

**Welsh Wreck Web Research Project
(North Cardigan Bay)
On-line research into the wreck of the:
POLTALLOCH**



Photo of painting in the Samuel Hunt Collection at the National Maritime Museum of Australia

Shipwreck of the POLTALLOCH January 2nd 1916

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1.0 Abstract

The Malvern Archaeological Diving Unit (MADU) currently has a database of 453 shipwrecks in the north end of Cardigan Bay in North West Wales. These wrecks date from 1590 to 1993 and very few have been investigated in any depth! With corona virus currently requiring us all to rethink the way we live, on-line research would appear to be something we could all safely consider taking on.

The author has no diving experience or training in archaeology. This report describes the historical aspect of the incident.

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2.4 Contributors

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MADU
Chris Holden

2.5 Abbreviations

A list of any abbreviations used in this report, i.e.

MADU	Malvern Archaeological Diving Unit
NAS	Nautical Archaeology Society
NPRN	National Primary Resource Number
OS	Ordnance Survey
RCAHMW	Royal Commission on the Ancient & Historical Monuments of Wales
URL	Uniform Resource Locator
Larne	Larne and Larne Shipwreck Index Vol 5
MW/CM	Maritime Wales/Cymru a'r Môr Journal
AE	Aled Eames
CH	Chris Holden
HP	Henry Parry

3.0 Introduction

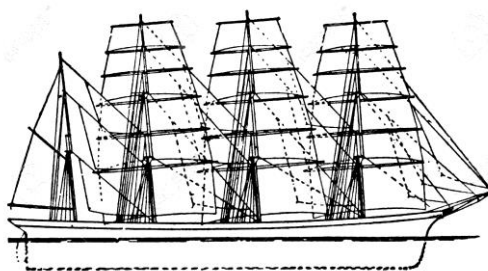
The author of this report is from a seafaring /fishing/ lifeboat family from Criccieth at the northern end of the Bay and the sea has been in his blood all his life, serving on ships of all types, including, as master, on research vessels, for over 40 years. His particular interest is in Tremadog Bay as the whole expanse of the bay is visible from Criccieth and as Trustee/Secretary of the Porthmadog Maritime Museum has gathered material on local shipwrecks and maritime incidents for many years and aims to correlate this and expand the information from written and the many on-line resources available. Anecdotes are included, but as always, though often useful, this type of information should be treated with caution so will be clearly indicated. The author is a Welsh speaker so possibly has wider access to newspapers in that language.

I became aware of this shipwreck from reading the books of Henry Parry and Ivor Wynne Jones and others. My late father, who was born 1904 and lived near the seashore in Criccieth, remembered tons of wreckage being washed up on the beach when he was a teenager. I always assumed that this was the POLTALLOCH but, of course, this was 1916, during WW1 and could have come from one of many ships sunk by the Germans in the Irish Sea.

A big thanks to Chris Holden for his advice and allowing me to quote and use images from his book "Underwater Guide to North Wales Volume one" (Edition November 1917).

Much information on the voyages of the ship from 1893 to 1916 is included. While this might not be pertinent to the wrecking, it will perhaps bring the human element in, of the lives of the men who sailed on her.

N.B. POLTALLOCH was the name of an estate in Argyll and Bute, Scotland the ancestral home of Clan McCallum (Malcolm). No connection has been found between this place and the ship in this report other than that the owners managed other ships named after Scottish name places.



Four Masted Barque



Barque



Full Rigged Ship

Fig 2. Types of square rigged sailing ships

4.0 Background

The four-masted barque **POLTALLOCH**, of San Francisco, 2138 tons, had a very rough passage from Caleta Buena Chile to Queenstown (Cobh) for orders, with a cargo of nitrates. She departed there under tow for Leith. During a storm the towing hawser parted and she became unmanageable and stranded on the rocks at the western end of St Patrick Causeway/Sarn Badrig on the 2nd January 1916. The Barmouth lifeboat went to the rescue, but the crew had by then left the ship. The captain and crew of twenty-five landed in their own boats at Harlech early the next morning.

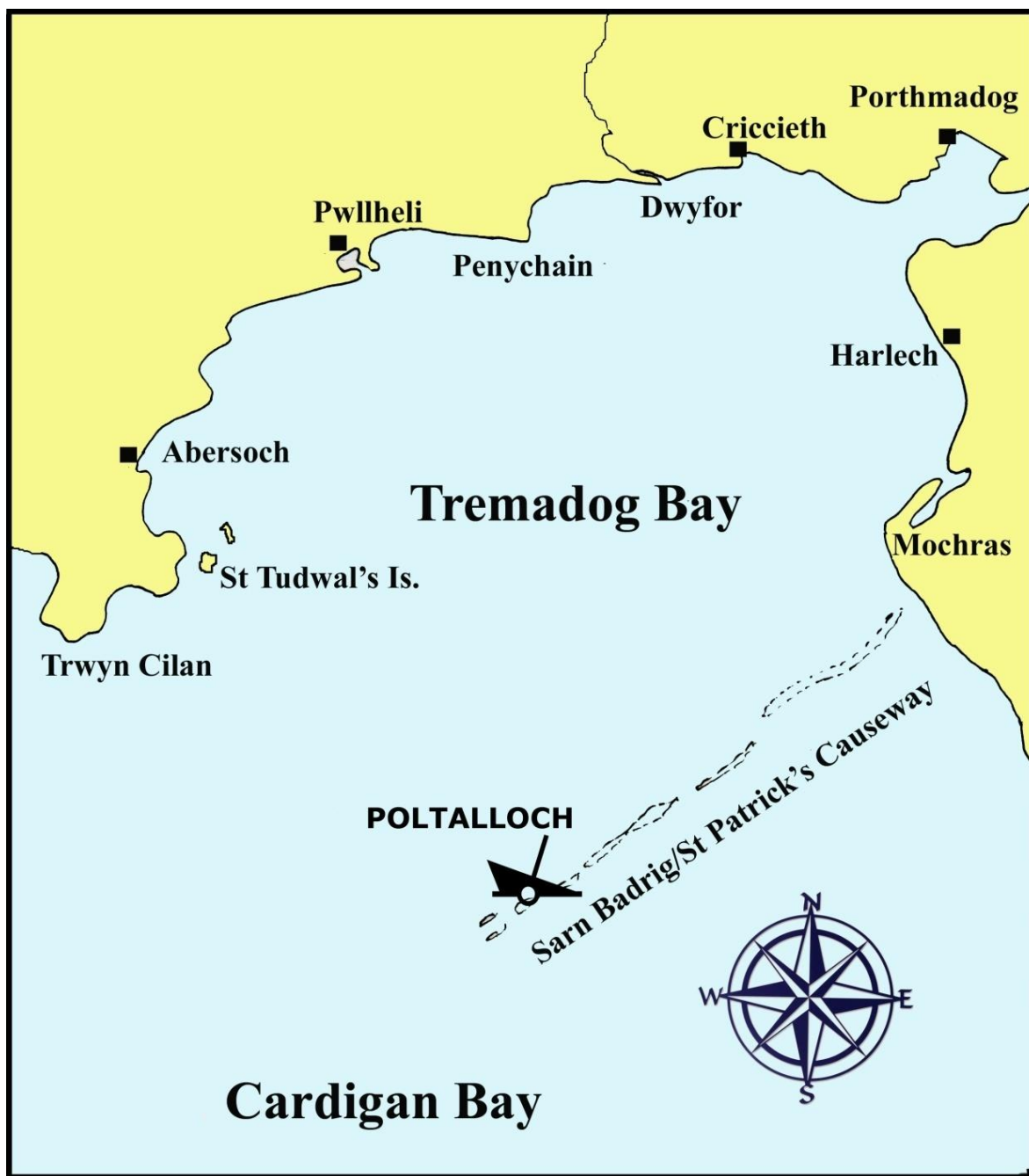


Fig 3. Cardigan Bay



Fig 4. Sarn Badrig / St Patrick's Causeway at Low Water on a Spring tide. Photo Chris Holden

