquired and used by his forces but because of the hatred of Cromwell towards Catholicism, I find it hard to believe he ordered the shipyards in Ragusa to built ships for him. (http://www.studiacroatica.org/jcs/01/0103.htm) If this was indeed true, Ragusan built ships would have suited Cromwell in mid seventeenth century well. They were being built secretly in a neutral country, well away from the prying eyes and knowledge of Kings men in British shipyards. The ships would be well built and designed as armed merchantmen, ideally suited as army transport ships or cargo carriers. They would also have a hull shape and rigging of a merchant ship that would be difficult to attribute nationality. When sighted from a distance an observer would regard the ship as not being Spanish, Dutch or French, and a keen identifier would even know it was a neutral nationality. Such confusing identification was important when piracy was rife and every ship was potentially a prize for someone.

Our Bronze Bell ship is a well armed merchantman and the bell found goes back nearly to the Cromwell era. What is somewhat curious, and it has been noted by others before me, that the date on the bell of 1677 and the supposed date of sinking of 1709, are many years apart. 32 years is quite some age for a wooden vessel. Although some oak built Welsh vessels may survive to over one hundred years, it was more common for them to be lost within 20 years of their launch date. Knowing it could be built in Croatia and endorsed by the fact that ships built there were of good quality, the age of our veteran ship is quite feasible. Other possibilities exist that the bell was not the ship's bell but a cargo item or that it had been taken from a former vessel or that it fell off from another shipwreck in the same wreck location.



HMS Enterprise (1705) French built ship lost in 1707

Class and type: 24-gun sixth rate frigate

Tons burthen: 320 bm[1] Length: 79.75 ft (24.3 m)[1] Beam: 27.5 ft (8.4 m)[1] Draught: 11.4 ft (3.5 m)[1]

Propulsion: Sails

Sail plan: Full rigged ship

Complement: 115 Armament: 24 guns

The Bronze Bell Ship may have looked like this only slightly bigger.

### St Paul's Connection

The white marble of Italy was known as Italian statuary, the pure white being a joy for sculptors. Leghorn seemed to be the favoured port of export for the Carrara mines. The blocks found seem to be of two main sizes one nearly nine foot long and the other blocks of a rectangular shape. The nine foot blocks could be intended to be sculptured into a statue at the intended destination. The loss of the marble would probably be borne by the merchant who was paying for its transportation.

Sir Christopher Wren, the Architect to the King, had been given the task of designing and rebuilding St Paul's Cathedral, after it had been destroyed in the Great Fire of London in 1666. By the turn of the century in 1700, already twenty five years of building had been going on and its roof finally finished in 1708. It has been suggested that there are notes that some marble was to come via Wales and that it did not arrive. I have looked through much of the history of the building and have failed to find this reference. However there is general opinion that it was Wren's original intention to raise the altar a few feet higher than the floor in white marble, which was not completed by the official opening date in 1711. The entire building, one of the most magnificent domes in Europe, was achieved through money from a Coal Tax. The area around the altar area was being made about 1704 as other nearby features were finished off during that year.

The reference (not seen by the author) that blocks for St Paul's were coming via Wales still does not mean the blocks were originally intended for the London Cathedral. It still fits my theory that the blocks were intended for Versailles but ended up on the coast of Wales. If and when the Privy Council heard of the Bronze Bell shipwreck (in 1709) they could have suggested salvaging of the blocks for St Paul's but they were never recovered.

There were other buildings in Hamburg, Amsterdam and Liverpool that could have been the destination for such fine marble, but St Paul's was being built and other colours of Italian marble had already been laid on its floors.

Marble was bought regularly from 1684 to 1709 (Wren Society, XX pp. xxv— xxviii). The building ... the Admiralty to request Admiral Lord Edward Russell to collect marble blocks from Leghorn or Genoa (Wren Society, XV, p. Wren Society XVIII p.174 society, XVIII, p. 174). Carrara marble was not, of course, the only form of white marble available, Commissioners bought marble throughout Europe, mainly coloured marbles from Northern Europe (Wren Society, XV)

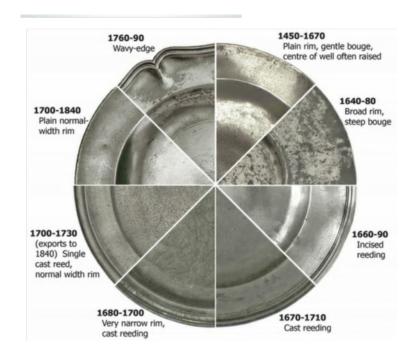
Lord Godolphin wrote to Sir Christopher Wren about moving 11 blocks of white marble from storage at Scotland Yard, 8 of them to go for the works at Blenheim house, Woodstock and three to go for the Queens statue and pedestal at the Cathedral Church of St Pauls. Date 11 April 1709.

