Introduction

The years between 1880 and the outbreak of the Great War were the golden age of Belfast shipbuilding. In 1914 Belfast shipbuilders accounted for nearly 8% of world output. In some years Belfast managed to account for an even higher percentage of world output. A Financial Times supplement in March 1914 described Belfast as ‘the premier shipbuilding centre of the entire world’.

Early twentieth-century Belfast possessed two great shipyards: Harland & Wolff and Workman, Clark & Co. The former was the ‘big yard’, while the latter was affectionately known as the ‘wee yard’. In 1894 Workman, Clark’s production represented two-thirds of Harland & Wolff’s tonnage, and, in 1895 Workman, Clark & Co., employing 3,500 men, was the fourth largest British shipbuilder in terms of tonnage. To describe Workman, Clark & Co. as the ‘wee yard’ was to seriously understate the scale of the operation. Indeed, in 1901, 1909, 1910 and 1913 the wee yard’s output exceeded that of the big yard.

Astonishingly, Cork rather than Belfast had been the centre of shipbuilding on this island in the first half of the nineteenth century and the three Belfast firms building wooden vessels – Ritchie & MacLaine, Charles Connell & Sons and Thompson & Kirwan – had launched only 50 ships, most of them small, between 1820 and 1850. Belfast, not being close to sources of iron and coal, appeared to have few of the assets needed to become a great shipbuilding centre in the second half of the nineteenth century. John Lynch fully explores this important point in An Unlikely Success Story: The Belfast Shipbuilding Industry, 1880-1935 (Belfast, 2001). Dr Lynch attributes the success of the industry to a ‘happy coincidence of timing, luck, nepotism and the Protestant work ethic’ and identifies Belfast as one of a number of centres, with little or no tradition of shipbuilding, which developed at this time largely on the basis of ‘new technology’. From the late 1850s the Belfast shipbuilding industry was ‘notable for its state-
of-the-art design and construction methods’.

The Lagan was totally unsuited for large-scale shipbuilding until massive improvements were undertaken by the Belfast Harbour Commissioners in the 1840s. The Belfast Harbour Commissioners deserve much of the credit for making Belfast’s shipbuilding industry possible. Only after the excavation of the Victoria Channel and the creation of ample space at Queen’s Island could shipbuilders take advantage of the shelter and depth available in Belfast Lough. Throughout the nineteenth century the Harbour Commissioners were responsive to the growth of the industry. Jonathan Bardon in Belfast: An Illustrated History (Belfast, 1982) has carefully chronicled the Harbour Commissioners’ proactive measures in support of the industry. For example, in 1885 the Prince of Wales re-opened Donegall Quay, while the Princess of Wales turned the first sod of the Alexandra graving dock, formally opened by Prince Albert Victor in 1889. The Duke of York, in 1897, opened a branch dock formed out of the Spencer basin, and in July 1898 an Act of Parliament gave permission for the deepening and widening of the channel.

However, Belfast’s ‘unlikely success story’ also owes a great deal to the talent, vision (or imagination) and enterprise of six men – William Ritchie, Edward James Harland, Gustav Wilhelm Wolff, William James Pirrie, George Smith Clark and Thomas Andrews Junior – to whom this publication is intended to offer a brief introduction. And behind the scenes was the intriguing figure of Gustav Christian Schwabe.

William Ritchie (1756–1834)
‘the father of shipbuilding in Belfast’

In March 1791 William Ritchie, a Scottish shipbuilder from Saltcoats, Ayrshire, visited Belfast, with a view to identifying new business opportunities. He was surprised to learn that there were only six jobbing ships’ carpenters who were not even in regular employment. This was sufficient to tempt him to open a shipyard in Belfast but the Belfast Ballast Board offered him the additional inducement of building ‘a graving platform’ on which vessels could be beached for ‘careening’ (beaching a vessel at high tide in order to expose one side or another of the ship’s hull for maintenance below the water line when the tide goes out) and repair.

On 3 July 1791 Ritchie returned, bringing over ten skilled workmen from Scotland and his younger brother Hugh, and started a shipyard on the site of the Old Lime Kiln dock on the County Antrim side of the Lagan.

