



Welsh Wreck Web Research Project (North Cardigan Bay)

On-line research into the wreck of the steamship

Ganda,

which drifted ashore at Hell's Mouth in 1904.



The marker-buoy shows where the ship lies, very close inshore.

Report Title: *Welsh Wreck Web Research Project (North Cardigan Bay)*

On-line and practical research into the wreck of the steamship 'Ganda', the remains of which lie in shallow water by the western hillside of Hell's Mouth / Porth Neigwl, Gwynedd, North Wales.

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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!

The author of this report is an amateur diver who has visited many of the shipwrecks around the Welsh coast between Barmouth and the Dee Estuary. He wrote and published 'The Essential Underwater Guide to North Wales, Volumes One and Two', and co-wrote 'Life and Death on the Royal Charter'.

He is also the licensee of the submarine 'Resurgam', a historic vessel that lies on the seabed off Rhyl after being lost in 1880.

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2.2 Contributors

Chris Holden.

2.3 Abbreviations used in this report:

MADU Malvern Archaeological Diving Unit

NAS Nautical Archaeology Society

CPH Chris Holden



Steamships loading manganese ore at Rhiw Pier. Note the overhead cable-way.

3.0 Introduction

The mining and quarrying of manganese ore took place in the Rhiw area of the Lley Peninsula between around 1858 and 1945, with the ore being taken away in small vessels that loaded from short piers located in very exposed locations. The remains of one steamer, the 'Ganda', can still be found in shallow water by the remains of one of these piers.

Note that the spelling of the town of Porthmadog varies in the early newspapers, so it may appear as 'Port Madoc' or 'Portmadoc'. 'Tudwal' also appears as 'Tudwall' or 'Tudwel'. Aberystwyth appears as 'Aberystwith'. Caernarfon appears as 'Carnarvon' or 'Caernarvon'. Wherever possible, the spellings in the published newspapers have been used.

4.0 Background.

This wreck was brought to the attention of the author by Richard Bufton, one of the author's diving-buddies. Lying in shallow water, the wreck was visited on several occasions so that it could be included in the book 'The Essential Underwater Guide to North Wales'.

5.0 Research Methodology.

Equipment and sources used:

Mark One Eyeball (the author has dived at the site of the wreck.)

Richard Larne's Shipwreck Index of the British Isles. West Coast and Wales.

Gwynedd Archives Record Office, Caernarfon. Denbighshire Records Office, Ruthin.

British Library on-line newspaper records. National Library of Wales on-line records.

Lloyd's List records.

6.0 Details.

Vessel Name: Ganda. Type: Steamship.

Nationality: Belgian. Registered at Antwerp.

Weight: 309 tons net, 474 tons gross.

Propulsion; Steam-engine, driving a propeller.

Construction Materials: Iron hull.

Location.

Hell's Mouth / Porth Neigwl is a 3-mile wide, south-westerly facing beach located on the southern edge of the Lleyn Peninsula between the villages of Abersoch and Aberdaron. The wreck lies close inshore against the western shore of the bay.

Overview.

During the late 1800s and early 1900s, manganese ore was mined at the western side of Hell's Mouth on the hillside above the village of Rhiw, and the photo on the previous page shows vessels loading this material at Rhiw Pier. The mineral was transported overland from Rhiw by an aerial runway to be loaded onto ships at a wooden pier north-east of the rocky outcrop of Graig Ddu. Obsolete mining equipment, including a boiler, still lies scattered along the hillside, and a few wooden piles from the pier can be seen at low-water.

At least one vessel got into difficulty while loading in such an exposed location, and now lies wrecked among the kelp only 50 metres or so from the low-water mark. Some divers have difficulty believing that an iron steamship can be found this close inshore, while others have failed to find the wreck because they are unwilling to delve among the thick kelp. The vessel is almost certainly the S.S. *Ganda*, a Belgian-registered vessel of 474 tons which was wrecked here on 5th August, 1904, while loading manganese ore.

The *Ganda* broke from her mooring during the night, tangled the mooring-rope around her propeller and drifted ashore. On the following day, the rope was cleared and she steamed away, heading for a safe anchorage at the St. Tudwal's Islands. Unfortunately, she was found to be leaking badly and so returned to the pier where she grounded on a stony seabed, split her hull and filled with seawater.