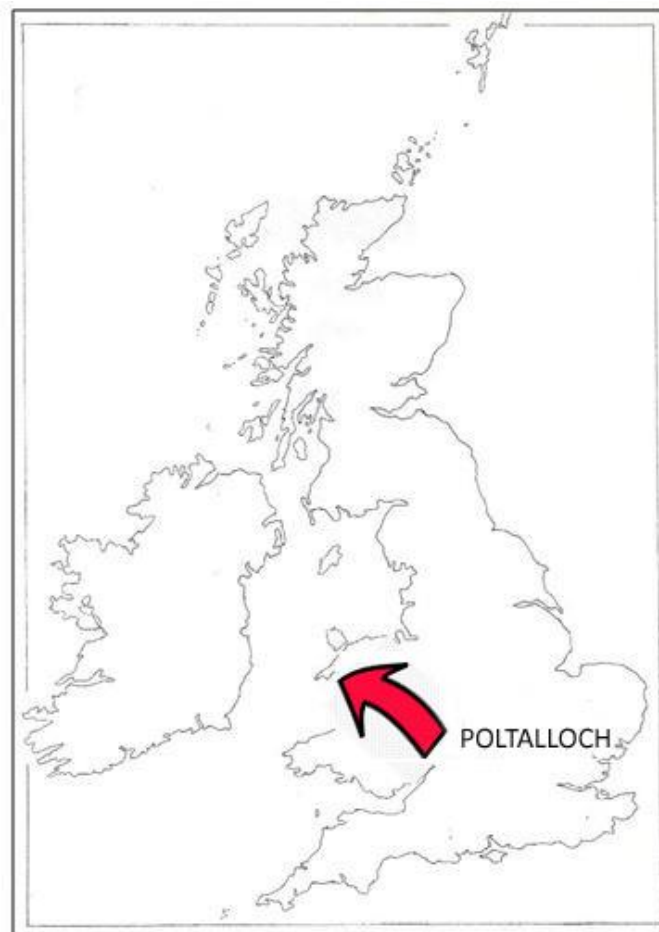


Fig 5. Map of UK

5.0 Research Methodology

Equipment used

LENOVA C40-3D Desktop PC with Windows 10
High speed broadband
Microsoft Office
Google search engine
Ancestry.co.uk
Adobe Photoshop Elements
Admiralty chart – Cardigan Bay Northern Part 1984 Edition

1. I have a good library of reference books on maritime history including the classic books on shipwrecks and rescue on the North Wales coast. As an amateur local historian I have a collection of autobiographies and biographies by local people plus typewritten and hand written notes by residents of Criccieth going back to the 1830s. I start my research from here.
2. I check the Lloyds Register database to see if there is an entry for the vessel to obtain building date and dimensions. The master's name is given which is useful for correlating the vessel details in the register with newspaper, and other accounts, as there might be more than one ship of the same name.
3. Entry from Larne and Larne Shipwreck Index Vol 5 included (if there is one)
4. Online – If no entry in Lloyds and if the ship is British I check with the CLIP Crewlist website <https://www.crewlist.org.uk/> to obtain the official number and vessel details from the Mercantile Navy List.
5. The COFLEIN website has information on some wrecks so this is checked
6. A general search with GOOGLE, always remembering to precede the vessel's name with.... barque, brig, schooner, sailing ship, SS , MV etc. And the date of the incident. Other search words used are... stranded, foundered, wrecked etc.
7. The National Library of Wales newspaper collection of Welsh newspapers 1800-1919 (English and Welsh) is invaluable <https://newspapers.library.wales/> (Free). Try using the name of a nearby community combined with the name of the ship or date of the incident using modern Welsh name or, more likely, the old English version or spelling e.g. Portmadoc/Port-madoc. Criccieth was spelt in several different ways.
8. The National Library of Wales Tithes Map site is excellent.
https://places.library.wales/browse/52.892/-4.126/13?page=1&alt=&alt=&leaflet-base-layers_70=on
9. The British Newspaper Archive online is a valuable source of information (Subscription required) <https://www.britishnewspaperarchive.co.uk/>
10. Many newspapers had a section on shipping movements and intelligence. In the search field always enter the ship's followed by the master's name. Unfortunately, the cargo carried is not often mentioned.
11. Wrecksite.eu is an excellent website. A very reasonable fee of 4 eu is charged for further information and HD image (if available). This site sometimes has the Board of Trade Inquiry Report.
12. Uboat.net is very useful for ships sunk during WW1 and WW2 <https://uboat.net/>
13. Anecdotal – sometimes elaborated over the generations but often an element of truth so well worth researching.
14. Archive catalogues from U.K and the U.S.A are sometimes online and often include a summary of the item.
15. Lloyd's Register Casualty Returns 1890-2000 <https://hec.lrfoundation.org.uk/archive-library/casualty-returns/casualty-returns>

6.0 Results

Vessel	Name/s	POLTALLOCH	
	Type	Sailing vessel – Four Masted Barque	
Built	Date	1893	
	Builder	Workman, Clark & Co	
	Built	Belfast	
Construction	Materials	Steel	
	Decks	1	
	Bulkheads		
Dimensions	Length	284.4 ft	86.68 m
	Beam	42.0 ft	12.80 m
	Depth of hold	24.4 ft	7.44 m
Tonnage	Gross		
	Net	2254.0 tons	
Owner	First	The Poltalloch Ship Co London (Potter Bros London)	
	Last		
	Others	The Poltalloch Ship Co Victoria B.C. (Eschen & Minor San Francisco)	
Registry	Port	London San Francisco ?	
	Flag	UK finally USA	
	Number	102822	
History	Routes	U.K. and N.European ports, Cape Town, Australia, San Francisco, Brazil, Chile, Mexico Puget Sound, British Columbia	
	Cargo	Timber, Coal, Grain, Nitrates	
Final Voyage	From	Buena Caleta Chile, via Queenstown (Cobh)	
	To	Leith	
	Captain	Final Captain not known	
	Crew	25	
	Passengers	0	
	Cargo	Nitrates	
Wrecking	Date	2 nd January 1916	
	Location	St Patrick's Causeway	
	Cause	Stranding	
	Loss of life	0	
	Outcome	Completely wrecked, cargo lost	

The Last Days of Sail

The improved efficiency of steam engines and the opening of the Suez Canal in 1869 saw the beginning of the end for sailing vessels. It was a slow decline as there were still routes where sailing ships could compete. The wind was free and they sailed long ocean passages with the prevailing winds carrying bulk, non perishable cargoes when there was no urgency. Ports visited were often remote with poor infrastructure so loading could take weeks or even months. The ships would sail to Queenstown (Cobh) or Falmouth for orders with the cargo being sold several times on passage. Often, they would be then towed to their final destination by a steam tug. Building of large iron then steel sailing ships continued well into the 20th century but these were cargo carriers not fancy clippers like the CUTTY SARK.

