No.	No. Service:		Rank:	Names & Service Information:	Supporting Information:			
26.	1 st	Oct.	Oct. Captain	Gerald Walter Russell, R.N.				
26.	1st Oct. 1902 Maso n 1 Oct 1902	Oct. 1904. 30 Sept 1904	Captain	Gerald Walter Russell, R.N. B. 17 Jan 1850, Wellington, New Zealand – D. 7 Nov 1928, Hazelmere, Surrey, England. B. All Saints, Grayswood, Waverly, Surrey. 9 Jan 1864 Gerald Walter Russell entered the Royal Navy as a Naval Cadet, aged 14 years. 10 Jan 1864-22 Mar 1865 Naval Cadet Gerald Walter Russell posted and attached to HMS "Britannia".	7 th child (son) of Andrew Ha ll Lt Col, 58 th Foot Regiment (B whilst parents were at sea - L Torquay, Devon, England.) at Howlett, (B. 1815 , Leven Yor Mar 1891 ,), Newton Abbot D. Married: 18 Jul 1835 in Filey England. Issue : 6 boys & 2 girls. Brother of, and.			
				She was a wooden screw three decker 1st rate ship, converted to screw whilst still on her stocks. Constructed and launched from Portsmouth Dockyard on 25 Jan 1860, launched as the "Prince of Wales" and renamed. She was 252 feet in length carrying a complement of 1100 men. She had a builder's measure of 3,994 tons with a displacement of 6,201 tons. Her armament was 121 guns. She was never fitted for sea. On 3 Mar 1869 she was renamed "Britannia", as a boys training ship, Dartmouth, replacing 1st rate sailing ship "Britannia" (1820-1869). [See extracts from the "Times" newspaper below]. HMS "Britannia" was commanded by Capt. Robert Harris, as a cadet training ship, Portsmouth, then (Feb 1862) Portland, 1 Jan 1860 to 1 Oct 1863. From 1 Oct 1862 to 20 Apr 1866 she was commanded by Capt. Richard Ashmore Powell, as a cadet training ship, Portland. From 20 Apr 1866 until 1867 she was commanded by Capt. George Granville Randolph, as a cadet training ship, relocated to Dartmouth. From 1867 she	 Andrew Hamilton Russel Cork, Ireland – D. 11 April Hampshire, England.). William Russell Russell, Capt. & Sir.] (B. 12 Nov 1 Berkshire, England – D. 2 Napier, Hawke's Bay, Network Scinder Lawsell, Capt. & Sir.] (B. 12 Nov 1 Berkshire, England – D. 2 Napier, Hawke's Bay, Network Scinder Lawsell, Capt. & Lawsell (B. 1841, Irwindown) Arthur Edward Russell (B. 1841, Irwindown) Arthur Edward Russell (B. 15 May 1924, Palmer Manawatu-Wanganui, Network) Herbert Henry Russell (B. 16 Manawatu-Wanganui, Network) Gerald Walter Russell, (Wellington, New Zealand Hazelmere, Surrey, England, Lawsell (B. 1856, Edward) Emily Russell (B. 1856, Edward) Emily Russell (B. 1856, Edward) A Jul 1893 – Gerald Walter Russell, Capt. All Lawsell (B. Mar 1 Hampshire, England) Herbert George Yatman (B. Mar 1 Hampshire, England) Herbert George Yatman (182 Lyon MacGregor (1837-1926) At St. Margaret's Church, Felengland; by the Rev. Stepher 			
				remained at Dartmouth as a training ship under the command of Capt. John Corbett, cadet training ship, Dartmouth. 11 Jun 1864 Naval Cadet Gerald Walter Russell passed his examinations and obtained his 1 st Class Seaman's Certificate. 21 Apr 1864 Naval Cadet Gerald Walter Russell detached and served	by the Rev. J. F. Quirk, rector Lincolnshire, Captain Gerald Royal Navy, youngest son of Colonel Andrew Hamilton Ru Torquay, Devon, to Katherin of Herbert George Yama of F Hazelmere, Surrey. Issue: 4 children, 1 died, 3 liv 1. Ellen Mary Russell, B 18 Hampshire.			

milton Russell, Bt **B.** 27 Sep **1811**, **D.** 20 Jul **1900**, and Elizabeth Ann rkshire England - D. Devon.

y, Yorkshire,

- sell III (B. abt 1837, r **1916**, Petersfield,
- Kt, MHR, [later 1838, Sandhurst, 24 Sep **1913**, ew Zealand
- sell (B. 13 Apr 1842, le, India – **D.** 25 Dec Scinde, India.).
- Ireland –**D.**
- (**B.** 24 Aug **1845** rston North, New Zealand.).
- B. 1847 D.
- (**B.** 17 Jan **1850**, nd – **D.** 7 Nov **1928**, land.).
- Bay of Islands, New chester,

Russell, married L863, Lymington, ug **1950**,) daughter of **322-1911**) & Mary 6).

ernhurst, Sussex, en Bridge assisted or of Great Coates, Walter Russell, f Lieutenantlussell, Fonthill, ne second daughter Fernden,

iving.

895, Winchester,

on HMS "Victory". She was tender to HMS "Duke of Wellington", [1869-1888]. She was also flagship of the port Admiral, Portsmouth [1824-1869]. HMS "Victory" is a 100-gun 1st rate ship of the line of the Royal Navy, ordered in 14 July 1758, laid down in 23 July 1759 at the Chatham Dockyard and launched in 7 May 1765. She was commissioned in 1778. She is best known for her role as Lord Nelson's flagship at the Battle of Trafalgar on 21 Oct 1805. She was constructed as a 104-gun first-rate ship of the line. She had a length of 186 feet (gundeck), 227½ feet (overall), with a beam of 51 feet 10-inches, a draught of 28 ft 9-inches and a hold depth of 211/2 feet. Height from waterline to top of mainmast: 205 feet. Her builder's measure was 2,142 tons and a displacement of 3,500 tons.

- Paul Herbert Walter Russell OBE, Lt Col, RA, B. 7 Nov 1896, Winchester, Hampshire, England. D. 5 Mar 1984, Haslemere, Surrey, England. B. 15 Mar 1984, All Saints, Grayswood.
- 3. **Sylvia Katherine Russell, B. 1902**, Torquay, Devon, England.

1911 Census living at Greenhill, Rownhams, Romsey, Southampton, with daughter and 2 servants

18 Jan 1929 Probate (Winchester) of Gerald Walter Russel of Hatchfield, Halemere, Surrey, to Katherine Russell, widow, effects to the value of £299.3s.10d.

Her propulsion and sail plan was that of a full-square rigged ship carrying sails of 6,510 sq. yd. Her speed was up to 11 knots, with a complement of approximately 850 men and officers. Her armament at Trafalgar was as follows: gundeck: 30 × 2·75-ton long pattern Blomefield 32-pounders; middle gundeck: 28 × 2·5 ton 24-pounders; upper gundeck: 30 × 1·7-ton short 12 pounders guns; quarterdeck: 12 × 1·.7 ton short 12pounder guns; forecastle: 2 × medium 12-pounder guns, & 2 × 68-pounder carronades. In Mar 1780, the hull of "Victory" was sheathed with 3,923 sheets of Swansea copper below the waterline to protect it against shipworm, which also increased he speed. Her honours and awards were all for events she participated in as follows: First Battle of Ushant (1778); Second Battle of Ushant (1781); Battle of Cape Spartel (1782); Battle of Cape St Vincent (1797); and Battle of Trafalgar (1805). "Victory" additionally served as Keppel's flagship at Ushant; Howe's flagship at Cape Spartel and Jervis's flagship at Cape St Vincent. "Victory" suffered badly from her battles over the years, but attempts were always made to restored the damage. On her return to England, "Victory" was examined for seaworthiness and found to have significant weaknesses in her stern timbers. She was declared unfit for active service and left anchored off Chatham Dockyard. In December 1796 she was ordered to be converted to a hospital ship to hold wounded French and Spanish prisoners of war. However, on 8 Oct 1799, HMS "Impregnable" was lost off Chichester, having run aground on her way back to Portsmouth after escorting a convoy to Lisbon. She could not be re-floated and so was stripped and dismantled. Now short of a 1st-rate, the Admiralty decided to recondition "Victory". Work started in 1800, but as it proceeded, an increasing number of defects were found and the repairs developed into a very extensive reconstruction. The original estimate of £23,500, the final cost was £70,933. Extra gun ports were added, taking her from 100 guns to 104, and her magazine lined again with Swansea copper. The open galleries along her stern were removed; her figurehead was replaced along with her masts and the paint scheme changed from red to the black and yellow seen today. Her gun ports were originally yellow to match the hull, but were repainted black, giving a pattern later called the "Nelson chequer", which was adopted by most Royal Navy ships in the decade following the Battle of Trafalgar (1805). The work was completed in Apr 1803, and the ship left for Portsmouth the following month under her new Capt. Samuel Sutton.

"Victory" had been badly damaged in the battle and was not able to move under her own sail. HMS "Neptune" therefore towed her to Gibraltar for repairs. "Victory" then carried Nelson's body to England, where, after lying in state at Greenwich, he was buried in St. Paul's Cathedral on 9 Jan 1806. In the years that followed, Nelson's personal life was called into question, the Admiralty Board considered "Victory" too old, and in too great a disrepair, to be restored as a first-rate ship of the line. In Nov 1807 she was relegated to 2nd-rate, with the removal of two 32-pounder cannons and replacement of her middle deck 24-pounders with 18-pounders obtained from other laid-up ships. She was recommissioned as a troopship between Dec 1810 and Apr 1811. In 1812 she was relocated to the mouth of Portsmouth Harbour off Gosport, for service as a floating depot and, from 1813-1817, as a prison ship. Major repairs were undertaken in 1814, including the fitting of 3 foot 10-inch metal braces along the inside of her hull, to strengthen all of the timbers. This was the first use of iron in the vessel structure, other than small bolts and nails. Active service was resumed from Feb 1817 when she was relisted as a first-rate carrying 104 guns. However, her condition remained poor, and in Jan 1822 she was towed into dry dock at Portsmouth for repairs to her hull. Re-floated in Jan 1824, she was relegated to the role of harbour ship, but was designated as the Port admiral's flagship for Portsmouth Harbour, remaining in this role until Apr 1830. In 1831 the Admiralty issued orders for HMS "Victory" to be broken up and her timbers reused in other vessels. A public outcry developed against the destruction of so famous a ship led to the order being held in abeyance and "Victory" was left, largely forgotten, at a Portsmouth mooring. Admiralty officially designated the ageing vessel as a ship's tender for the Port admiral's flagship HMS "Wellington", and permitted civilian visitors to come aboard for tours. The ship briefly returned to the public gaze on 18 Jul 1833 when the queen in waiting, Princess Victoria, and her mother, the Duchess of Kent, made a visit to her quarterdeck to meet with veterans of the "Trafalgar campaign". This generated a surge of interest in the vessel, and an increase in civilian visitor numbers to between 10,000 and 12,000 a year. Victoria returned for a second visit on 21 Oct 1844, creating a further burst of interest that lifted annual visitors to more than 22,000. The heavy civilian visitor presence militated against the "Victory" further use as a naval vessel, and she ceased her formal role as the tender to "Wellington". The impact of so much human traffic also left her increasingly decrepit, particularly in the absence of Admiralty funding for repairs. Sir Edward Seymour, the future Duke of Somerset, visited the vessel in 1886 and considered that ..."... a rottener ship never probably flew the pennant. I could literally run my walking stick through her sides in many places..." In 1887 she sprang a catastrophic leak and it was only with some difficulty that she was prevented from sinking at her mooring. Admiralty thereafter provided a small annual subsidy for maintenance, and in 1889, "Victory" was restored to a military function by being fitted up as a Naval School of Telegraphy. Despite her reuse as a school, "Victory" continued to deteriorate at her mooring. In 1903 she was accidentally rammed by HMS "Neptune", a successor to the vessel that had towed her to Gibraltar. Emergency repairs prevented her from sinking, but Admiralty again proposed that she be scrapped and it was only the personal intervention of Edward VII that prevented this from occurring. The school of Telegraphy remained on "Victory" until 1904, when training was transferred temporarily to HMS "Hercules". Public interest in the ship revived in 1905 when, as part of the centenary celebrations of the "Battle of Trafalgar", she was decorated with electric lights powered by a submarine moored alongside. From 1906 to a permanent establishment at the Royal Naval Barracks, Portsmouth. In 1910, the "Society for Nautical Research" was created to try to preserve her for future generations, but Admiralty was unable to help, having become embroiled in an escalating arms race; thus, by the time Frank H. Mason published "The Book of British Ships in 1911", the condition of "Victory" was described as ..." nothing short of an insult". A few glimpses of the ship in 1918 are to be seen towards the end of Maurice Elvey's biopic of Nelson created in that year. By 1921 the ship was in a very poor state, and a public "Save the Victory campaign" was

started, with shipping magnate Sir James Caird as a major contributor. On 12 Jan 1922, her condition was so poor that she would no longer stay afloat, and had to be moved into No. 2 dock at Portsmouth, the oldest dry dock in the world still in use. A naval survey revealed that between a third and a half of her internal fittings required replacement. Her steering equipment had also been removed or destroyed, along with most of her furnishings. The relocation to No. 2 dock sparked public discussion about the future location "Victory". Suggestions in contemporary newspapers included the creation of a floating plinth atop which she could be preserved as a monument, either in Portsmouth or adjacent to the Royal Naval College, Greenwich. Others proposed a berth beside "Cleopatra's Needle" on the Thames, or even as landbased structure in Trafalgar Square. Despite popular support, these options were not seriously entertained by Admiralty. The naval architects who had surveyed the ship reported that she was too damaged to be moved; Admiralty formally adopted their advice and No. 2 dock thereafter became the permanent home of HMS "Victory". In Nov 2007, the commanding officer, Lieutenant Commander John Scivier, of HMS "Victory", paid a visit to the USS "Constitution" of the US Navy, which is the world's oldest commissioned naval vessel still afloat. He met with the commanding officer, of the US "Constitution", Commander William A. Bullard III, and discussed the possibility of arranging an exchange programme between the two ships. In Dec 2011, Defence Equipment and Support awarded an initial 5-year project management contract to BAE Systems, with an option to extend to 10-years. The restoration is now worth £16 million over the life of the contract and will include work to the masts and rigging, replacement side planking, and the addition of fire control measures. It is expected to be the most extensive refit since the ship returned from Trafalgar. Since this contract was placed, the most significant change has been on 5 Mar 2012, when ownership of the ship was transferred from the Ministry of Defence to a dedicated "HMS Victory Preservation Trust", established as part of the National Museum of the Royal Navy. According to the R.N. website, the move was "heralded by the announcement of a £25 million capital grant to support the new Trust by the Gosling Foundation – a donation which has been matched by a further £25 million from the MOD". In her current state she has no upper masts and minimum rigging. It is expected that it will be over 12years before these are replaced. Listed as part of the National Historic Fleet, "Victory" has been the flagship of the First Sea Lord since Oct 2012. Prior to this, she was the flagship of the 2nd Sea Lord. She is the oldest commissioned warship in the world and attracts around 350,000 visitors per year in her role as a museum ship. The current and 101st commanding officer is Lieutenant Commander Brian Smith R.N., who assumed command in May 2015. "Victory" has also undergone emergency repair works to prevent the hull decaying and sagging, preserved as a museum ship. The hull is moving at a rate of 0.5-cm each year, about 20-centimetres over the last 40 years although there are plans to create new hydraulic supports that will better fit the "Victory". HMS "Victory" will benefit from a £35 million restoration project, utilising Scottish Elm trees as wood for the restoration project. She has been the flagship of the First Sea Lord since Oct 2012 and is the world's oldest naval ship still in commission with 241 years' service by 2019.

23 Mar 1865 Naval Cadet Gerald Walter Russell obtained his Midshipman's Certificate. **23 Mar 1865** Midshipman Gerald Walter Russell attached to HMS "*Caroline*", was a sailing gunboat serving in New Zealand waters. She was purchased in 1859 and brought back to Portsmouth, utilised as a training vessel sold-off in late 1865. Owing to her size only limited information has been obtained on this vessel.

<u>26 Jun 1865</u> Naval Cadet Gerald Walter Russell attached to HMS "*Royal Adelaide*" 104 guns. She was a 1st rate wooden sailing ship of the line, of the "*Princess Charlotte*" class. She was 2,446 tons builder's measure, with a displacement of 4,122 tons. She was actually ordered 6 Jan 1812 (not long after the shortage of vessels post Trafalgar. When first ordered in 1812 she was intended to be a 2nd rate of 98 guns, but in the general reclassifications of 1817 she was reclassed as a 1st rate. She was a triple deck vessel. She was laid down as "*London*" May 1819, from Plymouth Royal

Dockyard, some years after she was actually ordered. On the 1 Jan 1820 she was re-ordered adding her to be built, with a semi-circular stern. She was launched 28 Jul 1828, some 9 years after being laid down and 16 years after she was 1st ordered. She was renamed in 1828 HMS "*Royal Adelaide*" prior to her launch. Gerald Walter Russell served twice on this vessel 19 May 1875 to May 1879 (later as a Lieutenant. [*A full description and history are given below*].