There are numerous instances of vessels sailing north from the Portuguese coast intending to enter the English Channel but find themselves off the Pembrokeshire coast. In bad weather or fog, the navigators could not obtain their noon or star sights and could only rely on the distance run on their logs. It was so common for them to enter the northern channel some fifty miles further on than the English Channel, that the Bristol Channel was referred to as the "False Channel". With days of continuous gales the South Westerlies could even take unsuspecting ships into Cardigan Bay. The area between Wales and Ireland used to be called St Georges Channel, now commonly called the Irish Sea. To survive hurricane force winds, as happened in November 1703, a ship to survive can only go with the gale and run the entire length of the channel hoping the wind will die, before they do by hitting the coast of Scotland. Vessels unfortunate enough to not know where they are, will hit Sarn Badrig at the north end of Cardigan Bay, as there is a tidal set into this corner as well as being a lee shore.

St Patrick's Causeway or Sarn Badrig is a natural morraine of rocks reaching out into the shallow water of Cardigan Bay. It happens to be at the most dangerous spot of the Bay, in a position where either vessels wish to tack out or where they want to purposely run ashore. They are prevented from doing either and nearby is another spot aptly called Hells Mouth, also the scene of many a shipwreck.

The West of England Pilot for 1860 suggest in times of stress that if there is no alternative then drive the ship ashore at Morfa Dyffryn. It looks like the Bronze Bell ship did just that.

Pewter Platters can be used to date a wreck. On this site we know that a stack of pewter plates were found concreted to one of the iron cannon. The plates were of different designs, but one was shaped like a bishops hat and had the mark Lourdes 1700 on it. No ceramic plates have been found suggesting that it was wrecked before 1730. A fork has been found and it is thought that some domestic items found their way into general usage in the local manor hall of Cors Y Gedol.





The photo right is one of the Bronze Bell platters, as expected the diagram dates this platter into the 1640 to 1680 date period. One pewter plate had a mark Lyon 1700 on it. Photographs of two Pewter plates are to be seen in the Caer Nest Collection of photos.

Other artefacts found include a gunner's rule, buttons, lead shot and cannon balls. The buttons have not been seen but may give insignia that could date them or identify them to an actual person.

I am unable to find the reference but I have read that a wooden table with the initial "A" carved upon it has been seen out of artefacts from Corsygedol. As many family or captain's names could start with "A" it is not useful on its own. However a similar "A" is seen on a recovered pewter platter, suggesting a surname or forename. It is somewhat curious as two letters are often used as name initials. There seem to be more Crotian forenames starting with an "A" (Adamic, Antic) than those found in Genoa. It may show Austrian or Albanian origins.

Searching through all the statues of Europe and the buildings being constructed in Dublin, Edinburgh, Amsterdam and Hamburg, I could find little. I then commenced looking at Paris. I came across the Royal Chapel at Versailles which was built with a good deal of Carrara marble and was completed in 1710. We now need to look which route marble blocks would take to get to Versailles. Ships would enter the River Seine to get to Versaille and cargo would be destined to Paris from Leghorn (Livorno). However if 1709 is the date in question the River was totally iced over for the first three months of the year (see Later).

# •Chapelle Royale

Its architecture is simultaneously Gothic and Baroque. With the ceiling being 25 metres high, the stained glass, the pointed roof and the gargoyles all reminiscent of medieval cathedrals. The columns, balustrades, carved pillars and coloured marble tiling are all typical of the

1700's. The chapel features a tribune on the same level as the royal apartments, overlooking the nave. Built by Louise XIV, he used the Chapel for five years before his death. It was then utilized by Louis XV, and Louis XVI attended the half hour daily mass at 10 am every day. New Choral music was composed on a daily basis and sung in the Chapel.