He launched Hibernia, his first ship, on 7 July 1792, almost exactly a year after his arrival. The News Letter described the ship as ‘the only vessel of any burden which had for many years been built in the port’.

Over the next 20 years the business prospered. Between 1791 and 1811 William Ritchie built thirty-two ships and Hugh built a further eight, having founded a shipyard of his own in 1798. These ships ranged in size from 50 to 450 tons, the average being 220 tons. In 1810 William Ritchie launched the James, a vessel of 400 tons and the largest ship ever built in Belfast up to that point.

The size of the workforce grew...
impressively too during the same period. By 1811 William Ritchie was employing 44 journeyman carpenters, 55 apprentices, 7 pairs of sawyers, 12 blacksmiths and several joiners.

Hugh Ritchie died in 1807 and was succeeded in the business by his elder brother John. In 1811 John formed a partnership with Alexander MacLaine, another Scot, and it was their firm, Ritchie & McLaine, which built and launched the first steam ship in Ireland. But it was William Ritchie who laid the foundations of Belfast’s great shipbuilding industry. As the *Northern Whig* observed in January 1834, William Ritchie was ‘the first who established a regular system of shipbuilding in Belfast’.

Edward James Harland was born in Scarborough, North Yorkshire, and was educated at Edinburgh Academy. His father, William Harland, was a medical practitioner and an amateur engineer. In 1827 Dr Harland invented a patented steam-powered carriage.

In 1846, aged 15, Edward Harland went to Newcastle-upon-Tyne to serve an apprenticeship at Robert Stephenson & Company, an engineering works. Robert Stephenson, the owner, was the son of George Stephenson, the locomotive engineer. George Stephenson was friendly with Dr Harland as a result of a shared interest in steam power and locomotion. The young Edward Harland served his apprenticeship in Newcastle until 1851.

During his apprenticeship at Robert Stephenson & Company, Harland met Gustav Christian Schwabe, who knew Edward’s uncle, Thomas Harland. Schwabe was a partner in John Bibby & Sons, a Liverpool shipping company. Schwabe took a benign interest in the young Harland and arranged for him to be employed at J. and G. Thomson, marine engineers in Glasgow.

With Schwabe’s encouragement, in December 1854, Harland moved to Belfast, to become manager of Robert Hickson’s shipyard in Queen’s Island. Harland rapidly acquired a reputation for strict management and improving the quality of workmanship. He also cut wages, banned smoking and carried a piece of chalk and an ivory ruler which he used for marking mistakes.

An employee at Harland & Wolff later famously recalled: ‘He had an all-smelling nose as well as an all-seeing eye. One day he was walking rapidly along, and he suddenly stopped dead and sniffed at a saw-pit. In a flash the trapdoor was lifted and there squatting in the sawdust was a wizened little man, puffing at clay pipe.’

Harland’s stern management and
meticulous attention to detail enabled him to keep the shipyard running despite Hickson’s financial problems. In 1857 Harland employed Gustav Wilhelm Wolff, Gustav Schwabe’s nephew, as his personal assistant. Harland began attempting to open his own shipbuilding business, but was unsuccessful with several applications to open yards in Liverpool. However, on 21 September 1858, Robert Hickson wrote to him: ‘I offer you my interest and goodwill in the shipyard at the Queen’s Island, Belfast ... for the sum of five thousand pounds ...’ With the financial assistance of Gustav Schwabe, Harland purchased the firm and on 1 November 1858, Edward James Harland & Company came into existence.

The new company promptly attracted an order of three ships (which were named Venetian, Sicilian and Syrian) from John Bibby & Sons. Delighted with their new Belfast-built ships, Bibby ordered six more from Harland in 1860. Edward Harland’s ships were long, had a narrow beam and were flat-bottomed, thus increasing their capacity. They were disparagingly referred to as ‘Bibby’s coffins’. This, however, was a reference to their design rather than to any possible lack of seaworthiness.