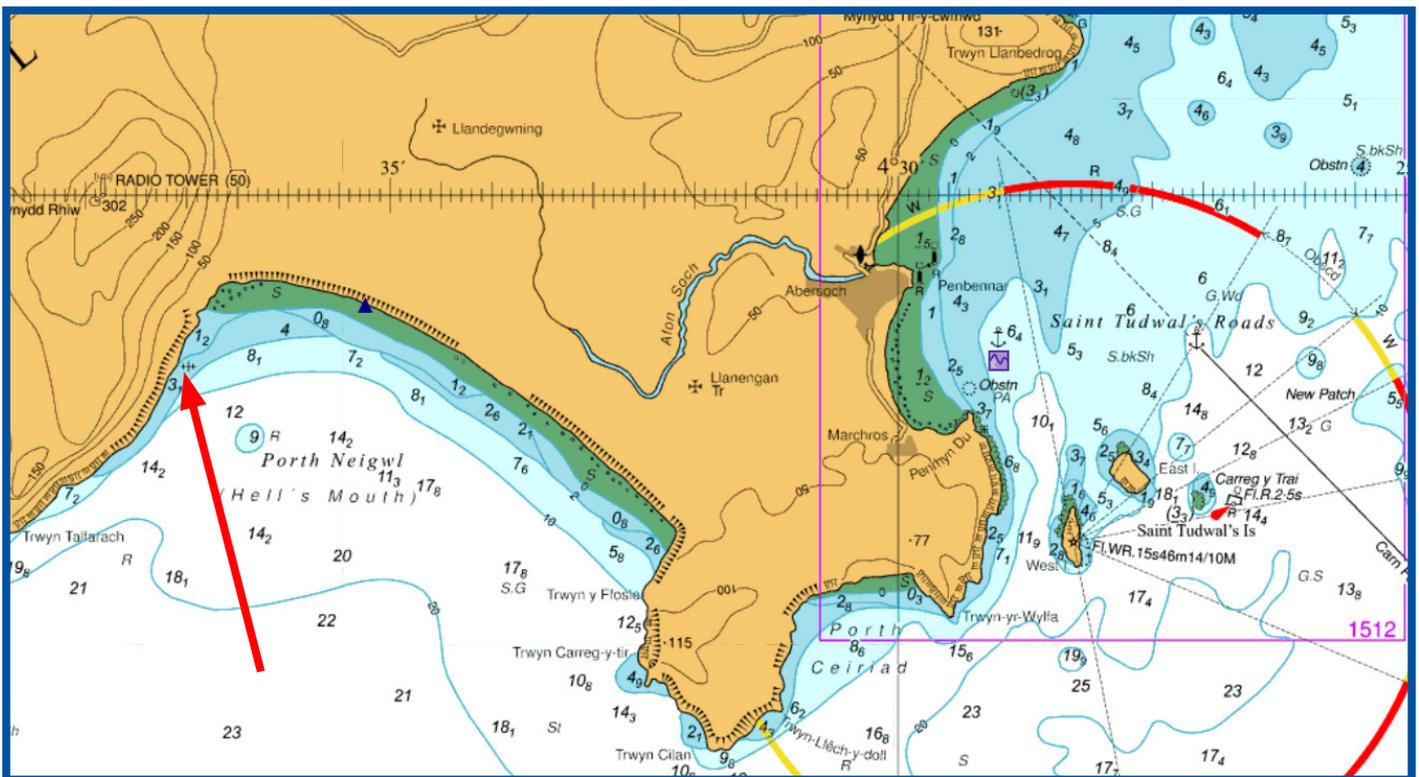
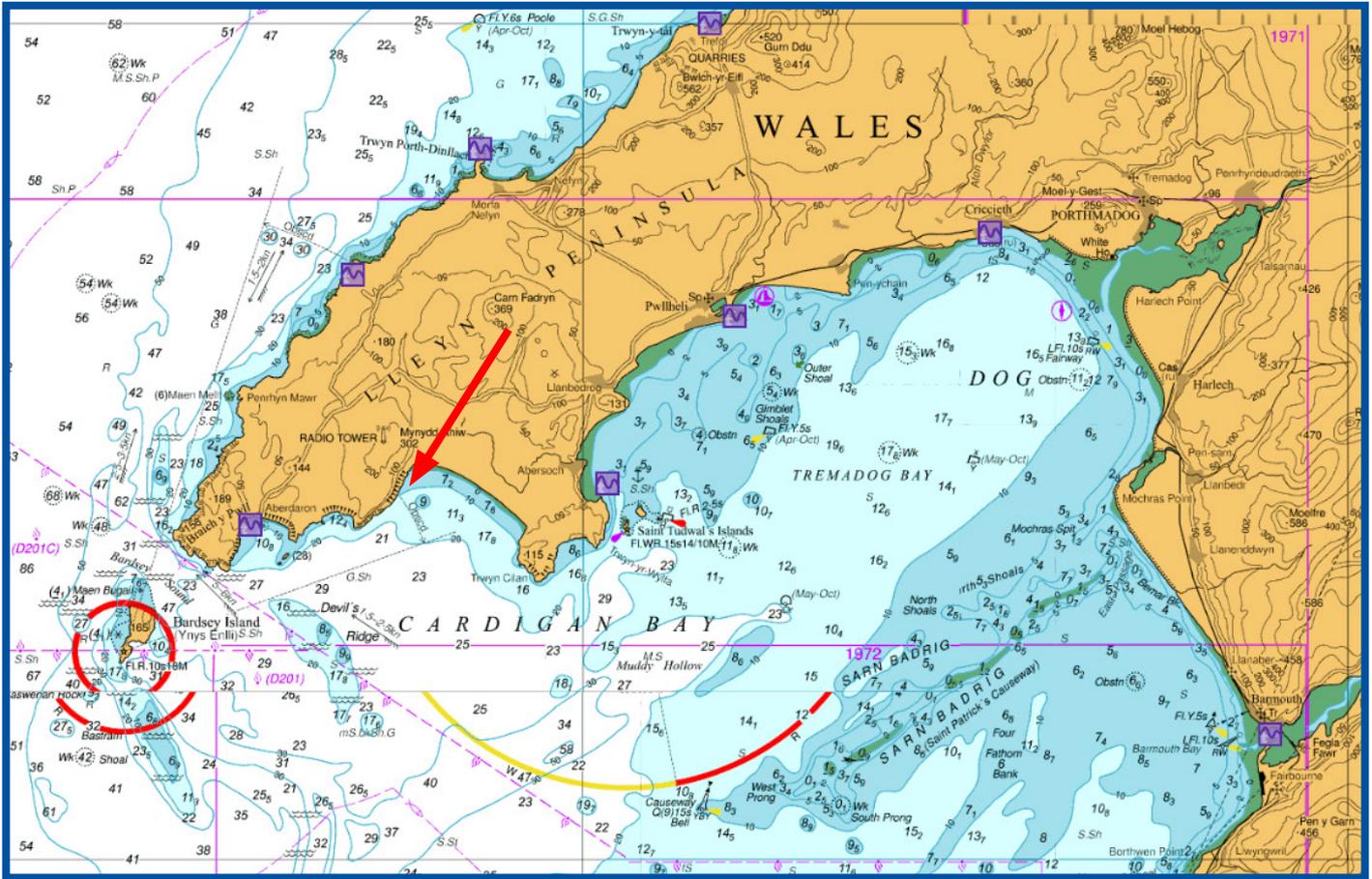
The wreck can usually be seen when snorkelling, since the least depth of water over the single boiler is only 3 metres. Through the summer months, a thick layer of kelp grows around the wreck, partially or fully hiding any sign of a ship. Salvage work has been carried out over the years, so most of the non-ferrous metal, including the condenser, has already been removed. The riveted hull is almost totally flattened or covered in boulders, but it is possible to swim into the forward hold where samples of manganese ore are still found. Despite the hundreds of boulders that have piled up around the bow section, the forward hold remains relatively clear of debris and kelp. Try picking up a sample of the manganese-ore, the greyish-coloured rock, and you will quickly realise that this is much heavier than a normal cobble or boulder. There is a 2-metre drop into this hold, where you can swim through gaps in the vertical hull-plates and explore under the horizontal decking.