31 Aug 1865-3 Sep 1865 Midshipman Gerald Walter Russell attached to HMS "Pelican". She was a wooden "Camelion" class screw sloop laid down 16 Jun 1859, launched from Pembroke Royal Dockyard 19 July 1860. She was completed 25 Sep 1861. The 1st ship of the class was "Camelion", laid down 8 Nov 1858, launched from the Deptford Dockyard 23 Feb 1860, completed 30 July 1861, she was sold for breaking-up 1883. Originally there were to be 16 vessels in the "Camelion" class was a class of screw-driven sloops of wood construction, designed by Isaac Watts and operated by the Royal Navy, as 2nd class sloops of 17 guns, and were a lengthened version of the "Cruizer" class sloop. 8 ships of the class were actually built from 1858 to 1866 with another 8 cancelled. The class contained vessels as follows: "Camelion" (see above). HMS "Pelican" was the 2nd; "Rinaldo" (Portsmouth Dockyard); "Zebra" (Deptford Dockyard); "Perseus" (Pembroke Dockyard); "Chanticleer" (Portsmouth Dockyard) [see below]; "Reindeer" (Chatham Dockyard); "Rattler" (Deptford Dockyard). The other 8 vessel although laid down (other than "Imogene" & Success) were all cancelled 12 Dec 1863, before launch, as follows: "Harlequin"; "Tees"; "Sappho"; "Trent"; "Circassian"; and "Diligence". At least 2 vessels were converted into other vessels whilst still on their stocks. They were initially rated as second-class sloops, but were later reclassified as corvettes. Built of a traditional wood structure, they were 185 feet long at the gundeck, 33 feet in beam and displaced 1,365 tons. A barque rig was fitted to allow easy sail handling with a relatively small crew of 180 men. They were fitted with a two-cylinder horizontal single-expansion steam engine (although "Perseus" and "Reindeer" received single trunk steam engines) driving a single screw. These engines generated 200 nominal horsepower, giving a speed of approximately 9 knots. They were armed with 5 x 40-pounder breech-loading guns and 12 x 32-pounder muzzle-loading smoothbore guns, although "Reindeer" was completed with a single 110-pounder and 5 x 64-pounders. The first two vessels were ordered on 3 Apr 1854, although neither was laid down for several years. Another three were ordered on 1 Apr 1857 and a further three on 27 Mar 1858. The final 8 ships were ordered in two batches on 5 Mar 1860 and 25 Mar 1861, but were either cancelled, or in the case of "Circassian" and "Trent", completed as ironclad sloops under new names. HMS "Pelican" was basically utilised out of Portsmouth until sold into civilian service in Feb 1867 and renamed "Hawk". She was resold to the Portuguese Navy and renamed "Infanta Dom Henrique".

4 Sep 1865-5 Jan 1866 Midshipman Gerald Walter Russell attached to HMS "Chanticleer". She was a sister ship to "Pelican" (which is detailed above). HMS "Chanticleer" was a wooden screw Sloop of the "Camelion" class (reclassified in 1862 as a Corvette) of 950 ton (builder's measure) with a displacement of 1,419 tons. Her length was 185 feet and carried 180 men and officers. She was armed with 17 guns. She was laid down 2 Feb 1860, launched from Portsmouth Dockyard on the 9 Feb 1861, and completed in Dec 1861. From 11 Dec 1861 to 14 Dec 1863 she was commanded (from commissioning at Portsmouth) by Commander Charles Stirling, as part of the Channel Squadron, [a Lieutenant in HMS "Britannia", 1 Sep 1854 to 10 Ap 1860, see vessel above], then (Oct 1862) HMS "Chanticleer" was transferred after recommissioning to the Mediterranean Squadron. On the 2 Oct 1862 the paddle ship "Iona" of David Hutcheson & Co was wrecked off Gourock, Renfrew in the West of Scotland, on the East shore of the upper Firth of Clyde, following a collision with the newly launched "Chanticleer". From 14 Dec 1863 to 6 Jun 1865 she was commanded by Commander John Erskine Field Risk, on the Mediterranean Station. From 6 Jun 1865 until 20 Feb 1866 she was commanded (until paying off at Woolwich) by Commander William Henry Fenwick, still on the Mediterranean Station. From 4 Apr

1867 to 12 Mar 1872 she was commanded (from commissioning at Woolwich until paying off at Sheerness) by Commander William Wilson Somerset Bridges, this time on the Pacific Station. Her last commission was in 1872 after which she was sold for breaking up 23 Jan 1875.

6 Jan 1866-31 May 1869 Midshipman Gerald Walter Russell was posted to HMS "Caledonia". She was a broadside ironclad of the "Prince Consort" class. Originally laid down as a 2nd Rate vessel of 91 guns, two-decker steam ship of the line of the "Bulwark" class, "Caledonia" was converted on the building stocks into an armoured frigate. She was laid down 10 Oct 1860 in the Woolwich Royal Dockyard, launched 24 Oct 1862, completed Jul 1865. Her length, as-built: 252 feet, after 1866 reconstruction: 273 feet. Her beam was as-built: 57 feet, after 1866 reconstruction 58½ feet. Her draught was as-built: 25 feet light, deep load 26½ feet; after 1866 reconstruction: 24 feet light, deep load 26 feet 9-inches. She displaced 6,832 tons. Her propulsion was via a one-shaft Maudsley horizontal reciprocating engine 3,750 ihp. Her sail plan was Single-topsail barque, sail area 25,000 square feet. Her speed was 12.5 knots under power; 11.5 knots under sail. She carried a complement of 605 men and officers. Her armament was as follows: 1865: 10 × 7-inch breech loading Armstrong rifle guns; 8×100 -pounder smoothbore guns; 12×68 -pounder smoothbore guns. After her 1866-7 reconstruction 4 × 8-inch muzzle-loading rifle guns; 20 × 7-inch muzzle-loading rifle guns. Her armour was as follows: battery and belt: 4·5-inches amidships and 3-inches fore and aft. HMS "Caledonia" was not completed until Jul 1865 due to a delay in the delivery of her main armament. Once this was installed, she was commissioned as Second-in-Command of the Mediterranean Fleet, becoming the first ever armoured flagship of the Royal Navy. She was temporarily withdrawn from service in 1866 for reconstruction which involved the addition of a poop-deck. Following this, she was flagship of the Channel Fleet until 1867, when she was paid off for re-armament. HMS "Caledonia" was flagship of the Mediterranean Fleet until 1869 (relieving HMS "Victoria", the last three-deck Royal Navy flagship) until 1872. She was a guardship in the Firth of Forth from 1872-1875. She was paid off at Plymouth, and was laid up there until she was sold on 30 Sep 1886. From 27 Apr 1865 she was commanded (from commissioning at Plymouth) by Capt. Fitzgerald Algernon Charles Foley, flagship of Rear-Admiral Hastings Reginald Yelverton, (second in command) (SIC) and utilised on the Mediterranean Station. From 10 Jun 1867 to 31 May 1869 she was commanded (until paying off at Malta) by Capt. Alan Henry Gardner, flagship of Rear-Admiral Lord Clarence Edward Paget, on the Mediterranean Station. From 1 Jun 1869 to 11 May 1871 she was commanded (from commissioning at Malta) by Capt. Thomas Cochran, in the Mediterranean. From 11 May 1871 until 7 Jul 1871 she was commanded by Capt. Chandos Scudamore-Scudamore Stanhope, in the Mediterranean (until Stanhope died of smallpox at the Royal Naval Hospital, Bighi, Malta, still in command of "Caledonia". From 8 Jul 1871 to 17 Nov 1874 she was commanded by Capt. Charles Pringle, on the Mediterranean Station. From 18 Nov 1874 until 31 Mar 1875 she was commanded by Commander Edmund Hope Verney. She was later commanded by Captain John Eglinton Montgomerie. She was broken-up in 1886

1 Jun 1869-30 Jun 1869 Midshipman Gerald Walter Russell was posted to HMS "Revenge". She was a 91-gun, 2nd Rate wooden screw ship of 3322 tons (builder's measurement) with a displacement of 5,260 tons, she was a twin, two-decker of 245 feet long, with a beam was 55½ feet. She carried a complement of 860 men and officers. She was constructed and launched from Pembroke Royal Dockyard 16 Apr 1859. She was the founder member of the "Revenge" class and the 10th vessel to carry the name. She was armed with 34 x 8-inch guns, 1 x 68-pounder, and 56 x 32-pounder guns. She was used as a base ship from 1872, she was renamed (Mar-1891) "Empress" and utilised as a training ship. She was sold for breaking up in 31 Dec 1923 and broken up at Appledore, Devon, on the banks of the River Torridge. HMS "Revenge" was commanded (from commissioning at Plymouth) by Capt. Charles Fellowes, flagship of Rear-Admiral Robert Smart, as part of the Channel Squadron, 1

May 1861 to 14 May 1863. From 13 Jun 1863 to 26 Apr 1865 she was commanded (until paying off at Plymouth) by Capt. Fitzgerald Algernon Charles Foley, flagship of Rear-Admiral Hastings Reginald Yelverton, second in command (2nd IC), in the Mediterranean (until replaced by HMS "Caledonia") [see above]. From 1 Sep 1865-2 Sep 1865 she was commanded by Capt. Thomas Henry Mason, Coast Guard, Pembroke (replacing HMS "Blenheim"). On the 2 Sep 1865 command was taken over by Capt. George Le Geyt Bowyear, on Coast Guard duties, Pembroke. On 11 Mar 1869 "Revenge" was paid off. From 15 Apr 1869 to 31 May 1869 she was commanded (from recommissioning) by Capt. Thomas Cochran, to take Vice-Admiral Alexander Milne, Commander-in-chief, Mediterranean, and a replacement crew for his flagship, HMS "Caledonia", to his station. From 31 May 1869 she was commanded by Capt. Alan Henry Gardner, bringing home Vice-Admiral George Rodney Mundy and the old crew of HMS "Caledonia", flagship in the Mediterranean. From 3 Jul 1869 to Sep. 1869. commanded by Capt. Richard Wells, to take Vice-Admiral George Greville Wellesley, Commander-in-chief, North America and West Indies, and a replacement crew for his flagship, HMS "Royal Alfred", to his station. From Sep 1869 to 27 Sep 1869 she was employed bringing home the old crew of HMS "Royal Alfred", flagship in North America and West Indies. From 16 Nov 1869 to 23 Jan 1870 she was commanded (from recommissioning at Plymouth) by Capt. Francis Alexander Hume, to take Rear-Admiral Arthur Farquhar, Commander-in-chief, Pacific, and a replacement crew for his flagship, HMS "Zealous", to Panama, for transfer overland to his station. In all, HMS "Revenge" was to had a further 9 captains, including periods as guard-ship in Queenstown, Ireland, until her renaming and reuse in April 1890. Her fate finally came on 31 Dec 1923, [as detailed above].

1 Jul 1869-20 Sep 1869 Midshipman Gerald Walter Russell joined HMS "Inconstant". She was an unarmoured iron screw frigate launched 12 Nov 1868 from Pembroke Royal Dockyard. She had a displacement of 5,780 tons and carried 16 guns. She was the first of an intended 6 fast, unarmoured, iron-hulled, frigates designed by the British Admiralty's Chief Constructor, Sir Edward Reed, in response to the fast, wooden American "Wampanoag" class frigates. Only 3 were actually built, however, as the American ships proved to be flawed enough to pose no real threat and the British ships were very expensive. The ship was 337 feet 4-inches long between perpendiculars, had a beam of 50 feet 3-inches, and a draught of 25½ feet. "Inconstant" displaced 5,780 tons and had a tonnage of 4,066 tons. She carried a complement of 600 officers and men. To reduce biofouling, her iron hull was sheathed in two layers of oak 3-inches thick that was covered by a layer of copper. HMS "Inconstant" was a good sea-boat and a steady gun platform. The ship had a single John Penn and Sons Co. 2-cylinder trunk steam engine that drove a 23-foot propeller. The engine used steam provided by 11 boilers with a working pressure of 30 psi. HMS "Inconstant" reached a speed of 16.2 knots from 7,360 indicated horsepower during her sea trials and was the fastest warship afloat when completed. The ship once sustained an average speed of 15.5 knots for 24 hours. She carried a maximum of 750 tons of coal, enough to steam 2,780 nautical miles at 10 knots. HMS "Inconstant" was ship-rigged with three masts and a sail area of 26,655 square feet. She proved to be excellent under sail, reaching a maximum speed of 13.5 knots, one of only two warships ever to reach this speed under sail and 16 knots with steam. To improve her performance under sail, her propeller could be hoisted into the hull and her funnels lowered to reduce drag. When completed the ship was more heavily armed than all but 2 of the 24 British ironclads afloat. Her main armament consisted of 10 x rifled muzzle-loading R.M.L. 9-inch guns on the main deck in the traditional broadside layout. The 9-inch shells weighed 254 pounds and was rated with the ability to penetrate 11·3-inches of wrought-iron armour. Her secondary armament of 6 x R.M.L. 7-inch guns was mounted on the upper deck, with two guns positioned in the bow as chase guns. The guns fired a 112-pound shell that could pierce 7.7 inches of armour. HMS "Inconstant", was the 5th ship of her name to serve in the Royal Navy, was laid down on 27 Nov 1866 at the Pembroke Dockyard, Wales. The ship was

launched on 25 Mar 1872 by Lady Muriel Campbell, daughter of John Campbell, 2nd Earl Cawdor. HMS "Inconstant" was transferred to Portsmouth Royal Dockyard to finish fitting out and was commissioned on 12 Aug 1869 by Capt. Elphinstone D'Oyly D'Auvergne Aplin for duty with the Channel Squadron. Upon completion in 1869, she was the fastest warship in the world and was assigned to the Channel Squadron. Capt. Elphinstone D'Oyly D'Auvergne Aplin was relieved by Capt. Charles Waddilove on 13 Sep 1870. The following year the ship was assigned to the Detached Squadron, commanded by Rear-Admiral Frederick Seymour, which visited ports in Scandinavia after Inconstant joined them at Gibraltar, finally arriving at Spithead on 11 Oct 1871. During this time, she served as the flagship of Vice-Admiral Seymour of the Mediterranean Fleet as she ferried replacement crews to that fleet. The ship was paid off in 1872 and spent the next eight years in reserve. HMS "Inconstant" was recommissioned in 1880 for service with the Flying Squadron that circumnavigated the world in 1880-82, commanded by Capt. Lord Walter Kerr from 5 Feb to 11 Mar. The Captain of "Inconstant" at this time was Charles Penrose-Fitzgerald. The Detached Squadron left Spithead on 17 Oct 1880 to circumnavigate the world and returned two years later. It is claimed that on 11 Jul 1881 (or 11 Jun 1881), Prince George of Wales (later King George V of England) sighted a phantom ship whilst aboard "Inconstant" between Melbourne and Sydney. Two other ships, "Tourmaline" and "Cleopatra", also reported seeing the phantom ship. Just after arriving in the Falkland Islands, the squadron was ordered to Simonstown, South Africa, for possible service in the First Boer War of 1880-81, but hostilities had already ended by the time that it arrived. On the return voyage, the ship was diverted to Egypt during the Anglo-Egyptian War of 1882 and played a minor role supporting operations ashore. On the return voyage, the frigate caught fire; it was stopped by flooding all of the after compartments. Shortly afterward, the squadron was diverted to Egypt after the start of the Anglo-Egyptian War of 1882; they arrived after the Bombardment of Alexandria on 11 July and some of crew of "Inconstant" crew were landed to participate in operations ashore. From Aug 1880 to Oct 1882, "Inconstant" was assigned to the reconstituted Detached Squadron, this time as the flagship, first of Rear-Admiral Richard Meade, 4th Earl of Clanwilliam until he was got sick in Hong Kong, and then from 6 Dec 1881-17 Oct 1882 of Rear-Admiral Sir Francis Sullivan. The ship was reduced to reserve again after their return on 16 Oct 1882 and served as an accommodation ship, in 1897. HMS "Inconstant" was taken out of service and was hulked in 1904 and became a gunnery training ship in 1906. In June 1906, she was reassigned to the boy's training establishment "Impregnable". She was again renamed "Impregnable III" in 1907, then "Defiance IV" in Jan 1922 after she was transferred to the torpedo training school at Plymouth, "Defiance", and then "Defiance II" in Dec 1930. She continued in that role, under a variety of names, until she was sold for scrap in Sep 1955 and subsequently arrived at the breaker's yard in Belgium on 4 Apr 1956 for demolition, when she was the second-to-last Welsh-built naval vessel afloat and the second-to-last surviving Pembroke Royal Dockyard-built warship in existence. 21 Sep 1869 Midshipman Gerald Walter Russell promoted to rank of Acting Sub Lieutenant and attached to HMS "Royal Adelaide". She was a 1st rate wooden sailing ship of 2446 tons, with a displacement of 4122 tons. She was laid down as "London" 1860 and commissioned out of Plymouth Jan 1840. She was commanded by Capt. Trevenen Penrose Coode, Devonport, flagship of the Port Admiral from the 1 Nov 1869 and commanded by Capt. John Ommanney Hopkins, flagship of Admiral Thomas Matthew Charles Symonds, Devonport, flag-ship of the Port Admiral, from 1 Oct 1875. <u>24 Feb 1870</u> Acting Sub Lieutenant Gerald Walter Russell re-joined HMS "Inconstant". [A description and history of this vessel can be found above]. 25 Feb 1870-31 Dec 1870 Acting Sub Lieutenant Gerald Walter Russell attached to HMS "Vanguard", during her commissioning phase. She was the 8th vessel to carry