It is regarded as one of the most exquisite religious buildings in the World.

The French wars during the nine years previous to 1709 had slowed up the building of this most magnificent chapel. The Italians could do trade directly with the Dutch during this time and we know Carrara marble shipments were going to Amsterdam during this period. We are also aware that during 1708 two such ships were taken as a prize when off the French coast. One theory of how a French boat could be carrying a cargo of Italian marble is that it was transhipped from a captured Dutch vessel onto a French vessel in Dunkirk.



Other nations during this time were allowed to trade with both Italy and France and have immunity from the French corsairs. One such nation was Albania, which tried desperately to maintain their neutrality to both Austria and to France. A Ragusan vessel could trade with Leghorn and with any other European country, taking Carrara marble around the coast of France without fear of being taken as a French prize in the years 1706 to 1709. A merchant ship doing a trip from Leghorn to the Irish Sea would take anywhere from 20 days to two months. It was not unknown for a Dutch ship to even carry a Rasugan flag on board with which to fool or ward off a French corsair attack.

The Carrara Marble has always been the best quality white marble to be had. Traditionally only used by the most extravagant or wealthy, to have the grandest or most exclusive sculptures or buildings of the day.

It has always been the most expensive marble to buy and being so heavy its transport cost was invariably equal or greater than the cost of the material at the quarry. The building of St Paul's Cathedral in London and the Versaille Chappel Royale near Paris were both nearing completion in 1710.

# Genoa Paper

In 1711 there was paper known as Genoa Paper. This year the British Government considered imposing an Import Tax on the importation of cards, and then later paper, so as to preserve the paper industry in Britain. In various articles written about the Bronze Bell ship there is mention that the ship was carrying paper as well as marble. I have not seen the original source or where this snippet of information came from. I true is may also give an indication of where the marble was destined for. Paper, in any year, would have been a useful cargo going to Paris and the Palace of Versaille and equally direct to London. In the grounds of St Paul's Cathedral was a successful printer who was reprinting bestseller books at the time. Albeit any big European city would want paper, especially if the price was right. The above Import Tax implies that paper imports into London would fall after the date of 1712.

#### The Bronze Bell

The bell was one of the first items recovered from the site around 1978. It has a date on it of 1677 and the words "LAUDATE DOMINUS OMNES GENTE" (All peoples praise the Lord). Also moulded into the design is a relief of Christ and the Virgin Mother. The majority of European bells of this date had Latin lettering. It is the design on the bell rather than the Latin that suggests a strong Catholic bias, which could mean a source of Italy, France or Spain.



The Bronze Bell, recovered from the site.

As the date is 32 years before the accepted date of sinking, it is conjectured that it was part of a cargo or was not acting as the ship's bell. However it is my opinion that it is the ship's bell, in those days they only carried one, and indicates the date of building of the Bronze Bell wreck.

https://www.british-history.ac.uk/cardiff-records/vol2/pp381-398

## The strongest and best shipbuilders at the time

Contemporaneous Italian observers refer to the excellent craftsmanship and superior quality of Ragusan-built ships: Bartolomeo Crescenti (Rome 1602) states the best craftsmen and shipbuilders of the Mediterranean are those of Ragusa; Pantera (Rome, 1614) considers the best shipbuilders those of Ragusa, Portugal and England; Sagri (Venice 1574) contends Ragusan ships are the strongest in the world, and of the best wooden materials.