This is the forward end of the propeller-shaft, but there is no sign of the thrust-block or the steam-engine.

The main identifiable part of the wreck is the 4-metre wide boiler that has partly split open, to reveal the internal tubing. There is no apparent sign of the engine, so unless it lies hidden under the kelp, this valuable piece of machinery was probably salvaged in 1904. Heading roughly north from the boiler, the propeller-shaft leads past a pair of bitts to the stern-post, thrust bearing, rudder and a single, 4-bladed, iron propeller. These lie at an angle of about 45 degrees to provide a dark hiding place for a shoal of pout, so make sure you take a torch to shine into this man-made underwater cave. See the photo on page 14. The Ganda was 52 metres in length and the propeller-shaft still lying on the seabed is about 16 metres long, so the engine and boiler must have been mounted amidships rather than at the stern. The ships shown in the photo on page 4 appear to have their engines close to the stern, so neither of them is likely to be the Ganda.

To get the most out of this dive-site, you really do need to delve among the kelp to see the wreck and the huge spur-dogs which shelter here, along with wrasse, pollack and spiny spider-crabs.





This shows the pier for Nant manganese mine located near Porth Ysgo, two miles west of Rhiw Pier.

The Manganese Mines of the Llein Peninsula.

Manganese ore is a form of rock that is used in the manufacture of bleach and steel, and has many other uses in the chemical industry. Two distinct areas of manganese mines can be found towards the western part of the Llein Peninsula, one being the Nant Mine at Llanfaelrhys, near Porth Ysgo, and the other being the Benallt Mine on the hillside above Rhiw. Manganese ore is heavy, so it was far easier to transport the material by ship than by road or track, but this is an



The quarries in the narrow valley at Nant.

exposed coast, with quite shallow water close inshore. As shown on the postcard above, a pier close to Porth Ysgo was used to export the ore from the Nant Mine, which was conveniently located in a narrow valley above the pier. The author has explored these underground workings, usually when bad weather has put an end to his diving activities.

Located further inland, the Bennalt Mine at Rhiw wasn't so conveniently situated, so the ore had to be transported via an aerial cable-way that lead from the mine down to another pier, this one located close to Graig Ddu, a rocky outcrop at the western edge of Hell's Mouth.

The Manganese Mines. 1903 - 1906.

Although the manganese mines at Rhiw operated for many years, this report is only concerned with the period of a few years either side of August, 1904, which is when the steamship 'Ganda' was wrecked. The business expanded rapidly in 1903 and 1904, but major problems were encountered in removing the product by land or sea, so that by October, 1906, the business had gone into receivership.

The Cambrian News and Merionethshire Standard. 21st August 1903.

RHIW MANGANESE WORKS. It is understood that these works, which already furnish employment for about twenty-five men, will have employment for over a hundred men in a short time.

The Cambrian News and Merionethshire Standard. 17th June 1904.

Rhiw Manganese Works. Over a hundred men are now employed at these works. A steamer of 800 tons arrived at Abersoch this week to take away the output.

The Aberystwith Observer. 23rd June 1904.

The manganese works, opened a short time back at Rhiw, in the Llyn Promontory, promises to be a successful concern. There are now over a hundred men employed, and it is intended to erect dwelling-houses for them. The output is shipped from the little harbour of Abersoch.

The North Wales Express. 1st July 1904.

On Rhiw Mountain are two manganese works, one carried on by the British Manganese Company, and the other by the North Wales Manganese Company. The quarries adjoin one another. A tram-road is being made to the shore, and a jetty on the beach. Hundreds of tons of manganese are being shipped every week. Cilan district will soon have a manganese quarry. A quarter of a century ago Llanengan district was covered with lead and copper mines. There is not one there now. But the district promises to be as lively as ever, as several new works are going to be started. Dr O. Wynn Griffith, Capt. J. Spargo, and another gentleman, are the principal movers in connection with these great industrial undertakings.