25 Feb 1870-31 Dec 1870 Acting Sub Lieutenant Gerald Walter Russell attached to HMS "Vanguard", during her commissioning phase. She was the 8th vessel to carry the name. She was an "Audacious" class central battery ironclad battleship, launched in 1870. She was laid down 21 Oct 1867 at Laird, Son & Co., Birkenhead, launched on 3 Jan 1870, and commissioned 28 Sep 1870. Her length was 342 feet 3-inches, her

beam was 54 feet, with a draught of 23 feet 2-inches, her displacement was 6,034 tons. Her installed power was 4,830 ihp. Her propulsion was from 2 × coal-fired Ravenhill reciprocating steam engines, fed by 6 × Cochrane boilers, which drove 2 × shafts. Her sail plan was that of a full-rigged ship. Her speed was 13 knots and her complement was 450 men and officers. Her armament was as follows: 10 × 9-inch, 12-ton R.M.L. guns; 4 × 6-inch, 64 pounders R.M.L. 'chaser' guns (two at bow and two at stern); 6 × 20 pounder guns; and a bow ram. Her armour was as follows: Belt: 6-8inches; battery: 4-6-inches; bulkheads: 4-5-inches. Her Armour was iron-plating with teak-timber backing. Although Russell had been reposted, the later history of the vessel could be considered as interesting. She formed part of the First Reserve Squadron 1870-1875. From 1 Oct 1870 she was commanded by Capt. Edward Henry Gage Lambert, Coast Guard, Kingstown. From 6 Sep 1871 to 1873 she was commanded by Capt. David Spain, as part of the Coast Guard, at Kingstown. From 1873 until 2 Sep 1875 she was commanded by Capt. Richard Dawkins, still as part of the Coast Guard, at Kingstown, Ireland. On the 11 Oct 1873 Commander (2ic) Dashwood Goldie Tandy was appointed as 2nd in command, again as part of the Coast Guard, at Kingstown. HMS "Vanguard" under the command of Capt. Richard Dawkins, sailed out of Kingstown 1 Sep 1875 (now Dún Laoghaire, Rathdown, a suburban coastal town in County Dublin, Ireland, about 7.5 miles south of Dublin -Formerly a major port of entry from Great Britain, it was known as Dunleary until 1821 when it was renamed Kingstown in honour of King George IV's visit that year), harbour on 27 August 1875 in company with three other ironclads, HMS "Warrior", "Hector" and "Iron Duke". The ships were part of the First Reserve Squadron and were on a summer cruise around the Irish coast. The squadron under the command of Admiral Tarleton, were on route to Queenstown (Cobh), County Cork where the cruise would finish. As they passed the Kish lightship, a heavy fog came down which restricted visibility to less than a ship's length. Off Wicklow Head the sister ship of "Vanguard" the "Iron Duke" noticed she was drifting off course and began returning to her proper station. A problem with her steam plant meant that her foghorn was inoperable, and could not be used to alert the other vessels of her position or course. At about 12:50 hours, a look-out on "Vanguard" spotted a sailing ship directly ahead. As "Vanguard" turned to avoid it, "Iron Duke" appeared out of the fog on her port side less than 40 yards away. The collision was unavoidable. The underwater ram of "Iron Duke" tore open the hull of "Vanguard" in the area of her boilers. The "Iron Duke" freed herself after a few minutes, sustaining only minor damage. HMS "Vanguard", however, was sinking. Her pumps could move water at a rate of 3,000 lbs/min but the flooding exceeded 50 tons per minute. The pumps were powered by her engines, which shut down 10 minutes after the collision when the engine room flooded. Both "Vanguard" and "Iron Duke" launched all their boats. "Vanguard" heeled gradually over until the whole of her enormous flank and bottom, down to her keel, was above water. Then she sank gradually, righting herself as she went down, stern first, the water being blown from hawse-holes in huge spouts by the force of the air rushing up from below. She disappeared some 90 minutes after the collision. The abandonment was completed in good-order with Capt. Dawkins the last of the 360 crew aboard to leave and the only casualty was his dog which was lost. "Warrior" and "Hector" sailed on in the fog and only learned of the sinking upon reaching Queenstown. Seventy minutes after the collision, "Vanguard" rested on the seabed 165 feet deep. The tips of her masts were still visible above the surface. The Admiralty was confident that the ship could be raised and diving operations started, but were soon abandoned. There was nothing more to be done but to save lives. Capt. Dawkins ordered abandonment and officers and men behaved calmly. At the risk of his life one of the mechanics returned to the engine-room to blow down the boilers, so preventing an explosion, however this stopped all the ships pumps. In the he inevitable naval court-martial was to prove remarkable for the statement by the then First Lord of the Admiralty - the minister responsible for the Navy - that "we ought to be rather satisfied than otherwise with the occurrence". Edward Reed, the designer of both ships, and by 1875 a Liberal MP,

stated that "ironclads were in more danger in times of peace than in times of war". In peacetime, he said, "they were residences for several hundred men, and many of the water-tight doors could not be kept closed without inconvenience. In wartime however they were fortresses, and the doors would be closed for safety". Even more remarkably, close station-keeping in a fog was not considered as contributing to the disaster. The Court commented "negatively" on the conduct of the officers on "Iron Duke" and indirectly blamed the admiral in command of the squadron. The Admiralty could find nothing wrong in either case and visited their wrath on the unfortunate lieutenants on deck at the time. Capt. Dawkins was blamed at the court martial for not doing enough to save his vessel following the collision, and never received command of another vessel. Contemporary popular opinion, however, was sympathetic towards him. The wreck was rediscovered in 1985 and lies in 148–165 feet of water. [The wreck is protected under the Irish National Monument Act, and a special licence from the National Monuments Service is required to dive it]. 1 Jan 1871-18 Jan 1873 Acting Sub Lieutenant Gerald Walter Russell attached to HMS "Iron Duke". She was named after the nickname for Arthur Wellesley, 1st Duke of Wellington, was the 1st ship of her name to serve in the Royal Navy. The ship was laid down at Pembroke Dockyard on 23 Aug 1868, and launched on 1 Mar 1870. HMS "Iron Duke" was the last of 4 "Audacious" class central battery ironclads built for the Royal Navy. She like her sisters was 280 feet long between perpendiculars and had a beam of 54 feet. She had a draught of 21 feet 7-inches forward and 22 feet 7-inches aft. The "Audacious" class ships displaced 6,034 tons but in the case of the "Iron Duke" 6,010 tons. They all had a complement of 450 officers and ratings. For her propulsion, "Iron Duke" had a pair of two-cylinder, horizontal-return, connecting-rod steam engines, each driving a single 16½-foot propeller, using steam provided by six rectangular boilers. The engines were designed to give the ships a speed of 13 knots; "Iron Duke", however, reached a speed of 13.64 knots from 4,268 indicated horsepower during her sea trials on 2 Nov 1870. She carried a maximum of 450 tons of coal. The main armament of the "Audacious" class ships consisted of 10 x R.M.L. 9inch rifled muzzle-loading guns. Six of these were positioned on the main deck, three on each broadside, and the other 4 x guns were mounted on the corners of the upper deck battery. The battery protruded over the sides of the ships to give the guns a certain amount of end-on fire. The shell of the 9-inch gun weighed 254 lbs while the gun itself weighed 12 tons. It had a muzzle velocity of 1,420 ft/s and was rated with the ability to penetrate 11.3 inches of wrought-iron armour at the muzzle. The ship was equipped with 4 x R.M.L. 6-inch 71 cwt guns as chase guns, 2 in the bow and another pair in the stern. They fired a 64-lbs 6-3-inch shell. They also had 6 x R.B.L. 20 lbs 3·75-inch rifled breech-loading guns that were used as saluting guns. In 1878, the ships received four 14-inch torpedo launchers on the main deck and the 6-inch guns were replaced by four breech-loading B.L. 5-inch guns during the mid-1880's. The wrought iron waterline armour belt of the "Audacious" class covered the entire length of the ships. It was eight inches thick amidships, backed by 8-10-inches of teak, and thinned to six inches towards the ends of the ships. It had a total height of 8 feet of which 5 feet was below water and 3 feet above at deep load. The main deck citadel's ends were protected by a 5-inch forward bulkhead and a 4-inch one aft. The sides and embrasures of the upper battery were 6-inches thick, but its ends were unprotected. The ships also had a one-man conning tower with walls 3-inches thick. The "Audacious" class was designed as a second-class ironclad intended for overseas service. They were rigged with three masts and had a sail area of 25,054 square feet. About 1871-2 they were re-rigged as barques with their sail area reduced to 23,700 square feet, to reduce drag, the funnel was telescopic and could be lowered. Under sail alone, they could reach 10 knots. She was completed on 1 Jan 1871, at a cost of £208,763, the ship was initially, briefly assigned to the Reserve Fleet as a guardship in Ireland, before she was sent out to the China Station in Sep 1871, as station flagship. She finally returned 4 years later and resumed her duties as a guardship, in British waters off of Ireland in 1875. From 1 Sep 1871 she was commanded (until paying off

at Plymouth, 18 May 1875) by Capt. William Arthur, flagship of Vice-Admiral Charles Frederick Alexander Shadwell, Hong Kong. Whilst on route to the Far East, she became the first ironclad warship to use the Suez Canal; virtually all of her coal had to be unloaded to reduce her draught and she was towed by 3 x tugboats through the canal in three days. She was relieved on station by HMS "Audacious", her sister ship. Whilst on her return trip to Britain, in an attempt to save money, no tugboats were hired by the Admiralty and the "Iron Duke" ship ran aground some 4 times, frequently scraped her sides of the canal during her four-day transit. Upon her arrival, she was paid off in May 1975. "Iron Duke" was recommissioned two months later and was assigned as the guardship at Hull. During the next First Reserve Squadron's summer cruise on 1 Sep 1875, she was on route with three other ironclads between Dublin (Kingstown) and Queenstown (now Cobh, County Cork, Ireland.). In a thick heavy fog, on 1 Sep 1875, the ship accidentally rammed and sank her sister, "Vanguard", off Kish Bank, off Wicklow Head south of Dublin Bay, [as described above]. "Iron Duke" had her bowsprit wrecked, but was otherwise little damaged. Her fore ram, however, had torn a 9-x-3-foot hole in the sided of "Vanguard". The ram also damaged the watertight bulkhead between the "Vanguard" engine and boiler rooms, which flooded both compartments and prevented her crew from using her steam-powered pumps, [as described above]. After the incident she was commanded by Capt. Charles John Rowley, part of the Coastguard, Kingstown, from 12 Oct 1875. Following the loss, "Iron Duke" replaced "Vanguard" as the guardship at Kingstown (now Dún Laoghaire, County Dublin, Ireland, south of Dublin.), where she received the latter's crew and remained until July 1877 when the ship began a lengthy refit that lasted until Aug 1878. She was inspected by Admiral Thomas Symonds, Commander-in-Chief, Plymouth, on 22 July 1878. She then departed Plymouth on 4 August 1878, bound again for the China Station and the Far East; on route, she pulled the P&O steamship SS "Bengal" off a reef in the Red Sea on 7 Sept after two days' effort. Vice-Admiral Robert Coote hoisted his flag aboard "Iron Duke" on 9 Nov. The ship ran aground herself on a sandbar entering the Huangpu River in May 1880, after five days, she was pulled free by the American paddlewheel river gunboat U.S. "Monocacy" with little damage. Princes Arisugawa Taruhito and Arisugawa Takehito visited "Iron Duke" on 22 July while she was visiting Yokohama, Japan. Several weeks later, Arisugawa Takehito came aboard to serve as a midshipman. The ship struck a rock off the coast of Hokkaido on route to Aniva Bay, Sakhalin Island, on 30 Jul 1880. She floated off on 1 Aug after another ship had also grounded while trying to assist; her repairs required a month in drydock in Hong Kong. She was commanded (until paying off) by Capt. Richard Edward Tracey, flagship of Vice-Admiral George Ommaney Willes, on the China station, 3 Jan 1881 until 15 Mar 1883. On 28 Jan 1881, Admiral Robert Coote hauled down his flag on and was relieved by Vice-Admiral George Willes, the new Commander-in-chief, of the China Station. On 10 Oct 1881, the ship was drydocked in Nagasaki, Japan and then sailed to Wusong District, Shanghai, China on 26 Oct 1881. The "Iron Duke" returned home to Britain in Jan 1883 and began a lengthy refit that included the replacement of her boilers. The ship ran aground twice during this deployment and returned home in 1883. After a lengthy refit, the "Iron Duke" was reassigned to the Channel Fleet in 1885. On 16 Apr 1885, the ship became a member of Admiral Geoffrey Hornby's Particular Service Squadron until August, when she joined the Channel Squadron. After the ironclad "Sultan" broke loose from her anchors in Lisbon on 24 Dec 1886 during a gale and (again) accidentally rammed and sank the French steamship SS "Ville de Victoria", the crew of the "Iron Duke" manned one boat in search for survivors, although it is uncertain how many they saved. The following year, "Iron Duke" participated in Queen Victoria's Golden Jubilee Fleet review on 1 Jul 1887 at Spithead. She again became a guardship in 1890 at Hull. She was reduced to reserve in 1890 and was converted to a coal hulk in 1900, serving at Kyles of Bute, a narrow sea channel that separates the northern end of the Isle of Bute from the Cowal peninsula in Argyll and Bute, on the Scottish mainland. The ship was transferred from Fleet Reserve to Dockyard Reserve at Portsmouth in April 1902. The

ship was converted into a coal hulk a decade later and continued in that role until 1906 when she was sold for scrap on 15 May 1906 to Galbraith of Glasgow and broken up.

<u>19 Jan 1873-18 May 1875</u> Acting Lieutenant Gerald Walter Russell was re-attached as promoted to the rank of full Lieutenant on HMS "*Iron Duke*". [for the description and history see above].

13 Mar 1873 Acting Lieutenant Gerald Walter Russell was promoted to the rank of Lieutenant with seniority on the 19 Jan, confirming a Commission given by Vice-Admiral Charles Frederick Alexander Shadwell, C.B., Commander-in-Chief on the China Station, on a vacancy caused by the death of Lieutenant Edward Cooper Abbs. 19 May 1875-30 June 1879 Lieutenant Gerald Walter Russell was posted to HMS "Royal Adelaide". This is the 2nd time he served on this vessel, (the 1st when he was a Naval Cadet in June 1865. The "Royal Adelaide" was a 1st rate wooden sailing ship of the line, of the "Princess Charlotte" class. She was 2,446 tons builder's measure, with a displacement of 4,122 tons. She was actually ordered 6 Jan 1812, (not long after the shortage of vessels post Trafalgar). When first ordered in 1812 she was intended to be a 2nd rate of 98 guns, but in the general reclassifications of 1817 she was reclassed as a 1st rate. She was a triple deck vessel. She was laid down as "London" May 1819, from Plymouth Royal Dockyard, some years after she was actually ordered. On the 1 Jan 1820 she was re-ordered adding her to be built, with a semi-circular stern. She was launched 28 Jul 1828, some 9 years after being laid down and 16 years after she was 1st ordered. She was renamed in 1828 HMS "Royal Adelaide" prior to her launch. She was 197 feet 7-inches in length at her gundeck, her beam was 52 feet 10inches, with a depth of 22½ feet in her holds. Her sail plan was that of a fully rigged sailing ship. Her original armament was 104 guns as follows: gundeck: 28 × 32 pounders, 2 × 68 pounder carronades; middle gundeck: 32 × 32 pounders; upper gundeck: 32 × 24 pounders; quarterdeck: 2 × 18 pounders; 12 × 32 pounder carronades; forecastle: 2×18 pounders; 2×32 pounder carronades. Over her long life her guns were reduced in numbers. She was commissioned on Jan 1830 Plymouth Royal Dockyard. In Plymouth the "San Josef", 10 Sep 1835, was paid off into "ordinary reserve", and the "Royal Adelaide" was recommissioned with the flag of the Commander-in-Chief, Plymouth. The "San Josef" acting as the receiving ship for the "Royal Adelaide". On 1 Oct 1840 she was undocked from Plymouth, after having had her copper cleaned and repaired and further commissioning. On 1 Nov 1842 after her selection as an "Advance Ship", she was taken into dock at Plymouth to have defects made good. From Jan 1848 to 20 Dec 1848 she was still utilised as the Port Admiral's Flagship, Devonport and a training ship for Naval cadets. Between 1 Apr 1859 and July 1860, she was commanded by Capt. Woodford John Williams, guard ship of Ordinary Reserve, Plymouth (replacing HMS "Royal William". She was converted to serve as a depot ship in 1860, utilised as Devonport, as flagship of the Port Admiral and training vessel. She was also appointed Reserve Depot Ship, Devonport. From Jul 1860 to 31 Dec 1861 she was commanded by Capt. William King Hall, steam reserve depot ship, Plymouth. 3 Nov 1863 she was commanded by commanded by Capt. Henry Caldwell, Devonport, flag-ship of the Port Admiral, until 17 Feb 1864. Between 1 Jan 1862 and 31 Oct 1863, she was commanded by Capt. Charles Vesey, Devonport, as flag-ship of the Port Admiral. She was re-commissioned for Harbour Service and as Receiving Ship, Devonport. 1864 she became the Home Station, and Receiving Ship at Devonport. Reports of Small Pox onboard, and a number of cases of other disease and Injury were also reported. From 1 Nov 1866 she was commanded by Capt. George William Preedy, Devonport, as flag-ship of the Port Admiral. He was replaced by Capt. Trevenen Penrose Coode, as Devonport, flagship of the Port Admiral on the 1 Nov 1869. In 1870 she became Flag Ship, Devonport, and her guns were reduced 26 guns. 21 Dec 1870 witnessed her the base for the Court Martial of Lt M'Neale, RM, who was tried for desertion and he was dismissed from the service. By the time of the 1871 census she was the flagship at the Hamoaze, Devonport. [The Hamoaze an estuarine stretch of the tidal River Tamar, between its confluence with the River Lynher