A great innovator, Harland applied for several patents including, in 1860 for ‘improvements in constructing and covering the decks of ships and other floating bodies’; in 1871 for ‘improvements in apparatus for propelling vessels’; and in 1878 for ‘improvements in screw-propellers’. According to his obituary in The Times, Harland designed his company’s ocean-going liners ‘on the model of a fish swimming through the water’.

In 1861 Harland formed a business partnership with Gustav Wilhelm Wolff, Schwabe’s nephew, thereby creating Harland & Wolff.

In 1874 Harland recruited William James Pirrie as another partner. Edward Harland, Gustav Wolff and William James Pirrie maintained a good order book, receiving regular orders from the White Star Line. In 1889 Harland effectively retired from daily involvement in the business, leaving Wolff and Pirrie to manage the shipyard.

Harland once self-deprecatingly described the nature of the three men’s business relationship in the following terms: ‘Well, Wolff designs the ships, Pirrie sells them and I smoke the firm’s cigars.’

On a more earnest note, Dr Samuel Smiles, the author of Self-Help, one of the most influential improving texts of the nineteenth century, held up Harland as an example of what riches could be won by determination and application.

Edward Harland served as the chief Belfast Harbour Commissioner from 1875 until the 1880s. Harland was a Presbyterian and a member of the Rosemary Street congregation in Belfast. In politics a Conservative and a Unionist, he served as Mayor of Belfast in both 1885 and 1886. He was a strong and natural opponent of W. E. Gladstone’s first Home Rule bill. Harland was knighted by the Liberal government in early 1886 and on 25 July of the same year he received a baronetcy from the new Conservative government. At a by-election in 1889 Harland was returned unopposed to serve as Unionist MP for North Belfast. In the House of Commons he was nicknamed ‘Majestic’ after one of his ships, launched in the year of his election. After his election Harland largely lived in London and was re-elected unopposed in the two subsequent general elections of 1892 and 1895. Harland died on Christmas Eve 1895 at his Irish home, Glenfarne Hall, County Leitrim.

Although Harland had married (in 1860) Rosa Matilda Wann, the daughter of Thomas Wann, a Belfast stockbroker and insurance agent, the couple were childless. As a result the baronetcy became extinct on Harland’s death.

© National Museums Northern Ireland Collection Harland & Wolff
Ulster Folk & Transport Museum
**Gustav Wilhelm Wolff** (1834 –1913)  
*Teutonic*

Gustav Wilhelm Wolff was born in Hamburg into a family of Jewish descent which had converted to Lutheranism in 1819. At the age of 15 he moved to Liverpool to live with his uncle, Gustav Christian Schwabe. He served an apprenticeship in Joseph Whitworth & Company, a Manchester engineering firm, and subsequently was employed as a draughtsman in Hyde (in what is now Greater Manchester).

In 1857, due to the intervention of his uncle, Wolff became Edward Harland’s personal assistant at Robert Hickson’s shipyard at Queen’s Island in Belfast.

In 1861 Wolff became a partner in Harland’s firm and thus Harland & Wolff came into existence. In the early years of the partnership Wolff assumed responsibility for managing the yard but he eventually played a major role in securing orders from various shipping lines. As a result of his Jewish ancestry he had strong links with the Jewish community in both Hamburg and in Britain, and was thereby able to attract business to the shipyard. Wolff had a particularly good relationship with the Hamburg-Amerika Line, periodically the world’s largest shipping company, which was managed by Albert Ballin who was Jewish.

Ballin, who may have been related to Gustav Christian Schwabe, was an extremely interesting figure in German society. Although very successful in developing the business, as a Jew and by virtue of the fact that he was the director rather than the owner of the company, he was placed at a double disadvantage and as a result he was not universally accepted by Hamburg society. Nevertheless, despite a strong undercurrent of anti-semitism at the Imperial court, Ballin enjoyed Kaiser Wilhelm II’s respect and admiration and he was designated as being hoffähig (welcomed and acceptable at court) an honour extended to few by the Kaiser. Ballin’s home in Hamburg had a suite of rooms which were built specifically for the use of the Kaiser when he visited Hamburg.