http://www.hnb.hr/dub-konf/18-konferencija/havrylyshyn-srzentic.pdf

## Reasons for ship losses at St Patrick's Causeway.

Just south of the Lleyn Peninsular at the northern end of Cardigan Bay is a large natural corner. All ships destined for Liverpool and Glasgow have to pass this area. Not only is it shaped like a huge net to catch any sailing vessels unfortunate to get caught there in the prevailing south westerlies, but the area poses a number of other hazards. Strong ebb tides off Bardsey Island, cause slow moving sailing vessels difficulties in rounding the headlands to get to the shelter of Holyhead. The whole area of Cardigan Bay has few natural features making navigation difficult. Captains in 1700 would have to rely on previous knowledge as there were no accurate charts of the area. Stretching out into the bay for some eleven miles is a reef of rocks, that many unsuspecting captains have found to their loss. It is a rocky terminal morraine from the last Ice Age and is so shallow that ships of any size can hit it. Nowhere else around the Britain's coastline is there any other similar hazard. Navigators in unfamiliar areas, have to take certain things for granted. They look along the coast and estimate if there are likely to be offshore rocks or islands. If they think it is safe they would take depth soundings and sail three to four miles away from the land, skirting the coast. If this was done in north Cardigan Bay, even in settled weather a ship would invariably hit St Patrick's Causeway, Sarn Badrig, The captain and navigator would be completely unaware of an unusual reef lurking south westward for more than ten miles out to sea. Once stranded, because of the depth and harsh boulders, the ship was unlikely to be got off. Most of the losses are ships travelling northward. Ships outward bound from Scotland and Liverpool, tend to stay seaward of a transit from Bardsey Island to Strumble Head thus avoiding this hazard. In bad weather, sailing ships get driven into the same area. I remember seeing a yacht, one of the survivors of the Fastnet gale, a few days after the storm in 1979 sailing carefully down the coast near Cardigan. He was obviously looking for the safety of Fishguard harbour after having sensibly abandoned the race and run up or been driven up the Irish Sea with the hurricane behind him to get out of trouble. He ended up 160 miles north of his intended rhum line. Likewise in the Red Sea I have run before a storm and ended up 80 miles in the wrong direction.

It was not unusual for ships intending to enter the English Channel to end up on the Welsh Coast. It was such a common occurrence that the Bristol Channel was often referred to by captains as the "False Channel."

Useful charts of the Welsh Coast were not available to captains until surveyed and printed by Lewis Morris about 1840. Some of the earliest Pilot books for St Georges Channel (Irish Sea) were printed in 1832, approximately 125 years after the Bronze Bell ship's voyage.

Any ship not familiar with the Welsh coastline and being unfortunate to end up there was in real danger. If the ship entered the Bristol Channel and followed the coast they could end up in the shallow waters of Carmarthen Bay or Swansea Bay, or founder on a sandbank. If they were taken up the west coast of Wales they would either hit St Patrick's Causeway, a spit of rock sticking 12 miles out into Cardigan Bay or get embayed in Tremadoc Bay, off Porth Neigle, an area appropriately named "Hells Mouth".

French ships with Captains experienced at sailing into the north French Ports were sometimes taken north of the Isles of Scilly, having crossed the Atlantic or met with bad weather crossing Bay of Biscay. Looking at the shape of the anchor, it is not one usually associated with Dutch or British ships and I would guess that it was a Mediterranean vessel, which could mean a Mediterranean captain, unfamiliar with both the Cornish coast and the Welsh coastline.

# The only written entry seen since the wreck date.

I only fully read the Wessex Archaeology, 2006, Tal-y-Bont, Cardigan Bay, Designated Site Assessment: Full Report, report ref 53111.03t. when I had already spent one week looking through State Papers. This WA report talks of the original Lewis Morris charts and its entry.

The hydrographer Lewis Morris carried out his surveys between 1737 and 1744, and published in 1748. The position of a Genoese vessel of about 700 tons lost in 1709 whilst carrying a cargo of marble and paper, together with other goods, is charted to the south-east of Sarn Badrig and close to the shore. The annotation on the map states: 'Here the Wreck of a Genoese Ship of ab. 700 tun lies, Lost 1709. Loaden with marble, Paper Etc(?)

The annotation is thought to be entered by Lewis Morris son, but the accuracy of this information cannot be underestimated. He would have heard of the wreck from elderly witnesses or second generation survivors of the wreck. In those days a vessel of 700 tons was a large vessel, certainly carrying the approximate number of 38 guns, and carrying 66 tons of marble would have been less than a "ballast" cargo. She probably carried 150 to 200 men, and was an old merchantman, with a ship's name that the local people could not remember. The age of the ship is implied by the variety of coins found, the date on the bell, and the number of aged swivel guns found on board.

I had already commenced with the notion that the vessel was a French one, so proceeded with a search of what buildings incorporated marble in France around 1709. Although there were many prodigious buildings being constructed using marble, only a few were exclusive enough to pay for the best white marble in the world. Louise XIV was putting the finishing touches to his Royal Chapel at the Versailles Palace near Paris.