and Plymouth Sound]. On the 8 Feb 1871 following on from the above William Tubbs, Second Mate of the Coastguard vessel "Imogene", was court martialled on board the "Royal Adelaide" for being drunk on board the "Vengeance" hulk on 30 Jan. He pleaded guilty, and taking into account his excellent character adjudged him to forfeit one year as a second mate and to be dismissed from his ship. On the 18 Feb 1871 in a 2nd court martial was held on board to try A.B. James Fenton for insubordination, and the offence being proved he was sentenced to 2 years in prison at Exeter Gaol (jail), with hard labour, and he was dismissed from the service. On the 20 Feb 1871 in a further court martial was held on board to try Assistant Paymaster Sambell, on 3 charges of wilful disobedience of the orders of the Paymaster, and was adjudged to forfeit one year's time and to be dismissed from HMS "Indus". On the "Royal Adelaide" 1871 became the year of the court martials. In 1 Oct 1875 she commanded by Capt. John Ommanney Hopkins, as flagship of Admiral Thomas Matthew Charles Symonds, Devonport, flag-ship of the Port Admiral. Between 1 Nov 1878 and 30 Oct 1879, she was commanded by Capt. William Henry Whyte and Capt. Frederic Proby Doughty, as flagship of Admiral Arthur Farquhar, Devonport, as flag-ship of the Port Admiral. In 1879 "Royal Adelaide" was reappointed as the Flag Ship, Devonport; her guns reduced to 13 guns and 1879 Officers borne for: Harbour Master, Plymouth, Plymouth Hospital. In 1879 her Tenders were: "Bruiser", "Harpy", and "Vivid". Between 30 Nov 1880 and 31 Dec 1884, she was commanded by Captain Richard Carter, Devonport, flag-ship of the Port Admiral. In Apr 1881 she and her crew appear in the British Census. On 29 Dec 1884 command was changed to Capt. William Elrington Gordon, flagship, Plymouth. Between 30 Mar 1885 and 7 Apr 1887, she was commanded by Capt. William Henry Cuming, Devonport, as flag-ship of the Port Admiral. From the 6 Apr 1887 she was commanded by Capt. Harry Woodfall Brent, Devonport, as flag-ship of the Port Admiral. In 1890 "Royal Adelaide" became a Receiving Hulk, at Devonport. In Jul 1891 she was taken from Devonport around the coast to Chatham, Kent, there to be fitted out as a training ship for boys. In Mar 1892, at Chatham, she was converted for use as a receiving ship, and will be fitted out to accommodate some 1,000+ ratings. HMS "Royal Adelaide" was eventually sold out of the navy in 4 Apr 1905, to Laider, Sunderland and Broken-up in Dunkirk. Mar 1878 Admiral C Key and Admiral Shadwell both reported in dispatches that Lieutenant Gerald Walter Russell "was a most valuable officer". 01 July 1875-30 Jun 1879 Lieutenant Gerald Walter Russell was posted to HMS "Pert", she was No. 16 of her class. Although the early vessels (1-10) were laid down and constructed in R.N. Dockyard, vessels (11-18) were sub contracted out to private yards. "Pert" was constructed in the yard of Reid & Company, Port Glasgow and launched on the 22 Jun 1868. She was Sold in Dec 1888. "Pert" (1868) was a composite screw gun vessel of the "Beacon" class (1867), and was made-up of 18 vessels. The gun-vessels designed from 1867 onwards were of composite construction, i.e. they had an iron keel, stem and stern posts, and iron framing, with wooden planking retained over the iron frames. Exact information on this vessel and its service locations is sparse, and for information an overview of the class has been included. The "Beacon" class gun vessels they were the first warships of the Royal Navy expressly designed to use the engines of an older class of ships with a different

yards. "Pert" was constructed in the yard of Reid & Company, Port Glasgow and launched on the 22 Jun 1868. She was Sold in Dec 1888. "Pert" (1868) was a composite screw gun vessel of the "Beacon" class (1867), and was made-up of 18 vessels. The gun-vessels designed from 1867 onwards were of composite construction, i.e. they had an iron keel, stem and stern posts, and iron framing, with wooden planking retained over the iron frames. Exact information on this vessel and its service locations is sparse, and for information an overview of the class has been included. The "Beacon" class gun vessels they were the first warships of the Royal Navy expressly designed to use the engines of an older class of ships with a different hull shape. They were generally deployed overseas to the China, East Indies, West Africa, Pacific, North America and West Indies Stations. In addition to showing the flag, the ships fought pirates and suppressed the slave trade in East and West Africa. As their engines wore out in the mid-1880's, they were mostly retired and scrapped by the end of the decade. A few survived into the early 1900's as they were modified for harbour service before being sold or scrapped. Designed by Sir Edward Reed, the Director of Naval Construction, as replacements for the various gun vessels built for the Crimean War. Being built of green timber, their hulls were starting to rot after a decade or more in service, but their engines were still generally sound. As the older ships were broken up their engines were salvaged and transferred to "Beacon" class ships under construction. Combat experience against Chinese fortifications had

shown that the single 32-pounder smoothbore armament of the earlier ships was not powerful enough so Reed was directed to prepare a twin-screw, shallow draft design suitable for riverine operations that incorporated a pair of steam engines from the older gunboats, a heavy armament, and enough freeboard to allow for service at sea. These rather contradictory requirements forced Mr. Reed to discard traditional wooden framing for these ships and the "Beacon" class became the first ships of the Royal Navy to be framed in iron with wooden planking. The ships were 155 feet long between perpendiculars and had a beam of 25 feet. Forward, the ships had a draught of 7 feet 9-inches, but aft they drew 9½ feet. They displaced between 603-613 tons as built and had a burthen of 464 tons. The depth of hold was 11 feet and the hull was subdivided by watertight bulkheads. Their crew consisted of 80 officers and enlisted men. Two different types of engines were used with this class. 12 ships received twocylinder horizontal return connecting rod engines built by Maudslay, Sons and Field while the remaining six got two-cylinder horizontal trunk engines from John Penn and Sons. Each engine powered a single 6-foot propeller. The engines produced between 472 and 641 indicated horsepower which gave the ships a maximum speed between 9 and 10 knots. Three cylindrical boilers provided steam to the engines, although the working pressure varied; the ships with trunk engines used 80 psi while the other engines used 60 psi. The ships carried 90 tons of coal although no range figures are available. To minimise their draught the "Beacon" class were given a very full hull shape with squared-off bilges and a flat bottom. Admiral G. A. Ballard commented that they were built "along the lines of an extremely elongated packing crate." This made them steady gun platforms and gave them quite a bit of buoyancy. If they ran aground, this shape allowed them to be pulled off easily and they remained upright if stranded by a receding tide. However, this hull shape made their steering erratic at low speeds or in a following sea and they made a large amount of leeway in a strong side breeze. The class was barque rigged and their best speed under sail alone was over 12 knots if running before the wind, despite the drag of the propellers, which could neither be hoisted out of the water, nor feathered. In a headwind, Ballard described them as "quite unmanageable under sail alone", while Preston claims they "sailed like tea trays". Their funnels were hinged to lower horizontally to reduce wind resistance while under sail. "Avon", "Dwarf" and "Elk" were re-rigged as barquentines after 1880. A poop deck was added in between commissions to some of the ships, but this was the only major structural change made during their careers. The ships were initially armed with a mix of 7-inch and 64-pounder 56 cwt rifled muzzle-loading guns and a pair of 20-pounder rifled breechloading guns. The 7-inch and 64-pounder guns were mounted on the centreline as pivot guns while the two 20-pounder guns were mounted at the bow and stern as chase guns. The 16-calibre 7-inch gun weighed 6.5 tons and fired a 112-pound shell. It was credited with the nominal ability to penetrate 7·7-inch armour. A lighter, 4·5-ton, 7-inch gun developed in the 1870's replaced the heavier gun in "Avon" and "Elk". It replaced both heavy guns in "Lynx", "Hornet", "Flirt", and "Rocket". These ships were primarily designed for service in Southeast Asian waters, including the rivers, and most of the ships spent at least one commission there. "Hornet", "Midge", and "Gnat" spent their whole careers there. Service of "Gnat", however, was rather short as she ran aground and was wrecked on Balabac Island, south of the Philippines, less than a year after she was commissioned. Their duties included protecting British lives and property and fighting pirates. Another major deployment area was the Gulf of Guinea in West Africa where "Fly", "Lynx", "Flirt", "Dwarf", "Beacon", "Avon", "Pert", "Growler", "Rocket", "Hart", and "Boxer" all spent part of one or more commissions. "Beacon" supported British coastal operations during the Third Anglo-Ashanti War in 1873 while most of the others engaged river pirates at various times. "Rocket", "Elk", "Dwarf", "Beacon", and "Avon" served at least one commission off the south-east coast of South America, while "Cracker" spent her entire career there. "Dwarf" made a port visit to Asunción, on the Paraguay River, some 600 miles from the ocean during one of her tours in the region. "Teazer", "Lynx", "Beacon", and "Thistle" each made one deployment to the

East Indies Station where they helped to suppress the slave trade between East Africa and the Persian Gulf. "Beacon", "Hart", and "Growler" were deployed to the Mediterranean where the former participated in the Bombardment of Alexandria in 1882. "Fly", "Flirt", "Boxer", and "Pert" each spent a commission on fishery patrol on the Grand Banks of Newfoundland. "Boxer" was also deployed to British Columbia to maintain order with the Indian tribes there. By the early 1880's, their engines were becoming worn out and most of the ships were placed into reserve for a few years before being sold for breaking up. The machinery of "Avon", "Dwarf" and "Elk" was in good enough shape that they were assigned as tenders to the coastguard district ships at Hull, Southampton, and Liverpool for a number of years. "Midge" was also an exception and was retained in Chinese waters until 1907 when she was sold at Hong Kong. "Elk" lasted nearly as long in harbour service as she was reclassified as a tugboat in 1890 and was then sold as a dredger in 1905.

			- a. a. ca.gc	
	Name	Ship Builder	Launched	Fate
1.	Beacon	Chatham Dockyard	17 Aug 1867	Sold, Dec 1888
2.	Avon	Portsmouth Dockyard	2 Oct 1867	Sold, 26 Apr 1890
3.	Gnat	Pembroke Dockyard	26 Nov 1867	Wrecked on Balabac Island, 15 Nov 1868
4.	Cracker	Portsmouth Dockyard	27 Nov 1867	Broken up, 1889
5.	Dwarf	Woolwich Dockyard	28 Nov 1867	Broken up, Apr 1886
6.	Flirt	Devonport Dockyard	20 Dec 1867	Sold, Nov 1888
7.	Fly	Devonport Dockyard	20 Dec 1867	Sold, Nov 1887
8.	Elk	Portsmouth Dockyard	10 Jan 1868	To the coastguard, 1887. Tug, 1890. Sold for service as a dredger, 1905
9.	Boxer	Deptford Dockyard	25 Jan 1868	Sold, June 1887
10.	Thistle	Deptford Dockyard	25 Jan 1868	Sold, November 1888
11.	Hornet	Pearse, Lockwood & Co, Stockton-on-Tees	10 Mar 1868	Sold, 1889
12.	Rocket	London Eng. Company, Poplar, London	8 Apr 1868	Sold, Dec 1888
13.	Lynx	Harland & Wolff, Belfast	25 Apr 1868	Sold, Dec 1888
14.	Teazer	Laird Brothers, Birkenhead	28 Apr 1868	Broken up, Dec 1887
15.	Midge	Randolph & Elder, Govan	21 May 1868	Sold, 15 Mar 1907
16.	Pert	Reid & Company, Port Glasgow	22 Jun 1868	Sold, Dec 1888
17.	Hart	J. & G. Thomson, Glasgow	20 Aug 1868	Sold, Dec 1888
18.	Growler	James Lawrie, Whiteinch, Glasgow	1 Dec 1868	Sold, Nov 1887

1 Jul 1879-18 Aug 1879 Lieutenant Gerald Walter Russell was posted to HMS "Duke of Wellington". She was a wooden 1st Rate triple-decker screw vessel of 3,771 tons, with a displacement of 5,829 tons. She was converted to screw whilst still on her stocks, and her drive power was 700 horse power. She was launched from Pembroke Royal Dockyard on the 14 Sep 1852 as the HMS "Windsor Castle" on the day when the Duke of Wellington died, she was renamed in honour of the Duke, 1 Oct 1852. She was 241 feet in length, carrying 131 guns and a complement of 1,100 men and officers. From 2 Feb 1853-25 Feb 1854 she was commanded, actually from commissioning, by Commodore Henry Byam Martin, Western (Channel) squadron. From 4 Mar 1854 she was commanded by Capt. George Thomas Gordon, flagship of Vice-Admiral Charles Napier, the Baltic during the Russian War. She was commanded from 4 Apr 1857 to 27 Mar 1857 by Capt. Henry Caldwell, flagship of Rear-Admiral Richard Saunders Dundas, in the Mediterranean. From 2 Mar 1858 until 30 June 1858 she was commanded from re-commissioning at Portsmouth until paying off at Portsmouth) by Capt. Harry Eyres, depot ship of the ordinary, Portsmouth. From 1 May 1863 she was commanded by Capt. John Sercombe, Portsmouth, training ship for seamen (replacing HMS "Hannibal"). From 12 Jul 1863 to 10 Sep 1867 she was commanded by Capt. Charles Fellowes, training ship for seamen, Portsmouth. From 10 Sep 1867 until 1872 she was commanded by Capt. George Hancock, Portsmouth, training ship for seamen, then on the 20 Dec 1869 she became flagship of the port admiral, replacing HMS "Victory" which became a tender. From the 1 May 1872 command was taken by Capt. Henry Carr Glyn, as flagship of the port admiral, Portsmouth. From 1 Mar 1875 to 1876 she was commanded by Capt. Francis William Sullivan, as the flagship of the port admiral, Portsmouth. From 16 Oct 1876 she was commanded by Captain Walter Cecil Talbot, flagship of Admiral Edward Gennys Fanshawe, flagship of the port

admiral, Portsmouth. From 9 May 1882 until 27 Oct 1884 she was commanded by Captain Charles John Rowley, flagship of the port admiral, Portsmouth. From 24 Oct 1884 until 1886 she was commanded by Captain Philip Howard Colomb, flagship of the commander-in-chief, Portsmouth. On the 31 Mar 1888 she was paid-off. 04 Oct 1879-2 Jan 1880 Lieutenant Gerald Walter Russell was posted to HMS "Cambridge", gunnery training ship at Devonport.for gunnery course which he passed. 3 Jan 1880-13 Feb 1880 Lieutenant Gerald Walter Russell was posted to HMS "Vernon" for Torpedo course which he passed. HMS "Vernon" was a shore establishment [or "stone frigate"] of the Royal Navy. HMS "Vernon" was established on 26 Apr 1876 as the Royal Navy's Torpedo Branch also known as the Torpedo School, named after the ship HMS "Vernon" which served as part of its first floating base. The original HMS "Vernon" the vessel, was a 50-gun 4th Rate launched in 1832. She became tender to the Navy's gunnery school HMS "Excellent", and then the torpedo school ship in 1876. She was renamed HMS "Actaeon" in 1886 and sold in 1923. The second ship to be called HMS "Vernon" ended her career laid up in Chatham Dockyard as a floating coaling jetty. In 1872 she was moved to become a tender to HMS "Excellent" for torpedo and mining training. In 1874 she was joined by HMS "Vesuvius", an iron screw torpedo vessel. The "Vesuvius" was attached as an Experimental Tender for the conduct of torpedo trials, and remained in the role until 1923. On 26 Apr 1876 "Vernon" was joined by the former steam frigate HMS "Ariadne" and the lighter "Florence Nightingale". These were then recommissioned as HMS "Vernon", and became the home of the Royal Navy's Torpedo Branch, independent of HMS "Excellent". The "Ariadne" was used to provide accommodation. In Jan 1886 HMS "Donegal" replaced the original "Vernon" as a more spacious torpedo school ship. The "Donegal" was renamed "Vernon", the original "Vernon" was renamed "Actaeon" and took over as the practical workshop. On 23 Apr 1895 the hulks were moved to Portchester Creek. The "Ariadne" was replaced as an accommodation hulk by the old HMS "Marlborough", which was renamed "Vernon II" and was connected by bridges to the "Actaeon" and "Vernon", jointly named as "Vernon I". In 1904 HMS "Warrior" joined the establishment as a floating workshop, power plant and wireless telegraphy school, renamed "Vernon III". Meanwhile, the "Actaeon" was renamed "Vernon IV". Also, in 1904 "Ariadne" was detached and sent to Sheerness to be used to establish a new torpedo school. She was renamed "Actaeon" in 1905. During the period of when Lieutenant Gerald Walter Russell was attached HMS "Vernon" was commanded by Capt. Albert Hastings Markham, Feb. 1883 to May 1886.