The North Wales Express. 22nd July 1904.

LLEYN RURAL COUNCIL. A long discussion took place on the question of the damage done to Rhiw Mountain road by a traction engine. Mr Evan R. Davies had seen a representative of the Manganese Works Company at Rhiw, and though the company did not acknowledge responsibility, they were prepared to pay £7 compensation. There was another company that had also used a traction engine. The damage done to the road was estimated at £50. The Clerk said that he had seen one of the company, and in the course of a conversation that took place, £20 was mentioned as a sum that would clear everything. The Clerk accepted the offer, but without prejudice. Mr J. P. Roberts did not think the Council would be in a nice position if they asked for £50 and accepted £7. Ultimately the question was referred to the committee.

The Cambrian News and Merionethshire Standard. 3rd February 1905.

The Parish Council considered the public was in danger from the aerial tramway of the Manganese Ore Company; that the public roads of Rhiw were in a shameful condition; and that there was need for improving a certain cattle reservoir. It was passed that the Clerk should write to the Manganese Company, and that a committee should report as to the cattle reservoir. Consideration of the complaint as to the roads was deferred.

Yr Herald Cymraeg. 2nd October 1906.

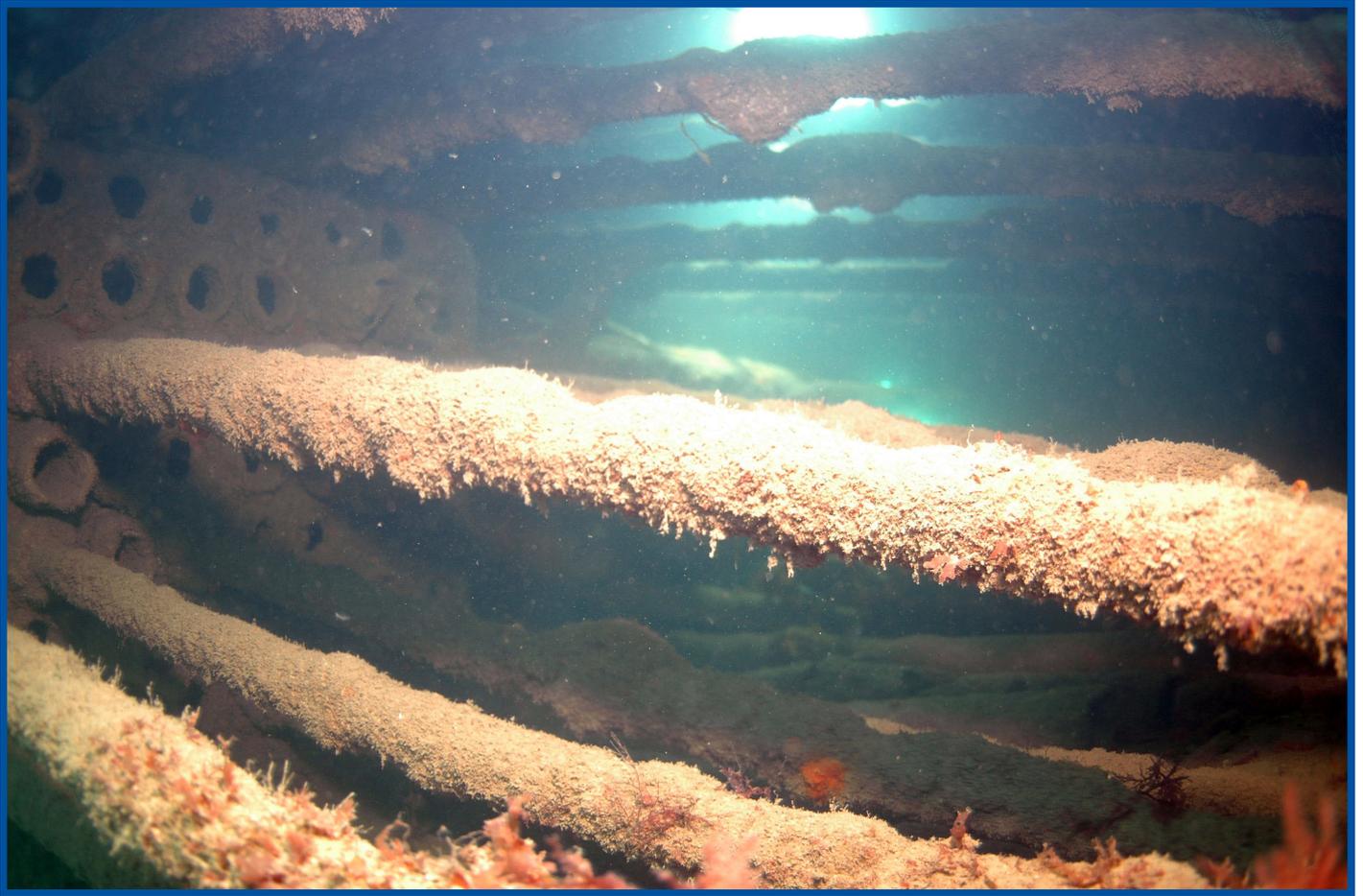
MANGANESE MINE, situated at Rhiw, near Pwllheli, in the County of Carnarvon, North Wales. The property of the Mine consists of amongst other Assets, a substantial Wooden Jetty with all requisite tackle, capable of accommodating vessels at any state of the tide. Aerial Rope-way and Appliances, Tramway and Trams, Weighing-Machines, Offices with all usual Plant and Machinery. The Lease of Mines and Minerals covers a tract of land containing 200 acres in the Parishes of Rhiw and Llanfaelrhys. Further particulars, forms of Tender and conditions of Sale may be obtained from and Lease viewed at the Offices of Mr T. B. Scattergood, 125, Edmund Street, Birmingham, Chartered Accountant, Receiver for Debenture Holders and Liquidator, and at the Offices of Messrs Forsyth, Bettinson and Co., 63, Temple Row, Birmingham, Solicitors to the above-named Receiver and Liquidator. All Tenders to be marked "Manganese", and to be received no later than 12 o'clock noon on the 4th October, 1906. The Receiver and Liquidator does not bind himself to accept the highest or any Tender. 4th September, 1906.