Ballin had diplomatic significance too: in the years before the outbreak of the Great War he acted as conduit between the governments of the Second Reich and the United Kingdom. Terrified that he would lose his ships in the event of naval hostilities, Ballin attempted to broker a deal whereby the United Kingdom and Germany would continue to race one another in passenger liners but desist from their attempts to best one another’s naval fleets.

Wolff worked extensively at the yard, and was partly responsible for the building of the engine works at Harland and Wolff in 1880. Wolff officially retired from Harland and Wolff in 1906. We have already noted Harland’s quip about the nature of the relationship which existed between the three key figures in Harland and Wolff. In response to an after-dinner speech, shortly before Harland’s death, Gustav Wilhelm Wolff offered a similar and equally amusing assessment of the division of labour: ‘Sir Edward [Harland] builds the ships, Mr Pirrie makes the speeches, and, as for me, I smoke the cigars.’
Victorian self-help guru. By the end of the nineteenth century the Belfast Ropeworks were the largest in the world.

Wolff was a shareholder in the Union Steamship Company, and became a director; with his influence, he ensured Harland and Wolff received regular orders from the Union Steamship Company. Like Harland, Wolff served as a Belfast Harbour Commissioner.

As a Lutheran, in Belfast he naturally gravitated towards the Church of Ireland, an episcopal church which was also theologically closest in spirit to Lutheranism, and to which he became very committed. He was also a generous benefactor to the Church and to various local causes, including the Ulster Hospital and the Orange Institution.

Wolff served as MP for East Belfast from 1892 to January 1910. Whereas, Harland was nicknamed ‘Majestic’ at Westminster, Wolff was appropriately nicknamed ‘Teutonic’, after another state-of-the-art ship launched by Harland and Wolff. Wolff only faced election once; in the 1892 by-election Sir William Charley, QC, stood against Wolff as an Independent Conservative. Wolff defeated Charley by a margin of over 2,100 votes.

In 1911 When Wolff was made an honorary Burgess of Belfast in 1911, he observed: ‘I had no idea when I came to Belfast in 1858 I would be a permanent citizen. I have no regrets I stayed.’ However, after his retirement from parliament in January 1910, Wolff lived almost exclusively in London, where he died on 17 April 1913 at his home, 42 Park Street. Wolff never married and died a bachelor. By dying in 1913 Wolff was spared the misfortune of seeing his homeland being at war with his adopted country.

WILLIAM JAMES PIRRIE (1847-1924)
‘the greatest shipbuilder since Noah’

The Northern Whig of 18 May 1921 described William James Pirrie as ‘not merely the greatest Irish industrialist of his day, but the greatest shipbuilder in the world’. It was Shane Leslie of Glaslough, the Monaghan author and cousin of Winston Churchill, who amusingly described Pirrie as ‘the greatest shipbuilder since Noah’. Captain William Pirrie, Pirrie’s grandfather, was a member of the Belfast Ballast Board and the Harbour Commissioners and in July 1849 had been granted the privilege of opening the Victoria Channel. William James Pirrie was born on 31 May 1847 in Quebec, Canada. He was the son of James Alexander and Eliza Pirrie (née Montgomery). Both parents were of Ulster-Scots ancestry. After his father died, mother and son returned to Ulster. The young Pirrie grew up in Conlig, County Down.

At the age of 15 he entered Harland & Wolff as an apprentice-draughtsman. By the age of 27 he was a partner in Harland & Wolff and on Harland’s death he became chairman, a position which he retained until his own death.

Harland contended that ‘Pirrie won his place in the firm by dint of merit alone, by character, perseverance and ability’. Even at a very early stage he had almost exclusive control over the yard. Over the next 50 years, under his leadership, Harland & Wolff became the greatest shipyard in the world.

He travelled widely to keep abreast of the latest developments in naval architecture and marine engineering. He was at the forefront of the development of the diesel engine for marine propulsion.
His career was contemporaneous with the development of steel shipbuilding. He was ‘the creator of the big ship’ and for many years the largest passenger liners in the world came from his yards, notably the Olympic, the Britannic, and the Titanic.