The Four Masted Barque

This became a favoured rig during this period as they could carry a profitable cargo with fewer crew. They were large powerful ships which were driven hard. Their strength was sometimes their downfall as the steel masts and wire rigging could not be cut away easily, as with wooden masts and rope rigging, if the ship broached or was overwhelmed by the mountainous seas of the "Roaring Forties" and rounding Cape Horn. Several were lost, badly damaged or simply disappeared. On arrival at Australian ports or the USA many of the crew would desert and were replaced by others, of all nationalities under the sun, so by the time the ships arrived back in the UK, perhaps two years later, only the officers and a handful of the crew would be from the original that set off at the commencement of the voyage.

Lars Bruzelius's website has a list and information on hundreds of four masted barques

http://www.bruzelius.info/Nautica/Ships/Fourmast_ships/Catalogue.html

The POLTALLOCH

She was typical of this type of ship, built in Belfast in 1893. She was purchased for Potter Bros of London who formed a single ship company THE POLTALLOCH SHIP COMPANY then sold shares in it. They would have retained a few shares themselves and charged commission for managing the vessel i.e. finding crew, "fixing" cargoes, port arrangements and disbursements etc.

The POLTALLOCH had an eventful, chequered career (one could say unlucky) with accounts of storm damage, men being washed overboard, killed or injured, groundings, salvage and other legal claims. It all ended after a very bad passage from Chile on the West Coast of South America (WCSA), on Sarn Badrig January 2nd 1916.

The first and last voyage are described here but the other events are tabulated in TABLE 2.

The First Voyage 1894 - 1895

The POLTALLOCH was built at Belfast in 1893 and registered at London during December. In the New Year she was towed to Barry in South Wales to take on a deep sea crew and prepare for her first voyage. Here she loaded a cargo of about 3,600 tons of coal and sailed for Rio de Janeiro in Brazil, with Captain Connell in command, arriving during March 1894. After discharging her cargo she sailed in ballast for Australia. This was a long passage along the bottom of the world at 40° South Latitude by way of the "Roaring Forties", with continual howling following westerly wind for week after week. She eventually arrived at Newcastle NSW. This was an extremely busy coal exporting port and she lay there for weeks awaiting her turn to load. Eventually she sailed at the beginning of October for San Francisco. Within a few days her bad luck started. She encountered a tremendous storm; the cargo shifted and considerable damage was caused. Two men were washed overboard and the captain was severely injured.

South Wales Daily News 4th October 1894

The British barque Poltalloch, for San Francisco, has returned to Newcastle, Australia, with boats stove, bulwark stays started, ports washed away, and other damage. Two sailors were washed overboard, and the master is dangerously ill. She has been surveyed and ordered to discharge part of her cargo.

The Sydney Morning Herald 2nd October 1894

NEWCASTLE, MONDAY.

Lloyd's surveyor, Mr T. Brooks, and Captain McLeod, of the ship Blackbraes, will make a survey of the four-masted barque Poltalloch tomorrow morning. The ship Blackbraes is the property of Messrs Potter Brothers of London, who are also owners of the Poltalloch

The lost men were a Swedish seaman named Janson and a Russian seaman named Gustav. Captain Connell received serious head injuries and was hospitalised. The vessel lay there for repairs and Captain McLeod, was transferred from the BLACKBRAES. It is highly likely that several of the crew deserted.

She eventually arrived at San Francisco to unload her coal cargo then sailed up the coast to Portland, Puget Sound in Oregon. Here she loaded grain (wheat) sailing early May and after a long passage around Cape Horn and north through the South Atlantic arrived in the English Channel (Falmouth for Orders?) during August. A tug was probably engaged and she finally arrived at Hull on August 28th 1895.

Trade Routes of the POLTALLOCH

There are nine Crew Agreements/Official Logs for the deep-sea voyages of the POLTALLOCH extant, mostly at the Maritime Archives, Memorial University St John's Newfoundland. Unfortunately, digital copies are very expensive. The 1915 copy is missing.

An overview of the voyages can be gleaned from newspapers especially Lloyd's List though cargoes carried are not always mentioned. The voyages usually commenced with coal from South Wales ports to South America or Cape Town then ballast to Newcastle NSW. Another coal cargo would then be loaded for San Francisco or other ports on the West coast of the USA. Loading ports here were mostly in Puget Sound or on Vancouver Island where lumber (Timber ready cut to size for the construction trade) was taken on board either back to the U.K by way of Cape Horn or returning to Australia. Sometimes she would do more than one trip across the Pacific particularly when she came under San Francisco ownership in 1901. Some voyages were made with grain (wheat) from Portland or Astoria back home which made for a shorter voyage. At least three times she took coal from Newcastle NSW to Valparaiso, in Chile, then loaded nitrates at Tocopilla, Iquique or Caleta Buena for Antwerp or Hamburg (see description of the Nitrates trade in the appendices). She was reported at Shanghai in China on one occasion but nothing more can be found on that voyage.