This sample of manganese ore is similar to those found on the wreck of the 'Ganda'.

Carnarvon and Denbigh Herald. 26th October 1906.

TO be SOLD by AUCTION at Pwllheli, on THURSDAY, 1st November, 220 Acres of FREEHOLD LAND, in the Parishes of Rhiw and Llanfaelrhys, in the manganese and iron district, yielding rents amounting to £67 per annum. Particulars of Mr ROBERT PARRY, 5 Salem Terrace, Pwllheli, or Messrs Crawley, Arnold, and Co. 3, Arlington Street, London,



The boiler has partially disintegrated to reveal the inner tubing.

The Steamship 'Ganda'.

Evening Express. 26th January 1904.

Cardiff. Arrivals, Ganda, (s), Schmidt, Ghent, cement.

Evening Express. 14th March 1904.

Cardiff Arrivals. Ganda, (s), 257, Schmidt, potatoes.

Lloyd's List. Thursday 4 August, 1904.

DUBLIN. Sailed. Ganda (s), Port Nigel. [SIC]

Lloyd's List. Monday, 8 August, 1904.

CANDIA (?) [SIC] (s). Aug 8, 8.10 a.m. Candia (?) (s), believe Belgian Flag, ashore Hell's Mouth in sinking condition, partly laden manganese. Proceeding there. Wire Sarn Post Office.

Western Mail. Tuesday 9 August, 1904.

Lloyd's Telegrams. Ganda - Carnarvon telegraphs: Belgian steamer Ganda ashore at Hellsmouth; she lies upright on sandy beach; vessel fills with the tide; extent of damage unknown.

Lloyd's List. Tuesday 9 August.

GANDA (s). Sarn, Carnarvon, Aug 8, 3.17 p.m. Steamer ashore is Ganda, of Ghent; lying

upright on sandy beach, but was bumping on boulders two tides. Nature and extent of damage unknown, but vessel fills and empties with tides. Suggest jettison cargo, ascertain damage. Impossible get up steam. Waiting Instructions Sarn. Lloyd's Agent. (See Claudia (?) (s) in issue of yesterday.