Politically, he was rather more interesting and complex than either Harland or Wolff. At a dinner party on 2 August 1886 Thomas MacKnight, the editor of the Northern Whig, asked Pirrie whether or not he would transfer Harland & Wolff to the Clyde in the event of Home Rule becoming law. He replied, ‘Most certainly this would be done’. At this stage Pirrie was a Liberal Unionist (a Liberal opposed Home Rule). However, in the first decade of the 20th century he reverted to Liberalism and became a Home Ruler. In 1896-7 he was Lord Mayor of Belfast and became the first Freeman of the city. In 1897 he was made a member of the Irish Privy Council. Harbouring parliamentary ambitions, in 1902 he wished to be the Unionist candidate in the South Belfast by-election of that year (occasioned by the death of the celebrated William Johnston of Ballykilbeg). However the Unionist Party selected C. W. Dunbar-Buller as its candidate. Out of pique, he seems to have assisted T. H. Sloan, the victorious Independent Unionist candidate and future founder of the Independent Orange Order, financially. Pirrie wished to be the Unionist candidate in West Belfast in the General Election of 1906 but the Unionist Party chose Captain J. R. Smiley as its candidate. Again, out of pique, he ran Alexander Carlisle, the managing director of Harland & Wolff and his brother-in-law, as a spoiling independent unionist against Smiley. Carlisle polled a derisory 153 votes but it was sufficient in a very tight contest to deprive Smiley of the seat and hand it to Joe Devlin, the Nationalist candidate.

In 1906 Pirrie was raised to the peerage (for his political apostasy, if not treachery, in the eyes of his political opponents) and was a prime mover in the establishment of the Ulster Liberal Association in April 1906. However, his support for Home Rule had no discernible impact on the fervent unionism of the shipyard’s workforce. In February 1912 Pirrie earned their whole-hearted contempt when he brought Winston Churchill, then a Liberal cabinet minister, to Belfast to speak in favour of Home Rule. He chaired the famous meeting in Celtic Park. The opprobrium which he incurred as a result of his support for Home Rule had an adverse impact on his health and prompted him to take up semi-permanent residence in London and Whitley Park, the thirty-two bedroom mansion, surrounded by artificial lakes and landscaped grounds, in Surrey, which he had purchased in 1909. In one lake, Whitaker Wright, the house’s previous owner, had famously built an underwater, glass-roofed billiard room, which still exists.
In 1907 Pirrie persuaded the White Star Line to order three great transatlantic liners which would put the White Star Line’s rivals and competitors out of business. The first would be named Olympic, the second Titanic and the third was originally to be called Gigantic. The Olympic was launched on 20 October 1910. On 31 May 1911 Olympic’s fitting-out was complete and the great liner, up until then the world’s biggest ship, steamed out of Belfast Lough. However, a few hours earlier, Harland & Wolff launched the Titanic, 1,000 gross tons heavier than her sister ship. The Gigantic was prudently renamed the Britannic and was launched on 26 February 1914. However, she was laid up for many months before being put to use as a hospital ship in 1915. In that role she struck a mine off the Greek island of Kea on 21 November 1916 and was sunk.

In April 1912 Pirrie intended to travel aboard the Titanic on her maiden voyage but illness prevented him from joining the ill-fated passage. Had he done so he would be much better known today because he would have either drowned (like Captain Smith, Thomas Andrews or Colonel J. J. Astor, the Titanic’s captain, designer and richest passenger respectively) or he would have survived and have been universally reviled like J. Bruce Ismay, chairman of the White Star Line, who got away in one of the last lifeboats.

Between 1908 and 1914 Pirrie was Pro-Chancellor of Queen’s University, Belfast. In the years before the outbreak of the Great War he served as a member of the Committee on Irish Finance. In 1911 he became Lord Lieutenant of the City of Belfast.

During the war he was a member of the War Office Supply Board and in March 1918 he became Comptroller of Merchant shipbuilding, helping to replace British shipping lost to submarine warfare. He was also mainly responsible for introducing the idea of standardizing ships, a principle that was adopted in Britain and the United States during Second World War.