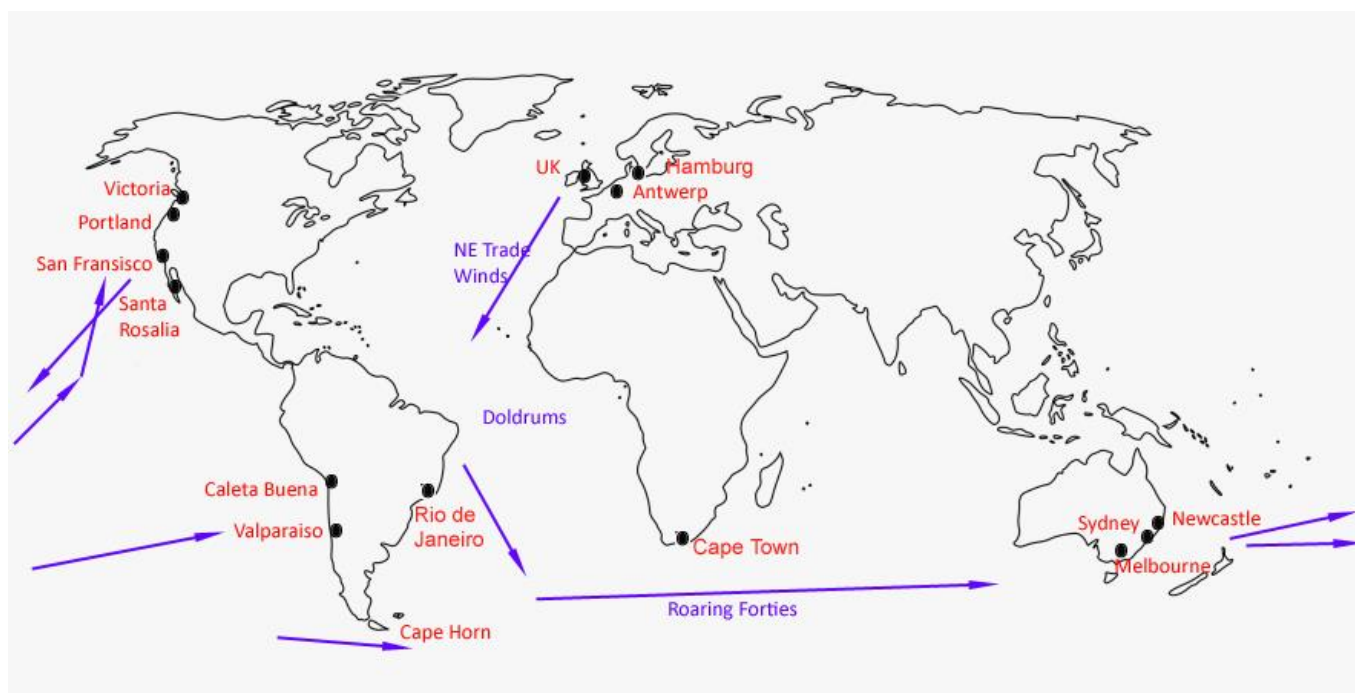


Fig 6. Some of the ports visited by the POLTALLOCH

The Final Voyage 1914 – 1916

On March 15th 1915 the POLTALLOCH arrived at Callao, Peru from Portland Oregon (lumber?). After discharging her cargo she sailed to Caleta Buena in northern Chile and after awaiting her turn, she loaded a cargo of nitrates of ammonia in sacks. She sailed the middle of July to Queenstown (Cobh) for orders on what was to be a difficult voyage. Passages from the nitrate ports to Europe usually took 70-90 days but it was 136 days before she was reported off the Irish Coast having been posted "overdue" at Lloyds.

Manchester Courier 2nd December 1915

136 DAYS' PASSAGE. The large American barque Poltalloch, from Caleta Bueno, was towed into Queenstown yesterday after a passage lasting 136 days. The Poltalloch was posted as missing. The ship met a succession of gales, and on November 12th shipped huge seas, which caused considerable damage to the hull and masts. The bulwarks were burst and the sails blown out of the bolt ropes, the cabins flooded and one seaman drowned. The ship arrived off the Irish coast three days ago but owing to the wind could not make Queenstown.

There were some legal problems straight away which are difficult to work out so one must speculate. The ship had been under American ownership since 1910 but had continued under the Red Ensign; her register having been transferred to Victoria BC, Canada. Perhaps, because of a salvage claim and excessive damage, the ship was sold.

Belfast News Letter 8th December 1915

Several boats over 10 years old have been sold at prices far excess their cost. American owned steel four-masted barque Poltalloch, built Belfast in 1893 Messrs. Workman, Clark. & Co., has

recently been sold for about £10,000. She is 2,139 tons register, and changed hands in 1910 at the price of £3,500.

More speculation is that she was sold and re-registered in the U.S.A, which was neutral at that time (WW1). After all this legal wrangling was sorted out she departed Queenstown, under tow for Leith, It was normal practice for these big square riggers to be towed between ports around the UK and Northern Europe. No sails were set and she would possibly have had a skeleton crew.

She met terrible weather in the Irish sea and the towing hawser parted. Having no sails set she was unmanageable and soon met her doom on Sarn Badrig.

North Wales chronicle 14 Jan 1916

SHIP STRANDED ON ST, PATRICKS CAUSEWAY. CREW LANDED AT HARLECH. Further particulars are to hand regarding the stranding of the four-masted ship. "Port Tulloch (sic)" on St. Patrick's Causeway during the storm on Sunday week. She was laden with 2,600 tons of nitrate of soda, and was bound from San Francisco (sic) for Leith. For many days she encountered severe weather in St. George's Channel, and had ultimately to give up all hope of getting nearer her destination under the circumstances. An effort was made to make for Queenstown. but the vessel became unmanageable and was driven towards Cardigan Bay. and stranded on the "Sarn," about eight miles from Harlech. The crew twenty-one in number, took to the boats and landed on the beach not far from Llanfihangel-y- Traethau, Talsarnau. On the way from the ship the boats were frequently filled with water, and the men had to bale (sic) it out with their sea boots. The crew consisted of Russians, Swedes. Americans, Poles, Norwegians, one negro, and one Welshman. The Abersoch and Barmouth life- boats went out to render help but when they reached the ship they found that the crew had left her. All the crew were housed at the Queen's Hotel, and Mr W. H. Moore, the Crown Receiver, attended to their needs. It is stated that there is practically no hope of salving the vessel. Liverpool and Portmadoc tug- boats tried to pull her into deep water, but failed. The value of the ship and the cargo is estimated at £100,000.

CAMBRIAN NEWS 14th January 1916

News

A TOTAL WRECK. The American four-masted barque "Poltalloch," of San Francisco, which drifted on St. Patrick's Causeway on Sunday evening week has since become a total wreck. Her valuable cargo of nitrate is also lost, the total loss of ship, freight, and cargo representing over £90,000. She left Chili (sic) for Queenstown for orders and was, proceeding from that place to Leith when overtaken by terrible weather, eventually drifting on to the Causeway. On arrival at Queenstown, five or six of the crew were found to be Germans and were interned, Britishers taking their place at Queenstown. The Portmadoc tug, "Ddraig Goch," with Captain Lloyd. the Square, Portmadoc, Lloyd's sub-agent on board, left Portmadoc on Tuesday morning week for the ship; but the weather was so bad that the tug could not cross the bar. Next morning the tug, when Captain Lloyd, accompanied by the captain and crew of the barque, were again on board, got over the bar and came within about a mile and half of the barque which was right on the Causeway. The seas on the reef were too heavy to attempt to board the barque, and Captain Lloyd then decided to locate her exact bearings and he ordered the tug to steam westward until Aberdaron point could be seen flush, with Cilan point. The tug afterward returned to Pwllheli and landed the crew of the barque. At Pwllheli Captain Lloyd recorded on a chart the exact position of the ship. To do so he took cross bearings from Bardsey Jslc and St Tudwals Lighthouse, the position of Bardsey being west x N, three-quarter north from the ship and of the lighthouse being north west half west. The ship was quite upright when the tug was one and a half miles away from her. Next morning the

barque had listed over and by now she is a total wreck and her valuable cargo, which was intended for munitions works in this country, is completely destroyed.

The detailed navigation calculations in this article are analysed in Section 7 in an attempt to ascertain the final position of the wreck.

Y Genedl 18th January 1916

Y "POLTOLLOCH". Gofidus genym hysbysu i'r ymdrechion wnawd i nofio y "Poltolloch," y llong fawr a yrwyd gan yr ystorm gref chwythai y Sul cyn y diweddaf, ar Sarn Badrig, brofi yn fethiant, a'i bod hi erbyn hyn yn myned yn ddarnau. Credir fod ei gwerth hi a i llwyth tua 100,000p. O San Francisco (sic) y deuai hefo llwyth o "nitrate of soda" am Leith. Bu am amryw ddyddiau yn sianel Sant Sior, ac yn ymyl Queenstown cyn cael ei hanalluogi i wrthsefyll y rhyferthwy. Pan darawodd ar y Sarn, ni wyddai y criw yn mha le yr oeddynt. Darfu iddynt lwyddo i fyned i'r cychod a glanio ar draethell Llanfihangel-y-Traethau. Gwneid hwy i fyny o Swediaid, Norwegiaid, Rwsiaid, un dyn du, ac un Cymro.