GANDA. Sarn, Carnarvon. Aug 8, 7.55 p.m. - Ganda; Owners superintendent due here morning; will meet him and report further.

Lloyd's List. August 9, 1904.

Ganda owners superintendent due here to report.

Lloyd's List August 8th. The steamer Ganda of Gent, for Antwerp with manganese ore, while lying at Rhiw Jetty, broke her moorings on the night of August 5th, got a rope round her propeller and drifted ashore. After clearing propeller, vessel got off next day and proceeded for St. Tudwal's Islands. Soon afterwards, she was found to be making so much water that she was beached in Hell's Mouth to prevent sinking. Crew safely landed.

Lloyd's List August 9th. Estimate cargo 500 tons. Bound Antwerp. Stranded off Rhiw, Hell's Mouth. Head inshore, exposed S.E. to S.W. weather. Sitting on level, sandy ground. Captain reports vessel having bumped on stony ground when she broke adrift from loading jetty. At 4 hours ebb tide, water in hold 20' higher than outside level. When high tide, reaches about 3' below after-deck.

The North Wales Express. 12th August 1904

ASHORE AT PORTH NEIGWL. DISABLING OF A MANGANESE STEAMER. The steamer "Ganda", of Ghent. Captain Schmidt, after being half loaded with manganese from Rhiw Works, had to leave Porthneigwl last Saturday owing to a S.W. gale having risen, and make for shelter in the St. Tudwal's road-stead. Unfortunately, the hawser became entangled in the propeller, and the steamer was disabled and blown ashore. The crew succeeded in getting a boat to shore, but not before the boat was capsized and the men had to swim through the surf. Up to the time of writing, the steamer was in such a position that she must be discharged before she can be floated. The "Ganda" is of 650 tonnage, and was chartered for Antwerp. The crew, numbering 13, are lodging in the neighbouring farms, and are well cared for, and seem to enjoy the kind attention paid them by the farmers.

The North Wales Express. 19th August 1904.

THE S.S. GAUDA [SIC]. The s.s. "Gauda" [SIC}, ashore at Porthneigwl, is likely to become a total wreck. The recent gale sent her higher up the shore. All the crew have been sent home. She was partly loaded with manganese from Rhiw Mountain

Lloyd's List. Thursday 18 August, 1904.

MARITIME DEPOSITIONS. Ganda (s), of Ghent, for Antwerp; Depositions of Charles Schmidt, master, and Joseph Dewerdts, mate. (3,930-31) - Rhiw, Aug 8.

Y Genedl Gymreig. Tuesday 23 August, 1904. TRANSLATED.

Hell's Mouth. THE GANDA. After the strong winds last week, there is no more hope that the steamship 'Ganda' can be saved. The crew have all left.



The cliffs and beach at the western end of Hell's Mouth / Porth Neigwl.



Looking down onto the site of the wreck.



The stern and propeller of the S.S. 'Ganda'.



The stumps of the old pier can still be seen.

7.0 Analysis.

From the contemporary newspaper reports and from personal experience of diving the site, the author believes that the wreck located in shallow water along the western edge of Hell's Mouth / Porth Neigwl is that of the steamship 'Ganda'.

8.0 Conclusions & Recommendations.

It is concluded that Hell's Mouth / Porth Neigwl in 1904 was, and still is, totally unsuitable for loading and unloading cargo from visiting vessels. Perhaps lessons should have been learned from the nearby wreck of the 'Aggravator', lost in 1898.

My recommendation is that no-one should invest in a business that relies on calm weather for their successful operation!

9.0. References.

Sources include: Lloyd's Register.

Shipwreck Index of the British Isles. Vol 5 (Richard Larne, Lloyd's Register).

The Essential Underwater Guide to North Wales. Vol. One, Part One. (Chris Holden)

RCAHMW COFLEIN <https://coflein.gov.uk/>

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

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

The British Newspaper Archive www.britishnewspaperarchive.co.uk/

The Manganese Mines of North Wales by C. G. Down.

The Llyn Peninsula Mines by Wil Williams. Published by Gwasg Carreg Gwalch.