In recognition of his war work and charity work, he became a viscount in 1921. He also became a member of the Senate, the upper chamber of the Northern Ireland Parliament. By this stage he had abandoned both Liberalism and his support for Home Rule. His acute political antennae informed him that both represented the past rather than the future. The rebellion in Dublin in 1916 played a significant part in his return to Unionism.

He died at sea of pneumonia (off the coast of Cuba) on 7 June 1924. He and his wife were returning from a business trip to South America. The body was brought back to Belfast and was buried in the City Cemetery. As Pirrie’s marriage was childless, the peerage became extinct at his death. There is a memorial to Pirrie in the grounds of the City Hall, Belfast.
Sir George Clark (1861-1935)
the co-founder of the ‘Wee Yard’

George Smith Clark was born in Paisley on 8 November 1861 and was the second son of the thread manufacturer James Clark and Jane Smith. Jane was the daughter of a Glasgow ship-owner who had founded the City Line. George was educated at Merchiston Castle School in Edinburgh (where James Craig, Northern Ireland’s first Prime Minister, was also educated) and was apprenticed to Harland & Wolff. In 1877 Clark, at what seems like a ludicrously young age, opened his own shipyard with capital provided by his uncle, George Smith. In 1880 the 19-year old Clark joined forces with the 24-year old Francis Workman, a Belfast-born former premium apprentice at Harland & Wolff who also had links with the Smiths of Glasgow, to form Workman, Clark & Co. The firm’s first order was for a steam coaster named the Ethel. The business grew and prospered.

In the early days Workman Clark outsourced the manufacture of engines to Rowan & Sons of Belfast and other suppliers, but after 1891 the ‘wee yard’ made its own engines. The ‘wee yard’ pioneered the development of the Charles Parson turbine engine and the construction of insulated and refrigerated fruit-carrying vessels (for United Fruit and for Elder & Fyffe’s West Indian banana trade). The company specialized in medium-sized cargo boats and also combined cargo-and-passenger vessels. Harland & Wolff specialised in the construction of high-speed transatlantic liners whereas Workman Clark concentrated on the production of ‘smaller, slower ships for less glamorous trades’. Because Harland & Wolff and Workman Clark had different customer bases and specialisms, the two firms were rarely in direct competition.

Clark was a founder member of the Ulster Unionist Council in 1905 and in 1907 contested the North Belfast by-election, briefly becoming the Unionist MP for North Belfast. As an industrialist and a shipbuilder, Clark believed that Home Rule would have a disastrous impact on the Irish economy, the prosperity of Belfast and the shipbuilding industry. The 1907 contest in the north of the city was the third contest in the constituency in swift succession and Clark was chosen as the candidate most likely to defeat William Walker, the formidable Labour candidate, who in the General Election of 1906 had trimmed the Unionist majority in the constituency to under 300. Clark boosted the Unionist majority to a rather more healthy 1,827. According to Fred Crawford, one of Clark’s most fervent supporters, another one-time apprentice at Harland & Wolff and the principal figure in the Larne gun-running of April 1914, the contest ‘was fought on the question of the Union, and the Union only. There were no side issues as far as Mr Clark was concerned’.

In January 1910 Clark retired from the House of Commons to devote more attention to his business affairs. However, this did not signal any weakening of his commitment to the Union. During the third Home Rule crisis George Clark chaired the secret Ulster Unionist Council sub-
committee established to acquire the wherewithal to oppose Home Rule by force of arms. As chairman of Duncairn Unionist Association, he invited Sir Edward Carson to contest the newly-created constituency in the General Election of 1918. After the establishment of devolution in 1921 Clark became a member of the Northern Ireland Senate.

During the Great War Workman Clark built 35 vessels for the Admiralty and also many standard merchant ships to replace those lost to German U-boats. The latter ships were built at break-neck speed: ‘During their construction one of the firm’s men established a new world riveting record in the north yard, [John Moir drove 11,209 rivets in a normal working day on 5 June 1918] and the south yard replied by making a record in the way of finishing a standard ship, an 8,000 ton vessel being completed in 3 ¾ days from the time of launch’. It was for his firm’s contribution to the war effort that Clark received the Baronetcy of Dunlambert in 1917.