TRANSLATION

The "POLTOLLOCH" We regret to report that the efforts made to float the "Poltolloch," the large ship driven by the strong storm that blew last Sunday, on Sarn Badrig, proved to be a failure and that by now is going to pieces. It is thought that her value and cargo load was about 100,000p. From San Francisco (sic) was carrying a load of "nitrate of soda for Leith, and was for several days in St. George's channel, and near Queenstown before being able to withstand the tempest. When they struck the Sarn, the crew did not know where they were, but they managed to get onto the boats and landed on the beach at Llanfihangel-y-Traethau. The crew was made up of Swedes, Norwegians, Russians, one black man, and one Welshman.



Fig 7. Possible intended and actual track of the POLTALLOCH

Table 2

Events in the career of the POLTALLOCH 1893 - 1916

October 1894	Storm after departure from Newcastle N.S.W. Coal cargo shifted. Much damage. Two sailors washed overboard and lost. Captain severely injured. Put back to port to reload the cargo and repair damage.
September 1896	<u>Lloyd's List 14th September 1896</u> Shanghai, Aug. 7. The barque Poltalloch, M'Leod, drifted ashore below the harbour limits during a squall on July 28. She has now been in dry dock, but was found to have sustained no damage to her bottom.--[This vessel has since sailed from Shanghai about Aug. 12.] Captain Alexander Young from Inverness took over command from Captain Macleod.
November 1900	<u>Columbia Pacific Heritage Museum</u> The POLTALLOCH left Santa Rosalia, Mexico bound for Astoria, on October 23, 1900. From the Court of Inquiry: "The ship POLTALLOCH was stranded on the North Spit of Cape Shoalwater, coast of Washington, on the 26th November, 1900, through the failure of the wind while the ship was in a critical position on a lee shore, with heavy westerly swell and strong current setting the ship towards shore. Prompt measures were taken by the master, Alexander Young, to get the ship afloat but were unsuccessful, and the London Salvage Association sent someone to superintend operations who appears to have been worse than useless. Finally on the 5th of June, 1901, the vessel was floated through efforts of the master and was taken to South Bend." She was repaired in Victoria and brought into the Columbia River, arriving in Astoria on the July 20, 1901. (Capt Young, who had successfully refloated the ship went home and Captain Ellis Evans, from Aberaeron, took over command. He had previously been Chief Mate since 1898.) <i>Photo of the ship aground in the Appendices.</i>
December 1905	On Dec. 26th the Poltalloch, while being towed by the Hibernia from Belfast to Flushing, was sheltering from bad weather off the Mull of Galloway, when the tow-rope parted and she had to come to anchor about 4 cables from Pladda Island. The assistance offered in those circumstances by the Swallow, a Glasgow tug, was at first refused, but afterwards it was accepted, and she and the Hibernia towed the barque to Greenock. This resulted in a salvage claim in the Admiralty Court. The two tugs were awarded £300 each.
August 1906	<u>Lloyd's List Aug. 18th 1906.</u> —The ship Poltalloch, arrived here from Antwerp. reports had a succession of SW gales for 21 days from the River Plate to Cape Horn, with hail and snow squalls ; saw several icebergs, blew away several sails ; was off Cape Horn 70 days out and was driven to lat. 60 S. Had variable winds to lat. 30 in the Pacific, thence ESE to ENE winds to the equator. Crossed the equator 120 days out in long. 117 W ; got the NE trades in lat. 14 N and lost them in lat 30 N ; had N and NW winds the last four days.

July 1909	<p><u>Lloyd's List - Friday 23 July 1909</u></p> <p>A VICTIM OF THE GALES. SAILING ships making long ocean voyages have had rather bad luck of late in encountering heavy weather. The disastrous experience of the British ship Edenuore has not been forgotten, and yesterday we had another big British sailer, the steel four-masted barque Poltalloch, arriving at her destination after a passage marked by more than one bout of tempestuous weather. The Poltalloch, a London-owned ship, was named in the overdue list about a fortnight ago, although there appeared to be little reason for alarm. She sailed from Antwerp on Jan. 28, bound for San Francisco, and on Feb. 1 was spoken off Alderney. Yesterday a cable from San Francisco announced her arrival after a passage of six months, all but a few days. Apparently she encountered heavy weather, not only when in the vicinity of Cape Horn, but also at the outset of the passage. The cable states that on Feb. 8 she ran into a storm, when her mizenmast was sprung, some sails lost, and a good deal of damage sustained about the decks. In addition, her cargo shifted. Some three months later, when the ship had worked her way down to lat. 55 S., long. 61 W., a position to the eastward of, and not far distant from, Staten Island, she had her second tussle with the elements. "Lost some sails, cabin flooded, "store-room galley gutted, bulwarks stove and decks swept, boats damaged, rigging damaged, " jigger-mast sprung." To those who know the sea and its devastating power these score of words tell their own story of how the ship fared in that vigorous southerly gale. It will be noted that not a word is devoted to the captain, officers and men on board. It is just a plain business message, devoid of sentiment—an extract from a cable in which one does not expect any allusion to the human element, unless, as was the case when the Edensuore was pooped, some unfortunate seaman is carried overboard, without the ghost of a chance of rescue. One takes it for granted that duty was done, but it is impossible, except for the deep-water sailor, to realise the discomfort— to use a mild word—which was the portion of those on board the Poltalloch during her second " dusting down." On the re-insurance market seven guineas per cent. had been paid on her, prior to the receipt of yesterday's cable.</p>
February 1910	<p>POLTALLOCH sold for \$17,500 (£3,500) to Eschen and Minor of San Francisco to satisfy a judgement. She was registered in Victoria BC until some time between 1914-16 when she came under the Stars and Stripes. Last Articles of Agreement is 1914 though the Mercantile Navy List 1915 still has her registered in Victoria B.C.</p>
June 1910	<p>Arrived Sydney June 13th from Portland (Oregon), experienced a rough time from June 1, when about 100 miles off Sydney Heads, a strong southerly gale, with very high seas was encountered, and for 14 days the vessel was under lower topsails</p> <p>The Poltalloch had a cargo of over 2,000,000 ft of timber, and the gale caused some of this to be damaged though none was lost overboard. Slight damage to the deck fittings was also caused by the gale.</p>
October 1910	<p><u>The San Francisco Call 27 Oct 1910</u></p> <p>POLTALLOCH MAKES RECORD PASSAGE</p> <p>British Ship Crosses Pacific From Newcastle, Australia, in Fifty eight Days — THE British ship Poltalloch, Captain Armstrong, which arrived yesterday from Newcastle, Australia, with a cargo of coal, made the run in 58 days, which is</p>