18 May 1880-24 Sep 1880 Lieutenant Gerald Walter Russell was posted to HMS "Minotaur". She was the lead-ship of the "Minotaur" class armoured frigates built for the Royal Navy. They were the longest single-screw warships ever built. The "Minotaur" took nearly 4 years between her launching and commissioning because she was used for evaluations of her armament and different sailing rigs. The "Minotaur" class ships were 400 feet long between perpendiculars and 411 feet long overall. They had a beam of 58½ feet and a draft of 26 feet 10-inches. The ships displaced 10,627 tons (light) and 10,798 tons (heavy). The hull was subdivided by 15 watertight transverse bulkheads and had a double bottom underneath the engine and boiler rooms. HMS "Minotaur" was originally ordered on 2 Sep 1861 as HMS "Elephant", in honour of the ship once commanded by Nelson 70-years before, but her name was changed to "Minotaur" during construction. She was laid down on 12 Sep 1861 by the Thames Ironworks in Blackwall, London. She was launched on 12 Dec 1863, commissioned in April 1867 and completed on 1 Jun 1867. The lengthy delay in completion was due to frequent changes in design details, and experiments with her armament and with her sailing rig. The ship cost a total of £478,855. The "Minotaur" class armoured frigates were essentially enlarged versions of the ironclad HMS "Achilles" with heavier armament, armour, and more powerful engines. They retained the broadside ironclad layout of their predecessor, but their sides were fully armoured to protect the 50 guns they were designed to carry. Each ship was equipped with a

plough-shaped ram that was also more prominent than that of "Achilles". The "Minotaur" had a two-cylinder trunk steam engine, made by John Penn and Sons, that drove a single 24-foot propeller. Ten rectangular fire-tube boilers provided steam to the engine at a working pressure of 25 psi. The engine produced a total of 6,949 indicated horsepower during the ship's sea trials on 10 May 1867 and she had a maximum speed of 14·33 knots. The ships carried 750-760 tons of coal, enough to steam 1,500 nautical miles at 7.5 knots. The ship had five masts and a sail area of 32,377 square feet. Because her propeller could only be disconnected and **not** hoisted up into the stern of the ship to reduce drag, HMS "Minotaur" only made 9.5 knots under sail. Both funnels were semi-retractable to reduce wind resistance while under sail. Admiral George A. Ballard described "Minotaur" and her sisters as "the dullest performers under canvas of the whole masted fleet of their day, and no ships ever carried so much dress to so little purpose". The "Minotaur" was considered "an excellent sea-boat and a steady gun platform, but unhandy under steam and practically unmanageable under sail" as built. Steam-powered steering improved her manoeuvring qualities significantly when it was installed in 1875 and she was judged "one of our very best maneuverers we have in the Navy" by Vice Admiral Philip Colomb in 1890. The ship's steadiness was partially a result of her metacentric height of 3.87 feet. The armament of the "Minotaur" class ships was intended to be 40 rifled 110-pounder breech-loading guns on the main deck and 10 more on the upper deck on pivot mounts. The gun was a new design from Armstrong, but proved a failure a few years after its introduction. The gun was withdrawn before any were received by any of the "Minotaur" class ships. They were armed, instead, with a mix of 7-inch and 9-inch rifled muzzle-loading guns. All 4 x 9-inch and 20 x 7-inch guns were mounted on the main deck while 4 x 7-inch guns were fitted on the upper deck as chase guns. The ship also received eight brass howitzers for use as saluting guns. The gun ports were 30 inches wide which allowed each gun to fire 30° both fore and aft of the beam. The shell of the 14-calibre 9-inch gun weighed 254 pounds while the gun itself weighed 12 tons. It had a muzzle velocity of 1,420 feet/s and was credited with the ability to penetrate a 11.3 inches of wrought iron armour at the muzzle. The 16calibre 7-inch gun weighed 6.5 tons and fired a 112-pound shell. It was credited with the ability to penetrate 7·7-inch armour. The entire side of the "Minotaur" class ships was protected by wrought iron armour that tapered from 4.5 inches at the ends to 5.5 inches amidships, except for a section of the bow between the upper and main decks. The armour extended 5 feet 9-inches below the waterline. A single 5.5-inch transverse bulkhead protected the forward chase guns on the upper deck. The armour was backed by 10-inches of teak. HMS "Minotaur" finally commissioned in Portsmouth as the flagship of the Channel Squadron, a position which she retained until 1873. The ship spent the bulk of her active career as flagship of the Channel Squadron. In 1868 the ship nearly rammed the ironclad HMS "Bellerophon" as they were leaving Belfast Lough. The "Minotaur" lost her bowsprit and fore top-gallant mast, but "Bellerophon" only suffered some minor flooding. She was paid off for a long refit in 1873 and resumed her position in 1875 when she re-joined the Channel Squadron. She was re-armed in 1875 with a uniform armament of 17 x 9-inch guns, 14 on the main deck, two forward chase guns and one rear chase gun. The gun ports had to be enlarged to accommodate the larger guns by hand, at a cost of £250 each. About 1883, 2 x 6-inches breech-loading guns replaced 2 x 9-inch muzzle-loading guns. 4 x quick-firing Q.F. 4·7-inch guns, 8 x Q.F. 3-pounder Hotchkiss guns, 8 x machine guns and 2 x torpedo tubes were installed in 1891–2. The "Minotaur" became the first ship in the Royal Navy to receive a permanent installation of an electric searchlight in 1876. The ship was the flagship of Vice Admiral Sir William Hewett, (who had earned himself the Victoria Cross in the Siege of Sevastopol in 1854), during Queen Victoria's Golden Jubilee Fleet Review on 23 Jul 1887. HMS "Minotaur" was paid-off at the end of 1887 in Portsmouth and assigned to the Reserve until 1893 when she became a training ship at Portland. The "Minotaur" was reboilered in 1893 and with her increased 6,288 i.h.p., reached a top speed of 14 knots. In 1893-4, after

her withdrawal from active service, the "Minotaur" had two masts removed and was re-rigged as a barque. She was renamed HMS "Boscawen II" in Mar 1904 and transferred in 1905 to Harwich as part of the training school HMS "Ganges" training school. The ship was renamed 11 Jun 1906 as HMS "Ganges" and then to "Ganges II" on 25 Apr 1908. The "Minotaur" was renamed several times during her life, before being sold for scrap in 30 Jan 1922 and broken up for scrap the following year. 25 Sep 1880-22 Apr 1884 Lieutenant Gerald Walter Russell was posted and attached to HMS "Tourmaline", which was utilised as a mail steamer. H.M.S. "Tourmaline" was one of 6 "Emerald" class composite corvettes completed for the Royal Navy. The class was designed by Nathaniel Barnaby. HMS "Tourmaline" was built at William Roylton and Dixon Co, Middlesbrough, and laid down in 1874 and launched 30 Oct 1875 and completed and commissioned 25 Oct 1870 at Sheerness. The frames and keel were made of wrought iron and the stem and stern posts made of cast Iron. The cladding was made of double layer of teak with the first layer being secured directly to the frames. and the second secured to the first layer. Due to the Admiralty deciding to put-out the engine-contract to tender resulting in price cutting all the class received inferior engines. So bad were the engines that the Chief Engineer of the "Tourmaline" actually committed suicide. She was a composite screw corvette with a builder's measurement of 1,864 tons, a displacement of 2,120 tons (light) and 2,150 tons (heavy). She was 220 feet between perpendiculars, with a beam of 40 feet, and draught of 18 feet. Her Installed power was 2,031-2,364 Indicated horsepower. Her propulsion was from 1 × 2-cylinder compound-expansion steam engine, with steam from 6 cylindrical boilers, driving a single shaft. Her sail plan was that of a fully rigged sailing ship. Her speed was 12–13 knots and her range was 2,000–2,280 nautical miles at 10 knots. Her armaments at commissioning were 10 × 64-pounder 71-cwt rifled muzzle-loading R.M.L. guns; 2 × 64-pounder 64-cwt R.M.L. guns and a bow ram. Later in her service, HMS "Tourmaline" had her armaments changed to 5-inch breechloaders and 4 x 6-inch breech-loader guns as her heaviest armament. She carried a complement of 230 men and officers. A Class overview show the "Emerald" class, preceded by HMS "Rover" and later succeeded by the "Bacchante" class. The "Emerald" vessels were constructed between 1873–1878 a list follows:

emeraia ve	esseis were co	nstructed t	bermeen 19	2/2-19/9	a list ioi	iows:
Overview of 6 "Emerald" class vessels:						
H.M.S.	Builder	Laid Down	Launched	Complet ed	Costs	Fate
"Emerald"	Pembroke Royal Dockyard	29 Jul 1874	18 Aug, 1876	2 Jul 1878	£98,442	Converted to powder hulk, 1898; sold for scrap 10 Jul 1906
"Garnet"	Chatham Royal Dockyard	16 Mar 1875	30 Jun, 1877	31 Oct 1878	£92,468	Sold for scrap Dec 1904
"Opal"	William Doxford & Sons, Sunderland	13 Oct 1873	9 Mar, 1875	Jan 1876	£95,949	Sold for scrap, 11 Aug 1892
"Ruby"	Earle's Shipbuilding, Hull	8 Jul 1874	9 Aug, 1876	14 Jun 1877	£93,116	Converted to coal hulk, Dec 1904; sold for scrap 16 Feb 1921
"Tourmaline"	William Raylton Dixon, Middlesbrough	17 Jul 1874	30 Oct, 1875	25 Oct 1876	£95,769	Converted to coal hulk, 1899; sold for scrap Nov 1920
"Turquoise"	Earle's Shipbuilding, Hull	8 Jul 1874	22 Apr, 1876	13 Sep 1876	£95,547	Sold for scrap, 24 Sep 1892

In 1879 "*Tourmaline*" was on the North America and West Indies Stations. In 1880-82 attached to the Flying Squadron; she visited Montevideo, Captetown, Australia, Fiji, Japan and China and then departed, with the "*Inconstant*", via the Cape of Good Hope, for the Mediterranean and the Egyptian war. In 1890 she was operational on the North America and West Indies Station. As part of the Detached Squadron of the Royal Navy was a squadron of warships intended to patrol all of the sea lanes of the British Empire. In 1881 the Squadron consisted of HM Ships "*Bacchante*", "*Carysfort*", "*Cleopatra*", "*Tourmaline*" and "*Inconstant*". On the 29 July 1881 the Detached Squadron arrived in Sydney on a "flag-showing-cruise". A Photograph exists, taken over the period, after the Squadron had returned from a trip to Melbourne. Another

photograph exists showing the last of the "Emerald" 1870 class cruisers returning from Bermuda flying the pennant of Capt. Sir Richard Poore in 1896. A photograph also exists showing the enlisted-crewmen of HMS "Tourmaline", throwing themselves down-flat on deck after receiving the order "Prepare to Ram" being given, in order to avoid injuries from the shock of the collision. Likewise, photographs exist showing HMS "Tourmaline" Fife and Drum Band in 1896. "Tourmaline" was commanded by Captain George Robinson, on the Pacific station, from 17 Sep 1877. From Apr 1878 to 2 Aug 1878 she was commanded by Capt. Charles Richard Fox Boxer, in the West Indies (until Boxer was invalided). From 2 Aug 1878 she was commanded by Capt. Robert Peel Dennistoun, on the North America and West Indies stations. From 12 Aug 1886 she was commanded by Capt. Mather Byles. From 6 Oct 1889 she was commanded by Capt. John H. Rainier. Who was in turn succeeded on 4 Apr 1893 by Capt. Sir Richard Poore, 4th Bart. She was re-commissioned at Bermuda on 13 Nov 1889. HMS "Tourmaline" was paid off in July- Aug 1896 and utilised as a coal hulk, renamed "#1799". In 1904 becoming a coal hulk, renamed "C.115" and finally sold for scrapping in 1920-21.

15 Jan 1883 Lieutenant Gerald Walter Russell was sent to sick-bay, suffering from a debilitating illness due to unknow factor. Here he remained for 15 days.

27 Sep 1883 Report of the Sir Stewart Weeks' inspection "recommended this officer Lieutenant Gerald Walter Russell was posted for further promotion".

<u>31 Dec 1883</u> Lieutenant Gerald Walter Russell was promoted to the rank of Commander upon the promotion of Commander John Coke Burnell.

23 Apr 1884 Commander G. W. Russell arrived back in England for full paid leave.
23 Apr 1884-8 Jun 1885 Commander Gerald Walter Russell was again attached to HMS "Duke of Wellington". (A description and history of this vessel is given above). During this period, she was commanded by Capt. Charles John Rowley, as flagship of the port admiral, Portsmouth, 9 May 1882 to 27 Oct 1884. From 24 Oct 1884 until 1886 she was commanded by Capt. Philip Howard Colomb, again as flagship of the commander-in-chief, Portsmouth. On 31 Mar 1888 she was paid-off. On 12 April 1904 she was sold to Castle Charlton & Co. for breaking.

<u>Jul 1885</u> Admiral Sir G Hornby spoke of Gerald Walter Russell and "his conspicuous ability in the Particular Service Squadron".

30 Sep 1884-6 Feb 1885 Commander Gerald Walter Russell posted and attached on board HMS "President" for study courses at Royal Naval College, Greenwich, which he attended on full pay. Originally HMS "President" was a wooden 4th Rate sailing vessel of 1,537 tons (builder's measure) armed with 52 guns, launched from Portsmouth Dockyard on 20 Apr 1829. She was 173½ feet in length, with a beam of 45 feet. She was converted to a drill ship in Apr 1862 and berthed at the West India Docks, London. She was renamed the "Old President" from 25 Mar 1903 and was sold-off 7 Jul 1903. **5 Feb 1885-14 Apr 1888** Commander Gerald Walter Russell posted and attached on HMS "Sultan" in Channel Fleet. She was a broadside ironclad of the Victorian Royal Navy, who carried her main armament in a central box battery. She was named for Sultan Abdülâziz of the Ottoman Empire, who was visiting England when she was laid down. Abdülâziz cultivated good relations with the 2nd French Empire and the British. In 1867 he was the first Ottoman sultan to visit Western Europe; his trip included a visit to England, where he was made a Knight of the Garter by Queen Victoria and shown a Royal Navy Fleet Review, with Isma'il Pasha of Egypt. HMS "Sultan" was laid down at the Chatham Royal Dockyard 29 Feb 1868. She was launched 31 May 1870 and completed 10 Oct 1871, when she proceeded to Portsmouth for final commissioning. HMS "Sultan" was 325 feet in length, with a beam of 59 feet, her draught was 25½ feet light and 28 feet 9 -inches deep load. She displaced 9,290 tons (light) and 9,439 tons (heavy). Her propulsion was from a Penn trunk engine, 7,720 i.h.p. driving one-shaft. Her Sail plan was that of a full rigged sailing ship, sail area 49,400 square feet. She had a speed of 14·13 knots under power; but only 6 knots under sail. She carried a complement of 633 men and officers. Her armament was as follows: 8 × 10-inch rifled muzzle-loading guns; 4 × 9-inch muzzle-loading rifles guns; 7

× 20-pounder breech-loading rifles. Her armour was as follows: belt: 6–9-inches; main deck battery: 9-inches; upper deck battery: 8-inches; bulkheads: 4·5-6-inches. With the exception of some small warships designed only for harbour defence, every ironclad warship so far completed, starting from HMS "Warrior", had mounted their main armament in broadside batteries. Although the turret-armed ships HMS "Monarch" and HMS "Captain" were being built, it was decided by the Board of Admiralty that, pending results from these two experimental ships, the "Sultan" would carry her artillery in a centrally-placed box battery. The design of the ship was closely based on the design of HMS "Hercules". Unlike the battery of the earlier ship, that of "Sultan" was on two levels; the main deck guns provided broadside fire, with limited ahead fire from the foremost gun, while the upper deck guns provided additional broadside fire and also could fire astern, by traversing the after gun on a turntable. The hull had one of the roundest amidships cross-section ever adopted at the time of her launch, and this and the low metacentric height of only 3 feet made her a very steady gun platform. It was soon found, however, that she lacked adequate stability - in naval parlance she was "tender" - and some 600 tons of extra ballast had to be inserted into her double bottom. She was commissioned 1871 at Portsmouth for the Channel Fleet, in which she served until 1876. She was refitted, being reduced to barque rig, and posted to the Mediterranean under the command of His Royal Highness the Duke of Edinburgh. She was with Admiral Geoffrey Hornby at the Dardanelles in 1878. She was then again refitted, and reduced to reserve until 1882, when she returned to the Mediterranean. At the bombardment of Alexandria (1882) she sustained casualties of 2 killed and 8 wounded from a single hit on the battery. She was with the Particular Service Squadron during the Russian war scare of Jun-Aug, 1885, and was retained in the Mediterranean thereafter. On 6 Mar 1889 she grounded on an uncharted rock in the Comino Channel between Malta and Gozo, ripping her double-bottom open. The "Temeraire" unsuccessfully tried to pull her off. The "Sultan" slowly flooded and in a gale on 14 Mar 1889 she slipped off the rock and sank. She was raised in August by the Italian firm of Baghino & Co for a fee of £50,000. On 27 Aug the "Sultan" was brought into Malta. Malta dockyard made preliminary repairs. In Dec 1889, the "Sultan" made the passage back to Portsmouth under her own steam, at 7 knots (although accompanied by another ship), arriving at Spithead on 22 Dec. The "Sultan" was put in dry dock at Portsmouth. Between Oct 1892 and Mar 1896, she was modernised at a cost of over £200,000. She was given two tall funnels, a double bridge forward, and new decks. Her old sailing rig was removed, and replaced by two military masts with fighting tops. She was given modern boilers capable of 150 psi, and modern triple-expansion engines made by J & G Thomson of Clydebank. At natural draught, on trial in late May 1895, these made 6,531 indicated horsepower giving an average speed 14.6 knots. On a four-hour trial, with forced draught, she made an average of 15.3 knots, for a power of 8,244 indicated horse power. Parkes reported that "there was intense vibration on these trials". As modernised her armament consisted of the following: 8 × 10-inch M.L.R. guns; 4 × 9-inch M.L.R. guns; 4 × 4.7-inch Q.F. guns; 9 × 2·24-inch 6-pounder Q.F. guns (of either Nordenfelt or Hotchkiss pattern); 13 × 1·85 3-pounder Q.F. guns; 7 × machine-guns; 2 × light field guns. As the modernisation affected the distribution of weights on the ship, her beam was increased with a waterline girdling of 9-inches of teak, which raised her metacentric height. The Engineer, London-based monthly magazine, seriously criticised the decision to retain the muzzle-loading guns, saying that "So much money has been spent on this ship since she was brought home from the Comino Channel that one would like to see a better result". According to Parkes, "nothing could be done to strengthen the old M.L. battery"; he thought that the old ship was not worth the money spent modernising her. She then served in the Reserve. She commissioned for sea-service twice whilst in reserve as follows:

- For the 1896 annual manoeuvres, from 8 Jul to 25 Aug 1896, when she served as one of the battleships of the C Fleet based in Milford Haven.
- For the 1900 annual manoeuvres, from 10 Jul to 24 Aug 1900, when she served

as one of the 12 battleships of the A Fleet based in Ireland. The action on 2 Aug took the form of a general chase of the A Fleet by the stronger B Fleet. To get away, the A Fleet steered a course against a strong head wind and heavy sea, which was sustained for hours. This obliged the A Fleet to detach the old "Dreadnought" (1875) and send her to Queenstown. The "Sultan" was able to keep up for a while, but when the A Fleet made 13 knots, "Sultan" struggled to maintain her station, and eventually had to be detached and sent to Berehaven, Cork, Southern Ireland, allowing the remaining battleships (of the "Royal Sovereign" and "Majestic" classes) to quicken their speed to 14 knots and get away.