The date 1709 corresponds to one of the coldest February March and April that France has ever known. With temperatures as low as minus 20 degrees Celcius, colder than the Arctic, thousands were dying of hypothermia. What is more significant for this story is that Paris was half iced over and the Siene near Versailles was completely frozen over. For months it was impossible for any ship to navigate to the Palace. The Palace of Versailles needed an ice free Seine to obtain its supplies of provisions, goods and building materials.

If the marble in a French/ Italian ship was destined for Versailles, then the ship would have found it impossible to get there in the cold Spring of 1709. One theory being that our ship was destined for the Palace of Versaille but had to go elsewhere. She may have heard of the ice problems if she had stopped at another port en route, or she may have arrived at Calais and realized she had to take her cargo elsewhere.

With exclusive marble intended for a Catholic church she could have returned to Le Havre to unload, but that port too, may have been frozen over. The captain may have then decided to sail for a Catholic port that was known to him and known to be ice free, such as Dublin in Ireland.

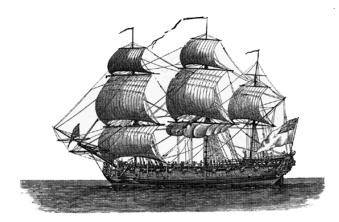
Dryade 44–46 (launched 21 October 1702 at Le Havre) – captured by the British 1709

Mercure 40–42, 4th Rang (ex-Dutch Mercurius, captured 1705) – Captured by the English 1707

https://books.google.com.ph/books?id=9SEnVWkX4fAC&pg=PA98&lpg=PA98&dq=Italian+ship+700+t on+lost+1709&source=bl&ots=hhUjEdDiQN&sig=\_8PbxooZ3av71UCUnuIaG1BOdbE&hl=en&sa=X&v ed=0CDAQ6AEwBGoVChMIm8aQmtv4yAIVA1umCh1o9Q4F#v=onepage&q=Italian%20ship%20700% 20ton%20lost%201709&f=false

Shipwrecks in the Americas By Robert F. Marx would give approximate details of a 1680 ship of

700 ton ship 102 ft length of keel Beam 36.7 feet Draft 14.8 feet Five or six anchors. He mentions that in 1688 a fourth rate British Man of War of 700 ton was required to have six anchors with an aggregate weight of 5.5 tons. Thus there are at least two anchors missing from the site, possibly deployed as it was being driven ashore. WA confirm that the site dimensions are similar to the above with 37 meters of assumed wreck site length.



This is the *Falmouth* an East Indiaman built in England 500tons 30 guns launched in 1752. The Bronze Bell was an earlier built vessel and if Mediterranean built likely to have a Lanteen Mizzen, not a fore an aft sail as shown here.

# Why the Bronze Bell Ship could be built at Ragusa, (Dubrovnic) Croatia.

Design of the bell
Catholic influence of artefacts.
Large number of cannon
Very large merchant vessel
32 years old when lost
Predominance of merchant vessels used around 1700
Many Genoa merchants would own or use Ragusan vessels.
Neutrality during French /British war
Shape and style of anchors

The Dubrovnik galleon Argosy is mentioned in two Shakespeare's plays: "Merchant of Venice" and "Taming the Shrew" The date of these is 1592, seventy years before our Bronze Bell ship was built.. This name was so iconic for Ragusan vessels that the name of Argos or Argosy would have always been given for a succession of Ragusan vessels over the decades. Although a bit far fetched as an idea it is possible that our vessel is called one of these names, especially as an "A" has been seen on two artefacts.

The first cannon foundry in Dubrovnik was started in 1410, that is, 62 years before Vienna and 64 years before Russia. This was a small foundry, that made bells aswell. If the bell was made there they already had 250 years of experience at making them. The foundry also made cannon and it may be indicative that the ship was carrying so many guns. Ragusan ships were well known as being both well armed and having large cargo holds, and were preferred by merchant in the Mediterranean. The three anchors found are of the Mediterranean type, a sharp V shape rather than a rounded palm and having no flukes. There has been identified a possible anchor fluke amongst the cargo heap without its associated shank suggesting a larger northern European anchor was present and not deployed. It is presumed that as 90% of the anchor is missing, complete corrosion of the shank is less likely than the possibility of it being salvaged from the site, but leaving only one fluke in situ. The sharp composite pieces of a wrought iron anchor shank are usually evident on a wrecksite even after severe underwater corrosion of 350 years. The recovered breech loading cannon show corrosion but nothing like 40% of the original mass.