	<p>the best trip made this year and one of the best on record. Chief Quarantine Officer Trotter sentenced all the rats on board to death and the ship was taken over to Angel island to be fumigated. Oscar Kroppneovich, a seaman, mixed in a rough and tumble fight with Second Mate Berg on the Poltalloch's quarterdeck October 12. The mate might have won out if Oscar had not grabbed a marlin spike and with it clouted the mate on the head and he fell to the deck dazed. As he started to his feet the Russian tar made another swipe with the heavy metal spike and broke the mate's left arm, which was thrown up to ward off the blow. The sailor was seized before he could do any more damage and was put in irons. He will be given a chance to tell the British consul all about it today. The Poltalloch encountered some heavy gales but sustained no damage beyond the splitting of a sail. The windjammer was off this port for three days lost in the fog. J. N. Eschen, a son of Captain Eschen of the local shipping firm of Eschen & Minor, who had been in Australia for his health, was a passenger on the Poltalloch. The windjammer brought 3,760 tons of coal.</p>
December 1915 Final Voyage	<p><u><i>Manchester Courier 2nd December 1915</i></u> <i>136 DAYS' PASSAGE. The large American barque Poltalloch, from Caleta Bueno, was towed into Queenstown yesterday after a passage lasting 136 days. The Poltalloch was posted as missing. The ship met a succession of gales, and on November 12th shipped huge seas, which caused considerable damage to the hull and masts. The bulwarks were burst and the sails blown out of the bolt ropes, the cabins flooded and one seaman drowned. The ship arrived off the Irish coast three days ago but owing to the wind could not make Queenstown.</i></p> <p>There were some legal problems straight away which are difficult to work out so one must speculate. The ship had been under American ownership since 1910 but had continued under the Red Ensign; her register having been transferred to Victoria BC, Canada. Perhaps, because of a salvage claim and excessive damage, the ship was sold.</p>
December 1915	<p><u><i>Belfast News-Letter - Wednesday 08 December 1915</i></u> Several boats over 10 years old have been sold at prices far excess their cost. American owned steel four-masted barque Poltalloch, built Belfast in 1893 Messrs. Workman, Clark. & Co., has recently been sold for about £10,000. She is 2,139 tons register, and changed Hands in 1910 at the price of £3,500.</p>
January 1916	Wrecked on Sarn Badrig

The Aftermath

Y Genedl 18th Jan 1916

POLTALLOCH. — Ddydd Sadwrn bu y Prif swyddog Jones, un o ddwyllaw y llong Poltalloch," a aeth yn ddrylliau ar Sarn Badrig, yn y dref yn diolch dros y captan a'r dwyllaw oll am y caredigrwydd mawr ddangoswyd iddynt gan drigolion y lle ar eu glaniad o'u dyfrllyd fedd.

(Translation)– On Saturday, Jones, the chief mate, one of the crew of the ship Poltalloch, that was wrecked on the Causeway, was in town to thank, on behalf of the captain and crew for the resident's great kindness on their landing from their watery grave.

Chief Mate Jones must surely be the Welshman mentioned in the article in *Y Genedl* 18th January 1916

SALVING POLTALLOCH WRECK. Lloyds Agent calls the attention to the advertisement inviting offers for the wreck of the above-named ship, and to state that there are hundreds of tons of steel platings lying on St. Patrick's Causeway, which can be secured, at the present value of steel, there would be a small mine of wealth to the salvors



Fig 8. Advertisement for sale of wreck

No further information can be found on the internet. It is not known if any of the fittings or steel plates were recovered so it seems that the POLTALLOCH went to pieces.

7.0 Analysis

1. The Location of the Wreck

- After repairs and legal problems were resolved orders for the final destination of the cargo were received and, sometime between Christmas and New Year 1915, the POLTALLOCH departed Queenstown (Cobh) under tow for Leith on the east coast of Scotland. As has been mentioned before, it was common practice for these large sailing ships to be towed between ports around the U.K. coast and northern Europe.
2. The distance between Queenstown and Leith, either via the English Channel or north via the Pentland Firth, is virtually the same (900 NM). In view of a falling barometer and impending SW'ly gale, the Captain of the POLTALLOCH and the tugmaster probably (SPECULATION) decided to go "North about".
3. They were soon struck by a full gale and while (SPECULATION) the tug was attempting to bring the heavily laden ship head to wind to "heave to", the towing line parted.
4. Being under tow the POLTALLOCH would probably not have any sails set and so was unmanageable. Any attempts on re-connecting the towing line failed and the ship was blown on to the Causeway. State of the tide is not known but with a draft of over 20' she would have grounded at any time.
5. No Court of Inquiry report could be found; possibly because the ship was under USA registration.

Analysis of wreck position.

Plotted on chart Cardigan Bay Northern Part 1984 edition (see charts in appendices)

1. Several newspapers, and the Lloyd's Casualty Returns, say 13 miles North West from Barmouth – Improbable 52° 52'.10 N 004° 18.30 W 1.55 NM SSE of Penychain.
2. Report of unknown wreck - Chris Holden (1.7) 10 miles from Barmouth.
3. Two articles report 8 miles from Harlech.
4. The advertisement for the sale of the wreck, on 2nd June, states *that "the wreck is lying on St Patrick's Causeway opposite Harlech and is dry at low water spring tides"*
5. The position in the Cambrian News 14th Jan 1916 is very detailed but confusing. Capt Lloyd on the Ddraig Goch (the last tugboat in Porthmadog) took bearings from 1.5 nm north of the wreck then calculated the position of the wreck when the tug went into Pwllheli. The bearings must have been very approximate as she would have been pitching and rolling heavily.

He gives a position of Bardsey (the hill?) WbN¾N (289° .25) and St Tudwalls Light NW ½W (309° .37).

6. It doesn't say whether they are True bearings or Compass bearings.

The Variation of the compass due to the world's magnetic field in 1916 was 17° West (NOAA map) https://maps.ngdc.noaa.gov/viewers/historical_declination/
The Deviation of the compass due to the metal in the tugboat is unknown.

7. The "New Seaman's Guide 1847" (CH) states that a magnetic anomaly was reported in this vicinity.

This perhaps explains the statement "He ordered the tug to steam westward until Aberdaron point could be seen flush, with Cilan point." This would have been a practical, seamanlike way of ascertaining the gross error of the tug's compass.

8. If the given two bearings have been corrected to TRUE and are plotted, then they give an impossible position, on land, south of Barmouth.
9. If the two given bearings are COMPASS/MAGNETIC and the Variation of 17° West is applied (West variation subtract from compass to obtain True) we get TRUE approx bearings of Bardsey = 272° and St Tudwals = 292°. When plotted this gives a more likely position on a drying part of the bank. The Deviation of the tug is not known but if the the compass had been adjusted it would have been probably no more than 2-3 degrees. (the Ddraig Goch spent much of WW1 on charter to the Admiralty in the English Channel so it is probable that her compass(es) had been adjusted). Using these corrected bearings we obtain a position of approximately 52° 44'.42 N 004° 14'.50 W. (B). The accounts of 8 miles from Harlech agree with this position.
10. Chris Holden has dived extensively on the Causeway and in his book "Underwater Guide to North Wales Volume one" (Edition November 1917) he has meticulously correlated his echo sounder and physical observations with the side scan sonar and magnetometer findings recorded by Wessex Archaeology Ltd in their survey of the Causeway commissioned by CADW in 2010 (and more recent surveys). Few noticeable ferrous targets were identified in this area but some scattered debris centred on position 52° 42.715' N 004° 18.655' W (WGS 84 datum) **(A)** were recorded and possible steel plates were found in this area. This position is 3 miles SSW of **(B)** so is within the error ellipse of that unreliable position.
11. At low water spring tide a metal object, which possibly could be the stock of an anchor, is visible nearby at position 52° 42.607' N 004° 18.713 W with debris leading away to the South East. (see photo in appendices).
12. According to Chris Holden, the drying wreck marked just SW of **(A)** is probably the DUNCAN, a steam trawler (1914) and the wreck marked on the South Prong is possibly the EULOMENE (1884).
13. The entry in Lloyd's Casualty Returns confirm that the POLTALLOCH was under the USA flag at the time of the incident.