In 1906, she was partially dismantled and became an artificers' training ship under the name of "Fisgard IV"; in 1931 she was further converted into a mechanical repair ship, regaining her original name of "Sultan". During the Second World War, she was a depot ship for minesweepers at Portsmouth, and was sold on 13 Aug 1946. She arrived 8 Oct 1946 at Dalmuir, an area on the western side of Clydebank, in West Dunbartonshire, Scotland, for breaking. HMS "Sultan" was commanded (from commissioning at Portsmouth) by Capt. Edward Westby Vansittart, as part of the Channel squadron, from 12 Sep 1871 to 20 Jul 1873. From 30 July 1873 she was commanded by Capt. Anthony Hiley Hoskins, as part of the Channel squadron. From 25 Feb 1876 until 27 Apr 1878 she was commanded by Capt. Duke of Edinburgh, on the Mediterranean Station. From 3 Apr 1882 she was commanded by Captain Walter James Hunt-Grubbe, again as part of the Channel squadron, then Dec 1882, back on the Mediterranean Station (including involvement in the Bombardment of Alexandria, where Hunt-Grubbe was in command of the ships which engaged the northern forts), then Channel squadron again. From 2 May 1884 to July 1885, she was commanded by Capt. Richard Edward Tracey, as part of the Channel squadron

<u>Jan 1886</u> Vice Admiral Fellows reported on Gerald Walter Russell that "the ship was very efficient" and expressed his complete satisfaction.

<u>Aug 1887</u> Vice Admiral Connelly of the Channel Squadron commented "in submitting Capt. Richards recommendation for promotion". Sir William Helsett stated that he had the highest opinion of Commander Russell's abilities as an executive officer.

15 Apr 1888-3 Jul 1888 Commander Gerald Walter Russell placed on ½ pay. 4 Jul 1888-10 Sep 1888 Commander Gerald Walter Russell was attached to HMS "Inflexible" as part of the Home Fleet. She was a Victorian ironclad battleship carrying her main armament in centrally placed turrets. The ship was constructed in the 1870's to oppose the perceived growing threat from the Italian "Regia Marin" (Italian Royal Navy) in the Mediterranean. The Italian Navy had started constructing a pair of battleships, Caio Duilio and Enrico Dandolo, each equipped with 4 x Armstrong 17-7inch guns weighing 100 tons each. These were superior to the armament of any ship in the British Mediterranean Squadron, "Inflexible" was designed as a counter to them. She mounted larger guns than those of any previous British warship and had the thickest armour ever to be fitted to any Royal Navy ship. Controversially, she was designed so that if her un-armoured ends should be seriously damaged in action and become water-logged, the buoyancy of the armoured centre section of the ship would keep her afloat and upright. The ship was the first major warship to depend in part for the protection of her buoyancy on a horizontal armoured deck below the waterline rather than armoured sides along the waterline. The original concept was based upon an outline design similar to that for HMS "Dreadnought", but with greatly improved armament. The ship was conceptually constructed from three components; several outline studies being produced by Nathaniel Barnaby. A heavily armoured citadel 75 feet wide and 110 feet long was located amidships, which would keep the ship afloat and stable regardless of what happened to the ends. This citadel contained the main guns, the boilers and the engines. The ends were unarmoured, but with a 3inch-thick armoured deck 6-8 feet below the waterline to limit damage to the underwater section to keep them buoyant. Coal bunkers were located over the armoured deck and surrounded by 4-foot-wide compartments filled with cork. The

ship had bunker capacity for 400 tons of coal below the deck for use during combat, when the above-deck bunkers would be inaccessible and possibly flooded. The structure above the armoured deck also contained a large number of watertight compartments to further preserve buoyancy. There was also light superstructure to provide crew accommodation, and freeboard in rough weather, although anticipated to be seriously damaged in any major engagement. Barnaby wanted a ship both broader than existing designs to minimise rolling and as short as possible to reduce its size as a target. Making a ship broader compared to its length was known to reduce its speed, so the innovative technique of water tank tests on models, pioneered by William Froude, was used to finalise a design. This was 10-feet wider than "Duillo" and 21-foot shorter, the smallest ever ratio of length to breadth in a metal first class warship. Once the outline design was agreed, the detailed architectural design was done by William White and she was laid down at Portsmouth Dockyard on 24 Feb 1874. She was launched 27 Apr 1876, completed 18 Oct 1881 and Sold off in 1903. On completion the ship was sent to join the Mediterranean squadron. She took part in the bombardment of Alexandria on 11 Jul 1882 during the Urabi Revolt, firing 88 shells and was struck herself twice; one 10-inch shell killed the ship's carpenter, mortally wounded an officer directing the fire of a 20-pounder breech-loader, and injured a seaman. The blast from the "Inflexible" own 16-inch guns did considerable damage to upper-works and her boats. She was refitted in Portsmouth in 1885, when the full sailing rig was removed. She was in the Fleet Reserve until 1890, except for brief service in the 1887 review and the manoeuvres of 1889 and 1890. She was recommissioned for the Mediterranean Fleet from 1890 to 1893, serving thereafter as Portsmouth guard ship until 1897. From there she went to Fleet Reserve and in Apr 1902 to Dockyard Reserve, until sold at Chatham in 1903 for scrap.

11 Sep 1888-25 Oct 1888 Commander Russell found himself on ½ pay. 26 Oct 1888-3 Oct 1889 Commander Russell attached to HMS "Lilly" (Lily). She was an "Arabis" or "Arab" class composite gun-vessel built for the Royal Navy. She was the 8th vessel to carry the name. Her sister ship was HMS "Arab", sold for breaking, 1889. Both ships were ordered and laid down in 1873 from Robert Napier and Sons, at Yard Number 334, Govan, Glasgow, Scotland. She cost £34,108. She was launched 27 Oct 1874 and commissioned at Devonport in Aug 1875. Designed by Nathaniel Barnaby, the Royal Navy's Chief Constructor. Her hull was built of iron frames and ribs, and planked in wood. This "composite" construction was both cheap and easy to repair and allowed the wooden planking to be coppered, reducing marine growth. On farflung colonial stations, the benefits of both simple repair and reduced marine growth were particularly positive, due to a lack of substantial ship repair and careening facilities. For this reason, smaller vessels like the "Arab" class continued to use composite construction until long after larger vessels had transitioned to iron or steel construction. She was 167-feet (overall) 150-feet 2-inches (between perpendiculars) in length, her bean was 28½ feet with a draught of 13½ feet and a hold depth of 17½ feet. She displaced only 720 tons. Her installed power was 829 ihp, 95 hp, steam at 60 psi being produced from 3 × boilers, which drove 1 × 2-cylinder horizontal compound-expansion steam engine. Her propulsion was via a single screw which could be hoisted when sailing. She achieved a trials speed of 10.7 knots under power. A sailing rig was provided, with square rig on the fore and main masts, and fore-andaft rigging only on the mizzen, giving her a barque rig. She had a speed of 10 knots and a range of 790 nautical miles at 10 knots. She carried a complement of 90 men and officers. Her main armament was as follows: 1 × 7-inch rifled muzzle-loading gun amidships; 2 × 6·3-inch 64-pounder rifled muzzle-loading guns one forward and one aft, and both fitted on traversing slides; 2 × machine guns; and 1 × light gun. HMS

"Lily" served on the China station and was recommissioned at Hong Kong in 1879. She saw service in Chinese and North American waters. She was actually decommissioned in 1885, but reprieved. By Apr 1886 she was serving on the North America and West Indies station. HMS "Lily" was wrecked off Point Amour Lighthouse, in the Straits of Belle Isle, Labrador, Canada (north of Newfoundland) in thick fog on 16 Sep 1888. A

capsized boat caused the death of 7 of her ship's company.

<u>Sept 1889</u> the findings court martial into the loss of HMS "*Lilly*" on the Labrador Coast, was due to negligence and want of due precautions in navigation. Commander Russell was severely reprimanded in writing by the Admiralty.

<u>Oct 1889</u> Vice Admiral Watson reported Commander Russell's "great activist due to the manner in which with Newfoundland Fisheries was carried out. Recommended for further promotion".

<u>3 Oct 1889</u> Commander Gerald Walter Russell (shipwrecked), was allowed to join Torpedo and Gunnery Courses.

4 Oct 1889-8 Jan 1890 Commander Gerald W. Russell found himself again on ½ pay. 19 Oct 1889 Commander Gerald Walter Russell was posted and attached to HMS "Polyphemus". She was the 3rd vessel to use the name in the Royal Navy. She was a torpedo ram vessel, serving from 1881 until 1903. A shallow-draft, fast, low-profile vessel, she was designed to penetrate enemy harbours at speed and sink anchored ships. Designed by Nathaniel Barnaby primarily as a protected torpedo boat, the ram was provided very much as secondary armament. It has been suggested that H. G. Wells' fictional HMS Thunder Child from his novel The War of the Worlds may have been based on this ship, in part because he described "Thunder Child" as an ironclad torpedo ram, and "Polyphemus" was the only ship of this type which the Royal Navy possessed. The Admiralty set up the "Torpedo Committee" in 1872 to examine ways in which the newly invented Whitehead torpedo could be launched at sea. The Royal Navy's first purpose-built torpedo launching ship was HMS "Vesuvius", which, with a maximum speed of less than 10 knots, was intended to stealthily approach within a few hundred yards of enemy ships at night to launch her torpedoes. Leading on from this, Barnaby and his assistant J Dunn, proposed a fast-deep cigar-shaped vessel with five submerged torpedo tubes and protected by 2 inches of armour over the deck. The design was modified in late 1875 into a larger vessel equipped with a ram. Early in 1876 the design was modified again into a 240-foot-long unarmoured torpedo ram with a top speed of 17 knots. Later the design was modified yet again to have armour added to the exposed steel deck. The "Polyphemus" was ordered on 5 Feb 1878 at Chatham Naval Dockyard, and was laid down, 21 Sep 1878 in the Chatham Royal Dockyard and launched 15 Jun 1881 and completed in Sep 1882. Her length was 240 feet, her beam was 37 feet and her draught was 20½ feet. Her displacement was 2,640 tons. She had a speed of 17.8 knots maximum and an endurance of "capable of making a passage in any weather from Plymouth to Gibraltar, or from Gibraltar to Malta at 10 knots without assistance". She carried a complement of 80 men and officers. Her armaments were as follows: 5 × 14-inch-diameter submerged torpedo tubes, and carried 18 x Mark II torpedoes. Her torpedo tubes armament had only a range of just 600 yards, these had a 26-pound gun-cotton charge and a speed of 18 knots, only marginally faster than "Polyphemus" herself. She had 6 × 1-inch Nordenfelt guns. HMS "Polyphemus" had both a formidable fore-ram and bowrudders, to improve close quarter manoeuvrability and rapid steering. A torpedo tube ran down the centre of the ram. The centre torpedo tube was fitted with a combined cast steel bow cap and ram. It hinged upwards to open, and considerable effort went into selecting the best hydrodynamic design through model testing since its size and location were found to have a major impact on the ship's performance. It had the same effect on the hull of "Polyphemus" as the bulbous bow fitted to many modern ships. The bow also had a balanced two-bladed rudder fitted into it, which could be retracted into the hull, that allowed the ship to be manoeuvrable when going astern. It also slightly reduced the diameter of the turning circle (by 12%) when the ship was moving forwards. The vessel was fitted with a flying deck, which housed the bridge and machine guns. It was designed so that if the vessel sank it would float off as two seaworthy rafts. The ship was the first Royal Navy vessel to be fitted with 80-volt electric lighting. This was adopted by the Royal Navy in 1882 following a fatal electrocution aboard HMS "Inflexible", which had an 800-volt circuit. She was fitted with limited armour as follows: deck 3-inches compound armour; hatch coamings 4-

inches; conning tower 8 inches. The ship was equipped with a 250-ton cast iron keel which could be released in an emergency to increase the buoyancy of the hull. It was held in place by two spindles which both had to be turned to release the keel and which were tested, fortnightly. The ship was equipped with twin boiler and engine rooms, and a low turtle-back hull which was almost submerged when the vessel was travelling at speed, and had a normal bunker capacity of 200 tons of coal, and 300 tons maximum. A second ship to the same design was ordered from Chatham on 30 Dec 1881 but was cancelled on 10 Nov 1882 without being either laid down or named. Another order to the same design was placed at Chatham on 6 Mar 1885, the ship to have been named HMS "Adventure", but this was also cancelled on 12 Aug 1885. In 1885 the ship undertook a simulated attack on a fleet at anchor at Berehaven, Southern Ireland. The principal object of this was to test tactics for a possible attack on Kronstadt Harbour in the event of the threatened war with Russia. Booms and nets (to catch propellers) were laid across the channel behind Bereshaven, along with small observation mines and the area covered by machine guns and torpedo boats. HMS "Polyphemus" launched a simulated attack on 30 June, evading around ten torpedoes fired by 6 torpedo boats during her two-mile run-in and easily smashed through the booms and a 5-inch steel hawser holding them in place. Despite this success, no further vessels were ordered by the Royal Navy, possibly because the development of quick-traversing and quick-firing guns as she entered service had rendered the concept behind her design less practical. When she was designed, the only guns capable of penetrating her armour were too slow to train and fire to have much chance of hitting such a fast-moving ship, but by the time that she entered service a few years later, this was no longer true. HMS "Polyphemus" served with the Mediterranean Fleet. She was paid off at Chatham Dockyard in Jan 1900. In Apr 1902 she was employed as tender to HMS "Defiance", torpedo school at Devonport. She was sold for breaking up 7 July 1903

<u>14 Apr 1890-9 Jun 1890</u> Commander Gerald Walter Russell completed the Naval long-shore course and passed with credits.

July 1890-Sept 1890 Commander Gerald Walter Russell attached to HMS "Arethusa". She was a 2nd class cruiser of the Royal Navy "Leander" class. She was built at Napier, Glasgow, being laid down in 1880, launched in 1882 and completed in Financial Year 1886-87. She remained in ordinary reserve at Chatham, being commissioned for the 1887, 1888, 1889, 1890, and 1892 annual manoeuvres. She served in the Mediterranean from 1893 to 1896, was commissioned for the 1899 annual manoeuvres, then recommissioned for the Pacific, and later sent as a reinforcement to the China Station during the Boxer Rebellion until she came home for the last time in 1903. "Arethusa" was commissioned for the 1887 annual manoeuvres on 8 Jul 1887, and paid off on 1 Sep 1887. HMS "Arethusa" was recommissioned for the 1888 annual manoeuvres on 4 Jul 1888, and paid off on 31 Aug 1888. The "Arethusa" was part of Vice Admiral John K. E. Baird's fleet. In the manoeuvres, hostilities broke out at noon on 24 Jul 1888, and ended at noon on 20 Aug. Baird's force represented the British fleet, and England, Scotland and Wales were considered friendly to the British fleet and hostile to the enemy. Opposing Baird was the "Achilles" fleet, led by Rear Admiral George Tryon, and based in Berehaven on the south-west coast of Ireland and Lough Swilly on the north coast. All Irish territory was considered hostile to the British fleet and friendly to the enemy. At the outset Baird's fleet was concentrated on keeping Tryon's fleet shut up in their base ports. They failed. Both Tryon and his second in command broke the blockade on 4 Aug, and swooping round the extremities of Ireland, made a descent on British commerce and British ports. In the manoeuvres, the "Arethusa" was assessed as lost on 5 August. The committee appointed to inquire into all circumstances connected with the 1888 British naval manoeuvres reported as follows: -

In the 1888 manoeuvres, "the proportion of untrained (2^{nd} Class) stokers which were draughted to several of the ships appears to have been too large". The opinion of the captain of "*Arethusa*" was that the "engine room complement [was] insufficient

by 2 engine room artificers, 2 leading stokers, and 23 stokers".