Anchors were shaped for efficient use in the area of operation of the ship's voyages. Even today wise cruising yachts carry a special anchor for deploying in the Eastern Mediterranean. Around Turkey and Greece many of the anchorages are a mud substratum covered in thick eel grass type weed. A traditional Admiralty anchor is designed primarily for a rocky sea bed and is generally good for sand and pebbles. It is not good for penetrating through the weed found in the eastern Mediterranean. The V shaped traditional anchor devoid of flukes is good for cutting through the weed and for holding in the mud beneath. These are the type of anchors seen on the Bronze Bell wrecksite, and this may indicate two facts, one that the ship was travelling outside its normal trading routes, and two, that it was likely to be a Genoa or Ragusan vessel.

Dubrovnik's 1395 Insurance Law is the oldest in Europe. It had all aspects of contemporary maritime insurance. This law is three centuries older than Lloyd's insurance, London, which dates from the end of 17th century.

Their ships carried special bombadiers, to man the guns. These could be Germans or French or Italian, and were not necessarily the same nationality as the ordinary seaman.

Slave trade in the Republic of Dubrovnik was forbidden in 1418 (in the British Empire in 1833).

## Why so many ships are lost along the Welsh coast.

Of all the shipwrecks of foreign nationality ending up in Carmarthen Bay it is surprisingly, the French that dominate. French vessels and English vessels would often get blown 70 miles north of their intended landfall off the Cornish coast, especially if meeting an Atlantic gale. There are on average 32 gales per year and most of these are South Westerly. These strong winds would drive ships onto the outer island of Pembrokeshire, into Carmarthen Bay or north to St Patrick's Causeway, never to re emerge. There is an added complication in the compass readings even if they were properly corrected at the commencement of an Atlantic crossing or one from the Mediterranean. Travelling North over such a distance especially if carrying a lot of iron (guns) would cause the compass to deviate more to the North as they progressed. Instead of finding themselves off Isles of Scilly they may already be off Ireland or SW Wales and thus needed to turn south to correct their course. The confusion of identifying the high cliffs then caused them to stray into Carmarthen Bay, the large tidal range and shallow waters compounding their problems. In bad weather, such as gales and fog, without noon or night sightings ships were often taken into the Bristol Channel instead of the English Channel. The cliffs of south Pembrokeshire look similar to those of Cornwall and an unfortunate captain was taken into the shallow waters of Carmarthen Bay before he had realized his mistake. Once off Laugharne there was little he could do except purposely beach the ship to save lives or the cargo. Most ships coming from foreign ports would be heavily laden and when driven into the shallow water by the prevailing south westerlies, the huge surf and swells would pound the vessel, breaking her apart in a matter of hours. So too, ships were taken up into Cardigan Bay, usually blown north by the predominant winds. A heavily laden marble ship cannot sail effectively into wind and at best will only sail about 60 to 70 degrees to the wind in favourable weather. If taken, out of control, into the confinements of a bay, with the wind still blowing hard, there would be little chance of her sailing out of it.

Between the long extending reef or Sarn Badrig and the Morfa Dyffryn beach lies a shallow channel, much used by the Porthmadoc schooners. This inner channel also has a reef running parallel to the beach, its position would only be known to the local captains and pilots. The Bronze Bell ship appears to have grounded on this inner reef and not the main St Patrick's Causeway (Sarn Badrig).

I have recently looked into putting a correct name on another shipwreck lost at Sarn Badrig, also a Protected Wreck. For convenience it was termed *Diamond*, but size alone makes this name an incorrect one. From data known on the site the true name comes from a list of seven possible wrecks of the size dimensions and era lost. For this we are assuming that the databases are covering 100 % of the losses. I would guess that for ships over 500 tons we know at least 97% of them for Sarn Badrig after 1840. You may say how can I possibly give a figure on how may unknown or unrecorded wrecks have happened there. My only answer is that I have been dealing with such lists for forty years and few large shipwreck incidents have come to light in the last 15 years, despite new databases being produced. For coasting schooners, sloops and fishing vessels such lists may be lacking 20 % of them, and of course there are some losses that are totally unrecorded. A ship foundering at sea with no survivors to tell the tale.