198	Poltalloch	2138	Amr.	Stl.4m. Bk.	Caleta Buena via Queenstown—Leith.	Nitrate soda.	of	On St. Patrick's Causeway, 13 miles N.W. of Barmouth	13	2nd Jan.
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Fig 9. Entry in Lloyd's Casualty Returns

8.0 Conclusions & Recommendations

1. The majority of this research has been carried out on-line. Much of the information is from newspaper archives which are an excellent source. However, one must be careful as the accounts are often in flowery language and in sensational style. The announcements that are reproduced from Lloyd's List or official Lloyd's agents are usually accurate but the journalists are not seafarers and sometimes elaborate on eye witness accounts.
2. The conflicting newspaper reports have made it difficult to arrive at a final position of the wreck. The analysis (section 7) has carefully looked at all available information but speculation has been unavoidable.
3. The approximate position of $52^{\circ} 44'.42 \text{ N } 004^{\circ} 14'.50 \text{ W}$. **(B)** is possible but must be considered UNRELIABLE. A fix derived from only two bearings with a narrow "angle of cut" and unknown compass corrections is open to a large error.
4. The approach to determining position **(A) $52^{\circ} 42.715' \text{ N } 004^{\circ} 18.655' \text{ W}$** is more disciplined and more likely so could be considered PROBABLE. (See chart in appendices).
5. The available information regarding the fate and position of the wreck is inconclusive but research uncovered during this research might help confirm the location. This could be helpful to dive or magnetometer surveys in the future.
6. The stranding occurred during WW1 when the price of iron and steel was very high so the remains of the POLTALLOCH were probably salvaged though no newspaper accounts or other information could be found to confirm this.
7. It is hoped that the historical and nautical information contained in the report is of interest. Hopefully it is an insight into life at sea during the last days of deep sea sailing ships



Fig 10. Possible anchor stock $52^{\circ} 42.607' \text{ N } 004^{\circ} 18.713 \text{ W}$ Photo Chris Holden

9.0 References

Sources include:

Lloyd's Register 1894 and 1899 <https://archive.org/details/@Irfhec>

Wreck and Rescue on the Coast of Wales by Henry Parry 1969

Shipwrecks of North Wales by Ivor Wynne Jones 4th edition 2001

Underwater Guide to North Wales by Chris Holden Vol 1 Barmouth to South Stack

Porthmadog Ships by Aled Eames

Wherever Freights May Offer by Lewis Lloyd

Pwllheli The Port and Mart of Llŷn 1991 by Lewis Lloyd

Hen Longau Sir Gaernarfon 1952 by David Thomas

Cymru a'r Môr / Maritime Wales Annual journal from Gwynedd Archives 1976 to present

RCAHMW COFLEIN <https://coflein.gov.uk/> No entry

Wrecksite website <https://www.wrecksite.eu/Wrecksite.aspx>

National Library of Wales Welsh newspapers on line <https://newspapers.library.wales/>

The British Newspaper Archive (online) <https://www.britishnewspaperarchive.co.uk/>

Welsh Tithe Maps (NLW) https://places.library.wales/browse/52.892/-4.126/13?page=1&alt=&alt=&leaflet-base-layers_70=on

WRECKS OFF THE COAST OF WALES - March 2011 Report by Wessex Archaeology Ltd

The Nitrates Clippers by Basil Lubock

Lloyd's Register Casualty Returns 1890-2000 <https://hec.lrfoundation.org.uk/archive-library/casualty-returns/casualty-returns>

Appendices:

Appendix A - Hydrographic Office chart Cardigan Bay Northern part

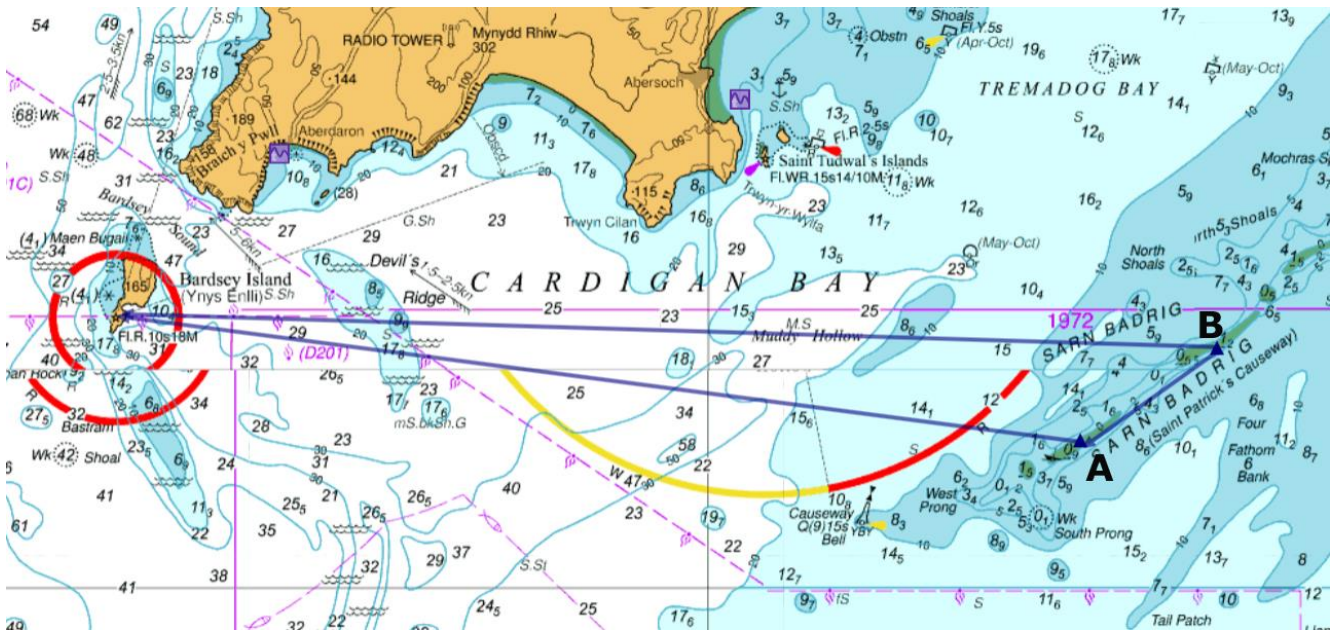


Chart 1 by Chris Holden (Not to be used for navigation)