"...the Committee think it right to call special attention to certain remarks contained in the report of the captain who lately commanded this ship.

He considers the "Arethusa" a good sea-boat, and that she steams well against a moderate head sea and strong wind, but that she rolls heavily when the sea is abeam or abaft; she is therefore unsteady as a gun-platform under these conditions, and, on account of her quick and heavy rolling, "accurate shooting would be an impossibility, and machine guns in the tops would be useless".

Among the many suggestions made for improving her efficiency, the following refer especially to the reduction of top weight: -

- Removal of square rig on foremast.
- Removal of fighting tops.

The captain does not himself suggest that the armament should be lightened; but Admiral Baird's opinion, that all cruisers appear to be too heavily armed, applies to this vessel as well as to the "Mersey" class, and in this opinion the Committee concur.

Three other suggestions from the same officer are noted as especially worthy of consideration, viz.: -

- To enlarge her rudder.
- To extend her upper bridge out to the ship's side in order to obtain a view right aft.
- To fit a search light on the poop, as a torpedo-boat coming up astern cannot be kept in the beam of the ones on the fore-bridge".

The First Naval Lord, Admiral Sir Arthur Hood commented on this as follows:

"The proposal to remove the square rig on the foremast, and the fighting tops, in order to reduce top weight I do not concur in; the square rig on the foremast is a decided advantage to vessels of this class, and would enable them to save coal when cruising on a foreign station; the value of the guns mounted in the fighting tops would be considerable when engaged with cruisers, and therefore I would retain them". HMS "Arethusa" was commissioned, re-commissioned and paid-off numerous times over the years as follows: -

She was commissioned for the 1889 annual manoeuvres on 18 Jul 1889, and paid off on 14 Sep 1889.

She was again commissioned for the 1890 annual manoeuvres on 22 Jul 1890, and again paid-off on 11 Sep 1890.

She was again commissioned for the 1892 annual manoeuvres on 21 Jul 1892, and paid off on 8 Sep 1892.

She was commissioned at Chatham, 16 May 1893, and the served in the Mediterranean. She was paid off at Chatham on 22 Jul 1896.

She was laid-up in ordinary reserve at Chatham from 23 Jul 1896 to 10 Jul 1899. She was commissioned at Chatham on 11 Jul 1899 for the annual manoeuvres, and paid off on 13 Aug. She was later re-commissioned at Chatham on 14 Nov 1899 by Capt. James Startin. Initially she served on the Pacific Station, where she visited Callao, (a city on the Pacific Ocean in the Lima metropolitan area. Callao is Peru's chief seaport), in Mar 1900. The following year she was sent out as reinforcement to the China Station for the protection of the lives and property of British subjects during the Boxer Rebellion. HMS "Arethusa" remained on the China Station until she was relieved by "Thetis", she then returned to England and was paid-off for the last time on 3 Apr 1903. This commission was the subject of a book in the 'Log' series, entitled: HMS "Arethusa", went round the World, 1899-1903. The British fleet on the China Station in Mar 1901 was commanded by Vice-Admiral Sir Edward H. Seymour, G.C.B. in "Centurion", with Rear-Admiral Sir James A.T. Bruce, K.C.M.G. second in command (2ic), and consisted of:

- Battleships: "Barfleur", "Centurion", "Glory", "Goliath", "Ocean".
- 1st Class cruisers: "Argonaut", "Aurora", "Blenheim", "Endymion", "Orlando", "Terrible", "Undaunted"**.

- 2nd Class cruisers: "Arethusa" ‡, "Astraea" ‡, "Bonaventure", "Dido" ‡, "Hermione", "Isis" ‡, "Pique".
- 3rd Class cruisers: "Alacrity", "Wallaroo" ‡.
- Destroyers: "Fame", "Hart", "Otter", "Whiting".
- Sloops: "Algerine", "Daphne", "Phoenix", "Rosario".
- Gun vessel: "Linnet".
- Gunboats: "Bramble", "Brisk", "Britomart", "Esk", "Lizard" ‡, "Pigmy", "Plover", "Redpole".
- Store ship: "Humber".
- Receiving ship Hong Kong: "Tamar" (flagship of the Commodore in charge at Hong Kong, Commodore Francis Powell, C.B.).
- River steamers: "Robin", "Sandpiper", "Snipe", "Woodcock", "Woodlark".

** Ordered home.

‡ Temporarily attached to China Station.

"Arethusa" was sold-off on 4 Apr 1905.

The HMS "Arethusa" Logbooks are available in the UK National Archives as follows:

Catalogue Number	Start Date	End Date
ADM 53/12513	8 Jul 1887	1 Sep 1887
ADM 53/12514	4 Jul 1888	31 Aug 1888
ADM 53/12515	18 Jul 1889	14 Sep 1889
ADM 53/12516	22 Jul 1890	11 Sep 1890
ADM 53/12517	21 Jul 1892	8 Sep 1892
ADM 53/12518	16 May 1893	11 May 1894
ADM 53/12519	12 May 1894	14 Aug 1895
ADM 53/12520	15 Aug 1895	22 July 1896
ADM 53/17281 A	11 Jul 1899	13 Aug 1899
ADM 53/12521	14 Nov 1899	15 Apr 1901
ADM 53/12522	16 Apr 1901	27 Nov 1902
ADM 53/17281 B	28 Nov 1902	3 Apr 1903.

19 August 1890-Sept 1894 Commander Gerald Walter Russell was posted and attached to HMS "Hearty", in command of Particular Service., replacing Capt. William Wilson. In 1894, Russell was replaced by Capt. Philip F. Tillard. HMS "Hearty" was a surveying ship with a crew of 98, on the North Sea Station, Harwich, England.

Nov 1890 HMS "Hearty" was grounded in the North Sea. The Admiralty held an official enquiry. The outcome was that Russell was partly responsible. "The Admiralty

expressed its great dissatisfaction".

<u>5 Apr 1891</u> Commander Gerald Walter Russell was on board the H.M. Sloop "*Hearty*", with a crew of 98, on the North Sea Station, Harwich, England.

<u>30 Sep 1891</u> Commander Gerald Walter Russell appointed as President of the Royal Naval College on full pay.

30 Jun 1892 Commander Gerald Walter Russell was promoted to the rank of full

<u>01 Sep 1892-Jun 1983</u> Captain Gerald Walter Russell attended the Royal Navy College. <u>Nov 1892</u> Capt. Dennistoun reported that "Lieutenant Gerald Walter Russell was suitable in every way should be recommended for promotion". Admiral Shadwell later supported this in dispatches and Gerald Walter Russell was later promoted by Admiral Shadwell on a death vacancy.

<u>Aug 1893</u> Admiralty "Satisfaction" was expressed in the proficiency in the studies of Captain Gerald Walter Russell, whilst at the Royal Naval College.

19 Jun 1894-Aug 1894 Captain Gerald Walter Russell posted and attached to HMS "Naiad" 1890. She was an "Apollo" class protected cruiser of the Royal Navy which served from 1892 to 1919. In 1890, building by the Naval Construction and Armaments Co, later known as Vickers, commenced. HMS "Naiad", named after Naiad in Greek mythology, the Naiads are a type of female spirit, or nymph, presiding over fountains, wells, springs, streams, brooks and other bodies of fresh water. She was laid down 3 Oct 1889 at Vickers, Barrow-in-Furness, launched on the 29 Nov 1890 and commissioned in Jan 1892. She had a length of 314 feet, a beam of 43 feet 8-inches, and a draught of 17 ½ feet. Her displacement was 3,600 tons (light); 3,700 tons (heavy). She had a speed of 19-7 knots. She carried a complement of 273 to 275

men and officers. Her armaments were as follows: 2 × 6-inch Q.F. guns; 6 × Q.F. 4·7-inch guns; 8 × 6-pounder Q.F. guns; 1 × 3-pounder Q.F. gun; and 2 to 4 × 14-inch torpedo tubes. On 26 Jun 1897, she was present at the Naval Review at Spithead in celebration of the Diamond Jubilee. In 1910, like many other ships of her class, "Naiad" was converted to a minelayer, as she was obsolete as a Cruiser. She was relegated to harbour duties in 1919 and sold for scrap and broken up in 1922. The "Apollo" class were 2nd class protected cruisers built for the Royal Navy in the late 19th century that served during the Boer War and the First World War, they were preceded by the "Pearl" class and succeeded by the "Astraea" class. "Latona", "Apollo", "Intrepid", "Iphigenia", "Andromache", "Naiad" and "Thetis" were converted into minelaying cruisers around 1907. Out of the 21 of the "Apollo" class of second-class cruisers were built under the 1889 Naval Defence Act, along with eight to a modified design (the "Astraea" class of vessels), built 1889–1892 and in commission 1889–1931. In all 6 vessels were lost, and 15 scrapped. By the last year of the First World War, the surviving ships were outdated, and six of this class were converted into blockships to be scuttled in the entrances to enemy-occupied ports in Belgium.

into blockships to be scuttled in the entrances to enemy-occupied ports in Belgium.							
List of "Apollo" class cruisers upon which Gerald Walter Russell served.							
Name H.M.S.	Builder	Laid down	Launched	Completed	Fate		
Andromache Apollo	Chatham Dockyard Chatham Dockyard	29 Apr 1889 27 May 1889	14 Aug 1890 10 Feb 1891	Dec 1891 April 1892	Broken up in 1920 Broken up in 1920		
Latona	Vickers, Barrow-in- Furness	22 Aug 1889	22 May 1890	Apr 1891	Sold in 1920		
Melampus	Vickers, Barrow-in- Furness	30 Aug 1889	2 Aug 1890	Dec 1891	Broken up in 1910		
Naiad	Vickers, Barrow-in- Furness	3 Oct 1889	29 Nov 1890	Jan 1892	Broken up in 1922		
Sappho	Samuda Brothers, Poplar	29 Oct 1889	9 May 1891	Feb 1893	Broken up in 1921		
Scylla	Samuda Brothers, Poplar	29 Oct 1889	17 Oct 1891	Apr 1893	Broken up in 1914		
Sybille	Robert Stephenson, Hebburn	11 Oct 1889	27 Dec 1890	May 1894	Wrecked in 1901		
Terpsichore	J & G Thomson, Clydebank	27 Aug 1889	30 Oct 1890	Apr 1892	Broken up in 1914		
Thetis	J & G Thomson, Clydebank	29 Oct 1889	13 Dec 1890	Apr 1892	Expended as blockship in 1918		
Tribune	J & G Thomson, Clydebank	11 Dec 1889	24 Feb 1891	May 1892	Broken up in 1911		
Aeolus	Devonport Dockyard	19 Mar 1890	13 Nov 1891	Jun 1893	Broken up in 1914		
Brilliant	Sheerness Dockyard	24 Mar 1890	24 Jun 1891	Apr 1893	Expended as blockship in 1918		
Indefatigable	London & Glasgow	6 Sep 1889	12 Mar 1891	Apr 1892	Broken up in 1913		
Intrepid	London & Glasgow	6 Sep 1889	20 Jun 1891	Nov 1892	Expended as blockship in 1918		
Iphigenia	London & Glasgow	17 Mar 1890	19 Nov 1891	May 1893	Expended as blockship in 1918		
Pique	Palmers, Jarrow	30 Oct 1889	13 Dec 1890	Mar 1893	Broken up in 1911 1910 to Royal Canadian		
Rainbow	Palmers, Jarrow	30 Dec 1889	25 Mar 1891	Jan 1893	Navy as HMCS "Rainbow". Sold in 1920		
Retribution	Palmers, Jarrow	31 Jan 1890	6 Aug 1891	May 1893	Broken up in 1911		
Sirius	Armstrong Mitchell, Elswick	7 Oct 1889	27 Oct 1890	Apr 1892	Expended as blockship in 1918		
Spartan	Armstrong Mitchell, Elswick	16 Dec 1889	25 Feb 1891	Jul 1892	Broken up in 1931		

The cruisers "Intrepid", "Iphigenia" and "Thetis" were expended on 23 Apr 1918 in the raid on Zeebrugge; "Brilliant" and "Sirius" were unsuccessfully expended in the similar raid on Ostend. A further attempt to block Ostend took place in May, with "Sappho" and "Vindictive" (the latter being of the "Arrogant" class) as blockships, but "Sappho" broke down on route to Ostend and returned to port.

8 Jan 1895-9 Oct 1900 Captain Gerald Walter Russell was appointed Captain of H.M.S. "Sybille", replacing Capt. John Ferris. She was one of 21 "Apollo" class second-class cruisers completed in the early to mid-1890's. Russell was replaced by Capt. Hugh Pigot Williams. "Sybille" was built by Robert Stephenson and Co. at Hebburm, on the south bank of the River Tyne in North East England, sandwiched between the towns of

Jarrow and Gateshead. She was laid down 11 Oct 1889, launched 27 Dec 1890, finally completed in May 1894 and finally wrecked in 1901 as follows. She was a protected cruiser with a displacement of 3,600 tons, 314 feet in length, with a beam of 43½ feet, a draught of 17½ feet, with a speed of 1975 knots. She carried a complement of 273-300 officers and men. She was armed with 2 x 6-inch Q.F. guns; 6 x Q.F. 4.7-inch guns; 8 x 6 pounder guns and 2-4 14-inch torpedo tubes. HMS "Sybille" was ordered to Lambert's Bay to support the Army in protecting the Cape Colony from Boer commando attacks. On 9 Jan 1901, Capt. Williams landed with fifty men and two field guns, leaving Lieutenant Hubert Henry Holland in command of the cruiser. On the night of 15 Jan, Holland elected to take the ship to sea when she began dragging her anchor. The weather abated before too long, and so he brought her back to the anchorage from the south, but he struck rocks and became stuck at 02:30 am. Holland fired signal shots from the 4·7-in guns and released oil to calm the water enough to launch boats. At 8:30, a tug and a trawler arrived, joined later by the "City of Cambridge" and the torpedo cruiser "Tartar". Collectively the men were removed by lifeline, though one man was fatally injured in the effort. The ship was to become a total loss under the action of the sea, though much of her stores and equipment was salvaged. A Naval Court of Enquiry concluded that Lieutenant Holland had not allowed for the strong current. Following a Court Martial, he was dismissed from the ship and was penalised two years' seniority, as was navigating lieutenant Herbert Cayley. Sub-lieutenant Alfred G. A. Street and Gunner (T) James J. Tapper" also received severe reprimands in the accident.

<u>Dec 1895</u> During inspect of HMS "*Sybille*" by Vice Admiral Seycombe complimented Captain Gerald Walter Russell on the standards found on board.

<u>1897</u> Captain Gerald Walter Russell commanded "*Rodney*" which had departed the Mediterranean. Thereafter she was to become coastguard ship at "*Queensferry*", Ireland, still under the command of Capt. Russell until **Feb 1901**, when she sailed to Chatham for a refit. She remained in reserve until being sold in **1909**. (*Vessel details are shown below*).

<u>Mar 1898</u> Admiral Freemantle mentioned Gerald Walter Russell in dispatches "for the improvements that had been made", whilst Russell was on H.M.S. "*Sybille*".