When searching for information, the ability of being able to search Welsh Newspapers online and seeing online Lloyds Shipping Registers makes life for a maritime historian so much easier. It is the shipwrecks prior to 1840 and those going back centuries that are more time consuming and much more difficult to research. A Coflein site has suggested that only one quarter of recorded shipwreck sites in Wales have been found. It is not known what they term 'recorded sites' but out of my records less than 5% are known.

#### **Some conclusions**

- 1 The wording "Genoan vessel wrecked here 1701" seen on a chart in the location of the Bronze Bell wrecksite some 400 meters from Dyffyn beach, is the only written reference known. This is the most significant and only descriptive piece of written information found so far. The author has not seen this chart but 90% of all the indicators also confirm that this could be the nationality and the date of sinking. I have also seen it reported that this chart gives a date of 1709 and not 1701` This date would fit better into the jigsaw puzzle.
- 2. A vessel carrying approximately 66 tons of marble and 35 guns could be one and the same vessel.

Although there must be wreck sites nearby on St Patrick's Causeway where one wreck sits on top of another, I do not think the site represents two wrecks but just one.

- 3. Merchant ships at this time were heavily armed and this number of cannon was not unusual for a galleon type vessel.
- 4 The overall number of cannon found at the site needs thorough investigation. The original number of cannon could be 35 to 38. Together with tonnage and name, the number of guns (cannon) identifies a given ship in this era.
- 5 The shape of the palm of the anchors, indicate a ship from the Mediterranean.
- 6 The bell is thought to be the ship's bell and indicates a Catholic bias.
- 7 The author thinks that the marble cargo could have been intended for the Palace of Versaille in the year 1707. That the ship was driven off course in bad weather and wrecked at Dyffryn Adudwy Beach. That Christopher Wren heard about the cargo of marble and wanted to have it salvaged and taken to St Paul's for the Cathedral construction. This was never done but left us with documents saying some marble was to come via Wales which it never did.
- 8. There is a reference in the Domestic State Papers of 108 Papal Palatines, being sent home in 1707. It is not known if these were survivors of a shipwreck with a Catholic bias or not, but it is quite likely.
- 9 Having looked extensively through the State Papers for the dates 1700 to 1709, I have failed to find any specific reference to a ship lost at Morfa Dyffryn. This does not mean that there is no reference, there could well be something there, it means I have not been successful in finding anything in three weeks of research.
- 10 Port books for the port of Leghorn (Livona) where the blocks were probably shipped from no longer exist as they were bunt for fuel, thinking they were of no further use, in 1887.
- 11 The name Juan Benedictus, of Italian origin, known to be buried locally in 1730, is regarded by the author as a possible survivor of the wreck. His surname may be the source of the Bennett Williams families in the area but this name (like that of the author) was already in existence for two generations around the Wales coast at that time.
- 12 The date on the bell is 1677. Why some still put 1671 as the date is that the best photograph showing the bell date is be seen on a youtube.com video. Here the bell date looks like 1671, but the "1" is the leading edge of the rectangular mound mark of the letter 7. Observing the actual bell, the last figure 7 is quite distinct..
- 13 The most recent coin found on the site is dated 1702.

14 It is unusual for a trading vessel of this date not to have a considerable number of silver coins on board. If these have not been recovered or seen it is supposed that much of this wreck was salvaged soon after her sinking. The story of domestic articles ending up in Cors y Gedol Manor should be fully investigated. If they have any historical documents, perhaps with their deeds, these may reveal numerous answers.

Pewter plates or silver cutlery or domestic ware may give ensignia or silver marks that could suggest ownership or certainly dates. A silver fork was found on the wrecksite, this could match those being used at Cors y Gedol. A pewter plate had an "A" mark, a table at Cors y Gedol has a similar "A" mark.