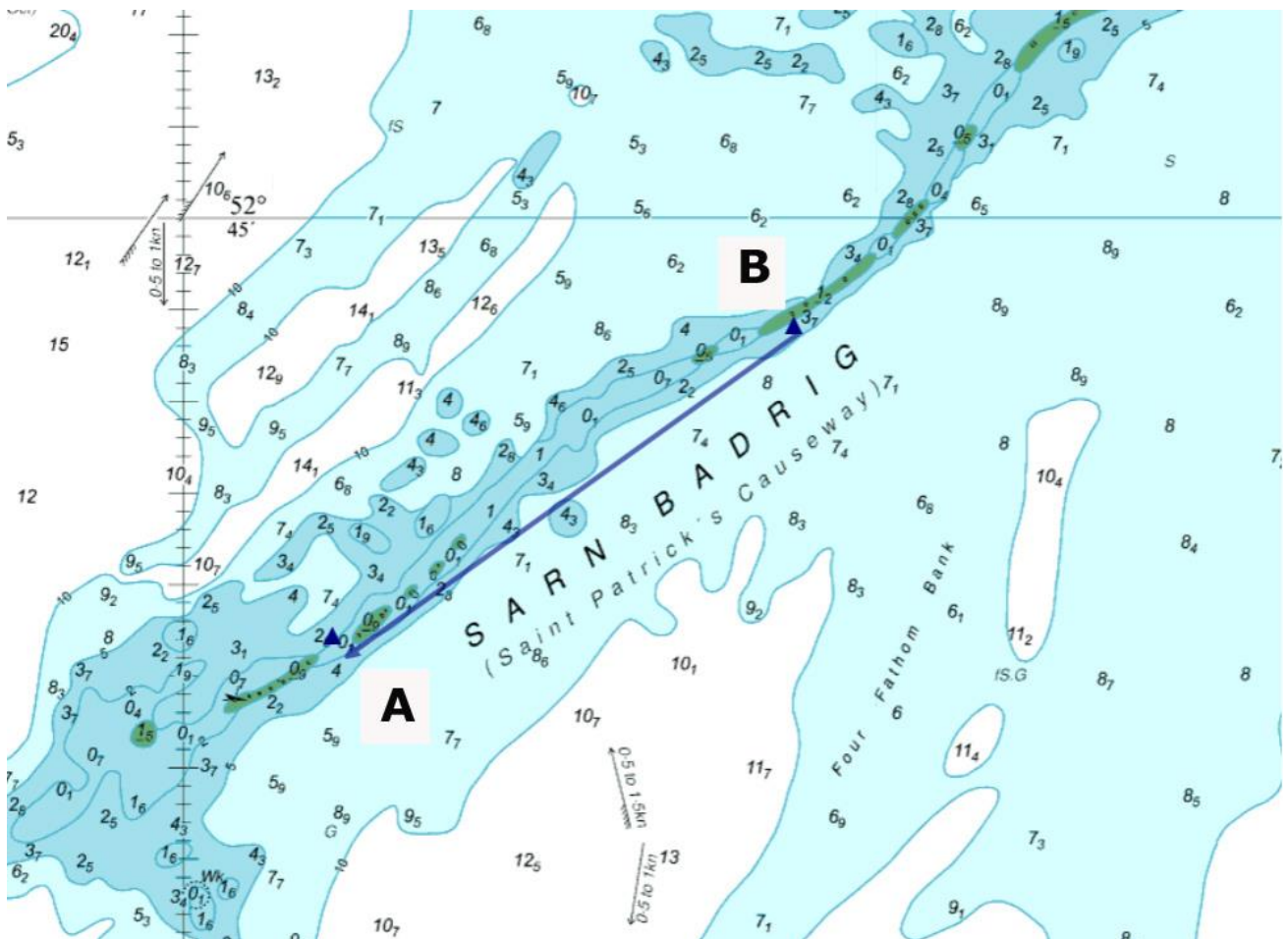


Chart 2 by Chris Holden (Not to be used for navigation)

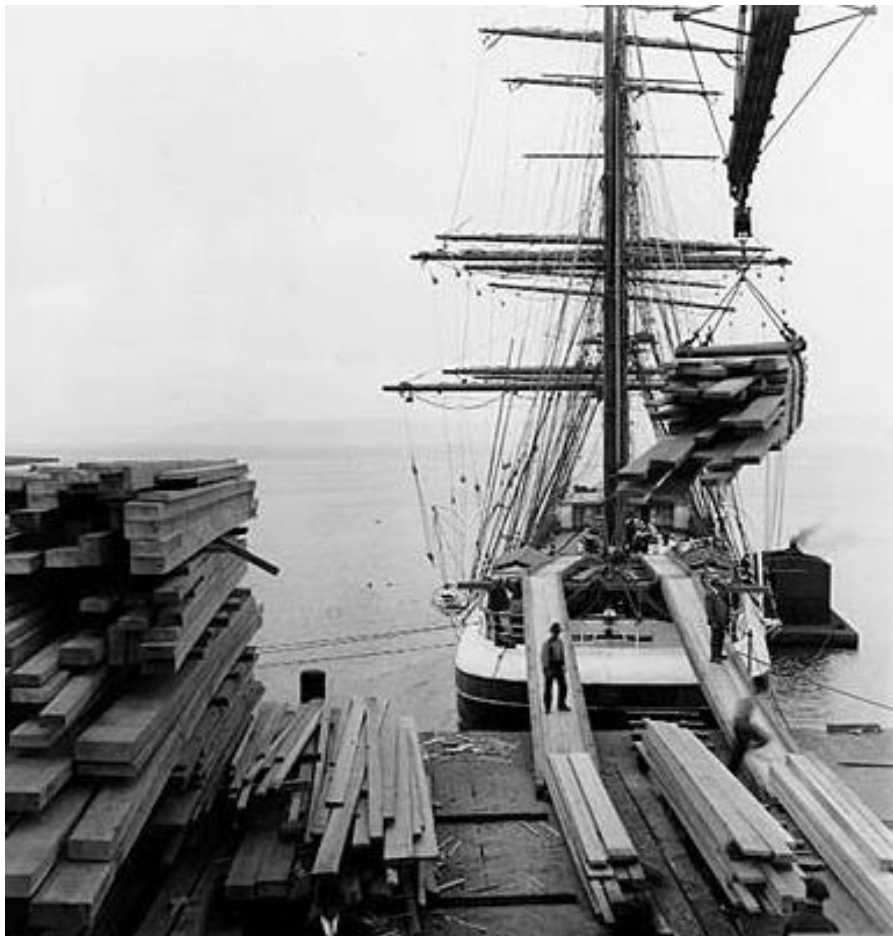
Appendix B Brief History of the Nitrates Trade

From Talcahuano in the south to tiny bleak Caleta Buena near the Pruvian border stretched the Atacama desert, where no rain is said to have fallen for a thousand years. It was once the only known source of naturally occurring sodium and potassium nitrates (saltpetre) used in the manufacture of fertiliser and explosive for the munitions factories and fields of industrialised Europe. By 1912 Chile was exporting two million tons of nitrates a year. It was mined and processed in the distant desert and until the railways came, carried to the sea by pack mules that died of thirst along the way. It had to be stowed dry. But out in the anchorages, in the holds lifting and falling in the long Pacific swell, the evaporation from the bags was known to kill rats and even woodlice, and ships' cats who curled up on the sacks in dark corners grew lethargic and died.

The nitrate trade was one of the last in which sailing ships could compete against steam. Sailing ships did not rely on expensive supplies of coals and water and so could afford to hang about for months while an awkward cargo was ferried out to them slowly, boat by boat. It came aboard in bags of 200lbs and was stacked into pyramids in the holds for six weeks by a single stevedore, who could drop each bag into place off his shoulders with absolute precision.

The nitrate trade eventually died in the 1930s, after the invention of synthetic ammoniac during the First World War.

Appendix C Loading Lumber in a Puget Sound Port



Loading Lumber at a Puget Sound port

Appendix D POLTALLOCH Anchored at Unknown Port Photo: State Library of South Australia from the A.D. Edwardes Collection



Appendix E POLTALLOCH Stranded on the Washington State Coast 1900



Appendix F Tugboat DRAIG GOCH