11 May, 1898–27 Apr 1900 Captain Gerald Walter Russell was appointed captain of HMS "Rodney", replacing John R. E. Pattisson. In Apr 1900 Russell was himself replaced by Capt. Richard W. White. She was a battleship of the Victorian Royal Navy, a member of the "Admiral" class of warships designed by Nathaniel Barnaby. The ship was the last British battleship to carry a figurehead although smaller ships continued to carry them. She was the named after Admiral George Brydges Rodney. She was built in the Chatham Royal Dockyard, she was laid down 6 Feb 1882 and launched 8-24 Oct 1884, she was completed 14 Mar 1887 and finally commissioned Jun 1888. Her displacement was 10,300 tons, with a length of 325 feet, a beam of beam of 68 feet and a draught of 27 feet 10-inches. Her propulsion was 7,500 ihp normal and 11,500 ihp with forced ventilation, from a two shaft Humphreys compound inverted engines. She had a speed of 15·7 knots normal and 17·4 knots with forced draught. She carried a complement of 530. Her armament was 4 x B.L. 13·5-inch guns, 6 x B.L. 6-inch guns, 12 x 6 pounder guns, 4 above water torpedo tubes. During a refit in 1901, her 6pounder quick-firing Hotchkiss guns were substituted with 6-pounder quick-firing mark I Nordenfelt guns. Her fitted armour was in a belt 18-8-inches, bulkheads 16-7inches, barbettes 111/2-10" inches with 12-2-inches on her conning tower. Throughout her life her armour was modified. She was a development of the design of "Collingwood", but carried 13·5-inch calibre main armament as against 12-inch in the earlier ship. This necessitated an increase of some 800 tons in displacement, and an increase of some 18-inches in her draught. This in turn produced a significant increase in the immersion of the armour belt, which was further increased when the coal bunkers were full. While this meant that under full-load condition the top of the belt approached the water-line, the view was taken that combat with a heavily armed enemy was very unlikely in the immediate vicinity of a British port, and steaming to a

more distant potential battleground would use enough fuel to reduce the draught and bring the top of the belt well above water. HMS "Rodney" was commissioned on 20 Jun 1888 into the Home Fleet. She was held in reserve until Jul 1889, and after taking part in manoeuvres until Sep 1889, she served with the Channel Fleet until May 1894. She was then posted to the Mediterranean Fleet, remaining there until 1897. During her Mediterranean service, "Rodney" operated as part of the International Squadron, a multinational force made up of ships of the Austro-Hungarian Navy, French Navy, Imperial German Navy, Italian Royal Navy (Regia Marina), Imperial Russian Navy, and Royal Navy that intervened in the 1897–1898 Greek Christian uprising against the Ottoman Empire's rule in Crete. On 9 Feb 1897, she became one of the first ships to arrive off Crete, accompanying the battleship HMS "Revenge", flagship of Rear-Admiral Robert Harris, to reinforce the British ship on station at Crete, the battleship HMS "Barfleur". In early Mar 1897, with the British consul at Canea, Alfred Biliotti, aboard, she took part in an International Squadron operation to rescue Ottoman soldiers and Cretan Turk civilians at Kandanos, Crete. She joined other ships in putting ashore an international landing party at Selino Kastelli on Crete's southwest coast for the four-day expedition, which was placed under the command Capt. John Harvey Hunter, of "Rodney". In late Mar 1897, she shelled Cretan insurgents attempting to mine the walls of the Ottoman fort at Kastelli-Kissamos, driving them off, and the International Squadron landed 200 Royal Marines and 130 Austro-Hungarian sailors and marines to re-provision the fort and demolish nearby buildings that had provided cover for the mining effort. HMS "Rodney" departed the Mediterranean later in 1897. Thereafter she was the coastguard ship based on the Firth of Forth under the command of Capt. Gerald Walter Russell until February 1901, when she sailed to Chatham for a refit. She remained in reserve until being sold in 1909, and was later scrapped.

27 Apr, 1900-10 May 1902 Russell was appointed Captain of H.M.S. "Hannibal", replacing Capt. Sir Baldwin Wake Walker, Bart. Serving in the Channel Squadron, part of the Channel Fleet. In turn Russell was replaced with Capt. George A. Gifford. HMS "Hannibal "was a "Majestic" class pre-dreadnought battleship_built for the Royal Navy, and was the 6th ship to bear the name HMS "Hannibal". The keel for HMS "Hannibal" was laid down at the Pembroke Royal Dockyard on 1 May 1894, she was launched in 28 Apr 1896, by Mrs. Laurie, the wife of General John W. Laurie, the Member of Parliament for Pembroke and Haverfordwest. She was commissioned at Portsmouth in April 1898 into the fleet and on the 10 May, 1898. Captain Sir Baldwin Wake Walker, Bart., was placed in command. "Hannibal" served with the Channel Fleet (later reorganised to the Atlantic Fleet after commissioning in 1898. On 10 May 1898 she went into full commission to serve in the Portsmouth division of the Channel Fleet, under the command of Capt. Sir Baldwin Wake Walker. She was armed with a main battery of four 12-inch guns and a secondary battery of 12 x 6-inch guns. The ship had a top speed of 16 knots. HMS "Hannibal" was 421 feet long overall, she had a beam of 75 feet and a draft of 27 feet. She displaced up to 16,060 tons; at full combat load. Her propulsion system consisted of 2 x 3-cylinder vertical tripleexpansion steam engines powered by 8 x coal-fired cylindrical boilers. In 1906 she underwent a refit, which included a conversion from a coal burner to using oil. By 1907–08, her boilers were replaced with oil-fired models. Her engines provided a top speed of 16 knots at 10,000 indicated horsepower. The "Majestic" class were considered good sea-boats with an easy roll and good steamers, although they suffered from high fuel consumption. She carried a crew of 672 officers and enlisted men. The ship was armed with 4 x B.L. 12-inch Mk VIII guns in twin turrets, one forward and one aft. The turrets were placed on pear-shaped barbettes; 6 x of her sisters had the same arrangement, but her sisters "Caesar" and "Illustrious" and all future British battleship classes had circular barbettes. "Hannibal" also carried 12 x Q.F. 6-inch guns. They were mounted in casemates in two gun-decks amidships. She also carried 16 Q.F. 12-pounder guns and 12 Q.F., 2-pounder guns. She was also equipped with five 18-inch torpedo tubes, four of which were submerged in the ship's

hull, with the last in a deck-mounted launcher. "Hannibal" and the other ships of her class had 9 inches of Harvey armour, which allowed equal protection with less cost in weight compared to previous types of armour. This allowed "Hannibal" and her sisters to have a deeper and lighter armour belt than previous battleships without any loss in protection. The barbettes for the main battery were protected with 14-inches of armour, and the conning tower had the same thickness of steel on the sides. The ship's armoured deck was 2.5 to 4.5 inches thick. She was part of a huge fleet of ships present in the Solent for the passage of the body of Queen Victoria from Cowes to Portsmouth on 2 Feb 1901. Capt. George Augustus Giffard was appointed in command on 10 May 1902, and she was present at the Coronation Fleet Review for King Edward VII on 16 Aug 1902. Earlier the same month, two officers and a seaman of the "Hannibal" drowned while on a fishing excursion outside Berehaven, Ireland. In Sep 1902 she was part of a squadron visiting "Nauplia" and "Souda Bay" at Crete in the Mediterranean Sea. On 17 Oct 1903 she collided with and badly damaged her sister ship HMS "Prince George" off Ferrol, Spain. When a fleet reorganisation led to the Channel Fleet being re-designated the Atlantic Fleet on 1 Jan 1905, "Hannibal" became an Atlantic Fleet unit. "Hannibal" transferred to the new Channel Fleet (formerly the Home Fleet) on 28 Feb 1905. This service ended on 3 Aug 1905, when she paid off into reserve at Devonport. "Hannibal" underwent a refit in 1906 in which she was converted to burn oil fuel and received fire control for her main battery. She then recommissioned into the reserve on 20 Oct 1906. In Jan 1907, "Hannibal" went into full commission as a temporary replacement for battleship HMS "Ocean" in the Channel Fleet while "Ocean" was under refit. When "Ocean" returned to service, "Hannibal" remained in Channel Fleet service as a temporary replacement for battleship HMS "Dominion" while "Dominion" was undergoing refit. When "Dominion" returned to service in May 1907, "Hannibal" went back into the commissioned into the reserve, becoming a part of the Portsmouth Division of the new Home Fleet in Jul 1907. She was placed in reserve from 1907. While in the Commissioned Reserve at Portsmouth, "Hannibal" suffered two significant mishaps. On 19 Aug 1909 she struck a reef in Babbacombe Bay, on the south coast of Devon, damaging her bottom. On 29 Oct 1909 she collided with her torpedo boat HMS "TB 105", suffering no damage herself but badly damaging the torpedo boat. She underwent a refit at Devonport from Nov 1911 to Mar 1912. Only to be mobilised in July 1914 as a precautionary measure prior to the outbreak of World War I. From Aug 1914 to Feb 1915 "Hannibal" was a guard ship at Scapa Flow. The Royal Navy began a precautionary mobilisation in July 1914 when war appeared increasingly likely. As part of this, "Hannibal" and her sister ships HMS "Mars", HMS "Magnificent", and HMS "Victorious" formed the 9th Battle Squadron on 27 Jul 1914, stationed at the Humber to defend the British coast. HMS "Hannibal" was serving as a guard ship on the Humber when World War I began in Aug 1914. The 9th Battle Squadron was actually dissolved on 7 Aug 1914, and "Hannibal" was transferred to Scapa Flow, where she served as a guard ship until relieved by the first-class protected cruiser HMS "Royal Arthur" on 20 Feb 1915. HMS "Hannibal" then paid off at Dalmuir. The "Majestic" class ships were by then the oldest and least effective battleships in service in the Royal Navy. While inactive at Dalmuir, "Hannibal" was disarmed between Mar-Apr 1915 except for four 6-inch guns and some lighter guns. Her 12-inch guns were taken for use aboard the new "Lord Clive" class monitors HMS "Prince Eugene" and HMS "Sir John Moore". After she was disarmed, she was laid up at Scapa Flow and Loch Goil until Sep 1915. HMS "Hannibal" was recommissioned at Greenock on 9 Sep 1915 to serve as a troopship in the Dardanelles campaign. She arrived at Mudros, Lemnos, North Aegean, Greece, in this capacity on 7 Oct 1915. Later that year, her main armament was removed and she was converted to a troopship, serving in this capacity during the Dardanelles campaign. From Nov 1915 to the end of the war, she served as a depot ship based in Alexandria, Egypt. In Nov 1915, HMS "Hannibal" became a depot ship for auxiliary patrol craft at Alexandria, Egypt, supporting both forces operating from Egypt and those in the Red Sea until Jun 1919, leaving Egypt for

Malta on 9 Sep. HMS "Hannibal" was paid off for disposal at Malta on 25 Oct 1919, was sold for scrapping on the 28 Jan 1920, and was broken up and scrapped in Italy.

Oct 1901 Admiral Wilson reported in dispatches that during an inspection of HMS "Hannibal" the ship was found to be very clean and in good working order throughout, and this was due to the outstanding efforts of Captain Gerald Walter Russell. Admiral Wilson also complimented on Captain Gerald Walter Russell in May 1902, "upon his actions and sound judgement".

01 Oct 1902-1 October 1904 Captain Gerald Walter Russell was appointed to HMS "Vivid" and Captain Superintendent of Pembroke Royal Dockyard, replacing Charles J. Barlow. Russell's appointment as Captain-Superintendent, Pembroke Royal Dockyard, was maintained for two years, until he was promoted to flag rank as rear-admiral on 1 Sep 1904. HMS "Vivid" was an iron screw yacht purchased from civilian service in 1891, where she had been named "SS Capercailzie". She was built by Barclay, Curl, and Co., Glasgow, yard number 321, way #87699, launched and completed 20 June 1883; 550 tons, 200 feet in length, beam 24 feet, draft 12 feet, installed power 450 hp, propulsion, 1 x 2-cylinder compound engine, single shaft, 1 screw, 2 masts, giving a speed of 10 knots. She had been built for and owned by George Burns, a shipping company owner [and 2nd Baron Inverclyde, chairman of the Cunard Steamship Company] whose wife launched HMS "Leviathan" on 3 Jul 1901]. SS Capercailzie was acquired by the Royal Navy and renamed HMS "Vivid" in 1891. She was in naval service 1891-1913. She became the Devonport base ship and flagship in 1893 and was also used as the yacht for the Commander-in-Chief, Plymouth. And, also as vessel of the Captain Superintendent of the Pembroke Royal Dockyard. Her fate was to be sold back to civilian service in 1912, to the Royal Technical College, Glasgow for use as a training ship. The purchase was a major investment for the college, spending an estimated £3000 on the ship and refit. On 8 Jul 1913 "Vivid" ran aground and was wrecked at Colonsay on route from Rhu (at the time spelt 'Row') to Stornoway on her first voyage as a civilian training ship.

1-16 Sept 1904 Captain Gerald Walter Russell was promoted to the rank of Rear-Admiral, on the promotion of Sir Robert Edmund Frederick Jeffreys C.V.O. to Vice Admiral, in accordance with the provisions of the Order in Council of 8 Dec 1903.

Jun 1905 Rear-Admiral Gerald Walter Russell attended and passed a Flag Admiral's Strategy Course, Portsmouth and passed

<u>Feb 1906</u> Rear-Admiral Gerald Walter Russell attended and passed a Flag Admiral's Signal Course, Portsmouth and passed

<u>7 Mar 1906-1 Jun 1906</u> Rear-Admiral Gerald Walter Russell attended and passed a Flag Admiral's War Course, Portsmouth and passed

<u>01 Mar 1908</u> Rear Admiral was placed on Retied List at own request. (1st requested 8-12-1903), at his own request.

<u>01-3 Jul 1908</u> Rear-Admiral Gerald Walter Russell was advanced and appointed to rank of Vice Admiral (Retired) on the Retired List.

<u>30 Jul 1912</u> Vice-Admiral Gerald Walter Russell promoted and appointed to the rank of full Admiral (Retired) on the Retired List.

<u>07 Nov 1928</u> Gerald Walter Russell died at Hatchfield, Kingsley Green Fernhurst of cerebral haemorrhage and arteriosclerosis. (Morning Post Newspaper 10.11.1928). Widow Mrs Katherine Russell, Hatchfield, Near Hazelmere, Surrey.

Extracts from the "Times" newspaper:

Tuesday 11 September 1860 covering the HMS. "Britannia" as the "Prince of Wales", The following vessels comprise the four classes of the steam reserve at Portsmouth, the list corrected to this date: First Class.-"Duke of Wellington", 131 guns, 700 horsepower; "Princess Royal", 91 guns, 400 horse-power; "Shannon", 51 guns, 600 horse-power; "Immortalite", 51 guns, 600 horse-power; "Volcano", 6 guns, 140 horse-power; "Philomel", 6 guns, 80 horse-power; and gunboats "Brazen", "Beaver", "Snapper", "Traveller", "Grinder", and "Blazer", of two guns each, and 60 horse-power. Second Class.- "Royal Sovereign", 131 guns, 800 horse-power; "Victoria", 121 guns, 1,000 horse-power; "Prince of Wales", 131 guns, 800 horse-power, [prior to her renaming]; "Duncan", 101 guns, 800 horse-power; "Nelson", 91 guns, 500 horse-power; the "Sutlej", 51 guns, 500 horse-power; the "Harrier", 17 guns, 100 horse-power; the "Rinaldo", 17 guns, 200 horse-power; the "Medea", 6 guns, 350 horse-power;

the "Stromboli", 6 guns, 280 horse-power; the "Coquette", 6 guns, 200 horse-power; and the gunboats "Cracker", "Fancy", "Swinger", "Pincher", and "Badger", of 60 horse-power each, and 2 guns. Third Class The "Tribune", 31 guns, 300 horse-power; the "Rosamond", 6 guns, 280-horse power; the "Vigilant", 4 guns, 200 horse-power; the "Vulture", 6 guns, 470 horse-power; the "Cygnet", 5 guns, 80 horse-power; and the gunboats "Cheerful", "Rambler", "Pet", "Daisy, "Angler", "Chub", "Ant", "Pert", and "Decoy", of two guns each and 21 horse-power. 4th Class The screw transport "Fox", 200 horse-power; the "Erebus", 16 guns, 200 horse-power; the "Meteor", 14 guns, 150 horse-power; and the "Glatton", 14 guns, 150 horse-power. The foregoing - not including the gunboats and mortar vessels in Haslar-yard - consist of seven line-of-battle ships, four frigates, two corvettes, nine sloops, three floating batteries, 20 gunboats, and one troop steamer. They give a total force of 1,150 guns, propelled by 11,420 horse-power (nominal). The "Fox" steam troopship is given in this return as not carrying any guns, but in the official Navy List she still carried "42" attached to her name"
Extracts from Local Newspaper Articles:
28th August 1902 the Evening Express Newspaper (Third Edition), (Special Edition) reported the following: - " PEMBROKE DOCKYARD. Promotion for Captain-Superintendent Barlow Captain Russell of his Majesty's ship "Hannibal", of the Channel Squadron, has been appointed to succeed Captain-Superintendent, C. J. Barlow, D.S.O., at Pembroke Royal Dockyard, as naval officer in command. Captain Russell will take up his appointment between the present date and October next. Captain Barlow will be promoted to Rear-Admiral. His departure will be greatly regretted by the officers and workmen of the dockyard, with whom he was a very popular officer. Mr. Henry Cock, M.V.O. Chief Constructor, also leaves this year"
30th August 1902 the Weekly Mail Newspaper wrote: " PEMBROKE DOCKYARD. PROMOTION FOR CAPTAIN- SUPERINTENDENT BARLOW. Captain Russell, of his Majesty's ship "Hannibal", of the Channel Squadron, has been appointed to succeed Captain-Superintendent C. J. Barlow, D.S.O., at Pembroke Royal Dockyard, as naval officer in command. Captain Russell will take up his appointment between the present date and October next. Captain Barlow will be promoted to Rear-Admiral. His departure will be greatly regretted by the officers and workmen of the dockyard, with whom he was a very popular officer. Mr. Henry Cock, M.V.O. Chief Constructor, also leaves this year"
3rd October 1902 the Evening Express Newspaper (Third Edition), (Special Edition) reported thus: - " ADMIRAL BARLOW LEAVES Rear-Admiral C. J. Barlow. D.S.O., who relinquished his duties as Captain-Superintendent of Pembroke Royal Dockyard on the 1st of October, when he was succeeded by Captain W. H. Russell, of his Majesty's ship "Hannibal". left the dockyard on Thursday morning. He was accompanied to the main landing-stage by his successor and Mr. Cock, chief constructor"
The National Archives. ADM 196/86/105 The National Archives. ADM 196/39/446. The National Archives. ADM 196/18/46. The National Archives. ADM 196/41/0/107.