- 15 Putting a name to the vessel, is much more difficult than I had at first imagined. Church records may reveal much more. Vessels of different nations were being captured and reused and renamed. Cannons were being removed from one vessel and added to others.
- 16 Without knowing of the 'Genoa vessel' mark on the Lewis Morris chart of 1748, now in possession of Gwynedd Archives, the author was of the opinion that the vessel was French, but built in the Mediterranean. Genoa was within the Kingdom of Naples which for all purposes was hand in hand with France mid 1701 to 1711. The local people who told Morris, who wrote "Genoa" on the eighteenth century chart may have assumed it to be a Genoan vessel because it had Genoa Paper and Carrara Marble on board and had sailed from there. There is a possibility that the vessel was from Ragusa, (Dubrovnic) now in Croatia, that was a neutral country in the Spanish War of Succession, but strongly Roman Catholic. They made strong and well built merchant ships and would be carrying anchors like those seen on the site.
- 17 Many ships intending to enter the English Channel, end up on the coast of Wales, through stress of weather or unable to get proper fixes of their position. If for some reason, a Catholic captain found himself north of the Isles of Scilly and knew the difficulties of sailing into the prevailing wind, he may be tempted to sail for Dublin (with more Catholic residents) with his cargo rather than a Welsh or British port which would be more hostile to him and his crew. The ship may have been caught on this dreaded lee shore, whilst sailing to Dublin as an alternative destination, after being blown too far north to enter the English Channel.

## **Further study**

Apart from looking in more detail at Church Records, which may be found in the National Library at Aberystwyth, it would be useful if someone catalogued and photographed all the coins recovered. Ten different countries are encompassed, which indicates a trading vessel over a few years or it may suggest that coins have been moved to the wreck site by underwater sand drift. The Wessex Archaeology report 2006, mentions 17<sup>th</sup> century coins being found at the low water marks on the nearby beach, some of which are thought to be from the Bronze Bell site. Silverware at Corsygedol needs viewing to see if it has the same marks as the cutlery found on the wrecksite.

I had hoped to come up with a name of our Bronze Bell wreck. This review has not produced a name but it does appear that the date of 1709 is quite feasible, and that the vessel was built in Croatia or Italy. My best guess at the destination of the marble bocks is to the Palace of Versailles. This text may help further research and I am convinced that a specific date and a ship's name will eventually surface in the future.

Research by TOM Bennett November 2015. (A desk top survey)

Contact: Tom@shipwrecks-philippines.com You are welcome to use any of the above text provided an acknowledgment is made eg Extract from "A review of the Bronze Bell Wreck", TOM Bennett 2015.

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Maritime Officer, RCAHMW, June 2012.

http://www.coflein.gov.uk/en/site/1015/details/BRONZE+BELL%3B+TAL-Y-BONT/

Ragusan ships built for Oliver Cromwell's navy,, reference Roucek, in Kerner (ed.), Yugoslavia, p. 136; Adamic, Native's Return, p. 152.

#### Maritime Officer, RCAHMW, August 2008

http://www.virtualtourist.com/travel/Europe/United\_Kingdom/Wales/Gwynedd/Barmouth-317366/Things To Do-Barmouth-TG-C-1.html

• 1703: David Lloyd of Hendwr • 1704: Morris Williams of Hafod-garegog

That some of the Vaughans collected manuscripts and books is an established fact. The following manuscripts, formerly at Mostyn Hall, Flints., but now in the National Library of Wales, were at Corsygedol — Mostyn MSS. 115, 130, 131, 144 ('Llyfr Coch Nannau'), 145 ('Llyfr Gwyn Corsygedol'), 147, 160, 162, 163 ('Y Llyfr Gwyrdd'), 164 and 165 (this last an important volume from the family history standpoint). The literary tradition is continued in the 18th cent. in the person of William Vaughan (1707 - 1775), who was Member of Parliament for Merioneth from 1734 to 1768

J. E. Griffith, Peds. Anglesey and Caern. Fams. 279; Arch. Camb. ser. 4, vi. 13–14, 16; ser. 1, ii. 132. Chirk Castle Accts. 1666–1753 ed. Myddelton, 455; Marlborough–Godolphin Corresp. 81, 88; Arch. Camb. ser. 4, vi. 14.

1709 William J. Hoffman, "'Palatine' Emigrants to America from the Principality of Nassau-Dillenburg," The National Genealogical Society Quarterly xxix (1941) 41-44 16