After the war demand for ships initially remained high: in 1920 Workman Clark had orders for 37 ships and appeared to be in a stronger position than Harland & Wolff, but by 1921 orders began to dry up. By that stage Sir George had resigned from the board of directors in protest at the financial dealings which were to result in the firm’s temporary liquidation in 1927. The firm was revived in 1928 as Workman Clark (1928) Ltd. The receivers hoped to persuade Sir George to resume control of the new company but he declined on health grounds. With the onset of the world depression in 1929, Sir George had made a wise decision. In 1932 and 1933 Harland & Wolff did not launch a single ship. Workman Clark launched its last ship, an 8,000-ton tanker named Acantus, in 1934. Sir George died at his home, Dunlambert, Fortwilliam Park, on 23 March 1935. He was buried on 26 March in Belfast City Cemetery. Less than a month later, it was announced that the firm was to be sold and closed.

Sir George’s grandson, George Anthony Clark (1914-1991), was the third baronet and a senior Unionist and Orangeman, being Grand Master of the Grand Orange Lodge of Ireland (1957-67), Chairman of the Standing Committee of the Ulster Unionist Council (1967-72), President of the Ulster Unionist Council (1980-90) and Patron of the Ulster Unionist Council (1990-91).
Thomas Andrews (1873-1912)
the man who designed Titanic

Thomas Andrews Junior was Chief of the Designing department of Harland and Wolff and Managing Director of the Firm. He designed the Titanic and was one of the 1,517 people who perished with the ship on its ill-fated maiden voyage. Despite all the controversy surrounding the sinking of the ship, Andrews is one of the few heroes of the sinking and his reputation remains — to employ John Wilson Foster’s word — ‘unblemished’.

He was born on 7 February 1873 at Ardara House, Comber, County Down, and was the second son of Thomas Andrews Senior (1843-1916) and Eliza Pirrie (1845-1929). The Andrews family had been prominent for several generations in the public, commercial and industrial life of Ulster.

His father was a linen baron and a politician whose mother, Sarah, was the daughter of Dr William Drennan, the radical poet and the real founder of the United Irishmen. Before W. E. Gladstone’s conversion to Home Rule Thomas Andrews Senior was a Liberal. Thereafter he was a leading Liberal Unionist.

John Wilson Foster has described Thomas Andrews’ place in Irish culture — ‘as a Unitarian, Unionist and staunch Empire man’ — as ‘complex’. Perhaps this is so to people today but these dimensions to his life really ought to be readily explicable in terms of his family background.

Shan Bullock produced a brief biography of Andrews, at the suggestion of Horace Plunkett, the one-time Unionist MP for South County Dublin, founder of the Co-operative movement in Ireland and Vice-President of the Department of Agriculture and Technical Education, who greatly admired Andrews’ political acumen. Bullock observed of Andrews: ‘He was a firm Unionist, being convinced that Home Rule would spell financial ruin to Ireland, through the partial loss of British credit, and of the security derived from connection with a strong and prosperous partner’.

From an early age Thomas Andrews Junior developed a great fondness for boats, and because of his manifest skill in the making of these he gained among his friends the nickname of ‘Admiral’.

He received his early education at home rather than at the local village school. Following family tradition, he entered Royal Belfast Academical Institution in September 1884. He was not academic, being fonder of games (especially cricket at which he excelled) than of study, and had not yet developed those powers of industry for which he became famed.

On 1 May 1889 he began a premium apprenticeship at Harland & Wolff. Every morning he rose at ten minutes to five and was at work in the Yard punctually by six o’clock. His first three months were spent in the joiner’s shop, the next month with the cabinet makers, the two following months working in ships. There followed two months in the main store; then five with the shipwrights, two in the moulding loft, two with the painters, eight with the iron shipwrights, six with the fitters, three with the pattern-makers, and eight with the smiths. In November 1892 he joined the drawing office and, after a spell of eighteen months there, he completed his term of five years as an apprentice.
By 1901 Andrews was the manager of the construction works and a member of the Institution of Naval Architects. The following year he became a member of the Institution of Mechanical Engineers, a member of the Society of Naval Architects and Marine Engineers (New York), and an honorary member of the Belfast Association of Engineers.

In 1905 he became chief of the designing department. Two years later he became managing director of the firm and was overseeing plans for the RMS Olympic for the White Star Line.

In 1908 he married Helen Reilly Barbour, younger daughter of John Doherty Barbour, of Conway, Dunmurry, County Antrim, and sister to Milne Barbour, a linen baron, the family firm of the William Barbour Linen Thread Company of Hilden being the largest linen thread manufacturer in the world, and future Northern Ireland cabinet minister. The couple made their home at Dunallan, Windsor Avenue, Belfast. The house is now the headquarters of the Irish Football Association.

On 31 July 1908 the White Star Line placed an order for the ship which would become the Titanic. Construction began on 31 March 1909 and on 31 May 1911 the hull of the Titanic was launched. Andrews took Helen to view the ship one night, shortly before Elizabeth Law Barbour Andrews, their only child, was born. Known by her initials, ‘ELBA’ was born on 27 November 1910.

The Titanic was a remarkable feat of early-twentieth-century engineering and craftsmanship, and the last word in luxury and technological innovation. She was a magnificent spectacle with five miles of decks, squash courts and a swimming pool. She was one-sixth of a mile long, as high as the Albert Clock and had funnels through which a Belfast tram could pass.

On 9 April 1912 in a letter to Helen, Thomas wrote: ‘The Titanic is now about complete and will I think do the old Firm credit to-morrow when we sail.’ Andrews headed Harland and Wolff’s Guarantee Group on the Titanic’s maiden voyage. This was a group of workers who went on the maiden voyages of the ships built by the company to observe the ship’s performance and to identify any necessary or possible improvements. On 14 April 1912 Andrews observed to a friend that Titanic was ‘as nearly perfect as human brains can make her’.

However, later that day, at 11:40pm, the Titanic struck an iceberg on the ship’s starboard side. Andrews had been in his stateroom sleeping at the time, and barely noticed the collision. Captain Smith, the ship’s captain, summoned Andrews to examine the damage shortly after midnight. Having inspected the damaged section of the ship, Andrews ascertained that the first five of the ship’s watertight compartments were flooding rapidly and understood that if more than four of the ship’s compartments were flooded, the ship was doomed. He relayed this information to Captain Smith and advised that the vessel had only about an hour before it completely sank. She actually managed to survive longer than Andrews had calculated: for two hours and twenty minutes. He also informed
Smith of the chronic shortage of lifeboats on board the ship: there were 2,228 people on board but only lifeboats for 1,178 people. For aesthetic reasons, the White Star Line had not wanted lifeboats cluttering up the ship’s decks.

As the evacuation of the Titanic began, Andrews searched the staterooms and advised passengers to put on lifebelts and go up on deck. Conscious of the short time the ship had left and of the lack of lifeboat accommodation for all passengers and crew, he continued to urge reluctant people into the lifeboats in the hope of filling them as fully as possible.

The Titanic sank at 2:20am on Monday 15 April. According to John Stewart, a steward on the ship, Andrews was last seen staring at a painting, ‘Plymouth Harbour’, above the fireplace in the first-class smoking room. Another account has Thomas Andrews frantically throwing deck chairs into the ocean for passengers to use as floating devices. Andrews’s body was never recovered.

On 19 April 1912 Thomas Andrews Senior received a telegram from his mother’s cousin, who had spoken with survivors in New York, searching for news of Andrews. Andrews Senior read the telegram aloud to the staff of the family home in Comber:

‘INTERVIEW TITANIC’S OFFICERS. ALL UNANIMOUS THAT ANDREWS HEROIC UNTO DEATH, THINKING ONLY SAFETY OTHERS. EXTEND HEARTFELT SYMPATHY TO ALL.’

Mary Sloan, a stewardess on the ship, whom Andrews persuaded to enter a lifeboat, later wrote: ‘Mr. Andrews met his fate like a true hero, realizing the great danger, and gave up his life to save the women and children of the Titanic. They will find it hard to replace him’. 