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Cork Harbour Commissioners in the Nineteenth Century: governance, infrastructure and revenue

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for the degree of

Master of Philosophy

University College Cork

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September 2020

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Declaration

This is to certify that the work I am submitting is my own and has not been submitted for another degree, either at University College Cork or elsewhere. All external references and sources are acknowledged and identified within the contents. I have read and understood the regulations of University College Cork concerning plagiarism.



Signature: _____

Date: 8/10/2020

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Introduction

Ports, specifically seaports, have played a cardinal role in the international seaborne trade and have been vital for fostering the economic growth of a nation. Moreover, ports have been considered as key economic drivers for a nation's economy and success. In to-day's global environment ports are a vital link in the supply chain of transport with ports operational efficiency a critical factor for the handling of goods in the international economy. Ports and indeed, harbours are seen to be interfaces between land and water. Palmer suggests that ports are points of interaction between peoples and cultures. But ports, and indeed, harbours are places and places have history and the history of a place affects its present.[1] For Palmer history matters and helps to take a longer view of port development and allows us to distinguish between new developments and the experience of old problems which sometimes can be dressed up in a new form.

This thesis presents an analysis and evaluation of Cork Harbour Commissioners from its early beginnings in the 19th century up to 1900. Chapter 1 details the emergence and more importantly the consolidation of Cork Harbour Commissioners as a harbour authority in the early decades of the century. The extensive port and harbour dredging investment and the significant benefits that accrued, in the second half of the century, are outlined in Chapter 2. The lower harbour was to play a significant role in the development of the port particularly

[1] Palmer, Sarah, 'Current port trends in an historical perspective', *Journal for Maritime Research,* vol. 1, December 1999, p. 1; Tull, Malcolm, 'Port history in the International Journal of Maritime History (1989–2012)', *International Journal of Maritime History*, vol. 26, January 2014, p. 124.

where American mails and emigration were concerned, and this is examined and evaluated in Chapter 3.

Cork, the port and harbour will be examined in terms of its economic history in the 19th century, with emphasis on matters of governance, infrastructure, and finances.

There has been mention of a harbour and a port so it would be important to differentiate between them. A harbour is where a body of water is protected from wind, waves and currents and is used by vessels as a place of safety from storms. The principal elements of a harbour are its natural features: protection from waves, shelter from storm winds and tides, freedom from strong currents, sufficient depth of water to permit a vessel to enter the protected area of the harbour and a bottom to hold a vessels anchor. Harbours can be natural or artificial with Cork regarded as a natural harbour.[2] A port, on the other hand, can be described as a man-made coastal or riverine facility where ships can load or unload. These facilities include docks, wharves, piers, quays, and cranes for loading/unloading.[3]

Cork has been regarded as both a river and ocean port. The upper harbour was regarded as the river port and the lower harbour as the ocean port. Historically, the Port of Cork has been classified as a port of call, a transit port, and a port of distribution.[4] The entrance to the harbour is through a passage without a bar and consists of two channels. The channels are divided by a rock known as the harbour rock and form one broad approach once the rock is passed. (Appendix 1.1 map of Cork port and harbour).

[2] McCarthy, T.F., 'Major Harbour Authorities in Ireland-a critical appraisal', Diploma in Administrative Science, Institute of Public Administration (Dublin, 1979), p. 3.
[3] ibid.
[4] *Port of Cork Handbook* (Cork, 1955), P. 2.

The Port of Cork lies at the south western part of the island and is often described as the dairying region of Ireland. The region has a "series of lofty, barren ridges of old red sandstone, trending roughly east-north-east to west-south-west, separated by damp fertile valleys of carboniferous limestone covered by superficial deposits and where the low land reaches the sea in the west, the valleys become long narrow inlets of the sea called rias".[5] Cork Harbour is thus perfectly situated at the centre of the Munster dairying region.

A city has a great environmental advantage in being located on the coast or the tidal waters of a river. The water becomes the lifeline for the city through imports of raw materials and the export of goods. Trade is the lifeblood of the city.[6] In economic terms, from earliest times, people have been aware of the strategic significance of locating their settlements on waterways. So, what determines the location of a city? Saunders, in relation, to Cork says, "The location of the city was determined by its facilities for defence at the time of its founding and for its position near the head of the tidal waters giving it good access to the sea on the one hand and to the hinterland of Cork and Munster on the other".[7]

The presence of the Vikings in the inner city area seems to have a profound effect on the development of Cork port and while the development of Cork city and Cork port have been closely entwined and mutually dependent, never was that more evident than in the 10th and 11th centuries. The Viking presence was an important and influential one. It is assumed that

[5] Stamp, D.D., *An agricultural atlas of Ireland* (London, 1931), p. 57.
[6] Pettit, Sean, *The Making of the Port of Cork* (unpublished 1986, Cork Harbour Commissioners), p. 1. The original manuscript is kept by the Port of Cork Company. The Port of Cork Company succeeded Cork Harbour Commissioners in 1997.
[7] Saunders, F. O'C, 'The Development of the River Port of Cork City', *The Institution of Civil Engineers of Ireland,* vol. 82, March 1956, p. 115. Saunders was harbour engineer from 1933 to 1960.

the Vikings, who were traders and dealers, brought business and wealth to the city which previously had not existed.[8] The city of Cork, both in its physical shape and its statutory legal existence, came into being when the Normans came to settle on the banks of the River Lee. The Normans brought to Cork what was emerging as a blueprint of a small European city. The city got its first charter in 1185 and subsequent charters gave greater definition to the means of government and municipal responsibilities. The charter was a legal one setting out rights and duties that established local government, leading in time to the establishment of Cork Corporation and the office of mayor. The main imports of the time were wine, cloth and spices. Exports, on the other hand, were wool, grain, beef, and other agricultural produce.

In 1569 "Tunnage" duties on wine were introduced in Cork and presumably, the term tonnage derived in later centuries. Harbour dues or tonnage rates are charged on the calculation of the cargo-carrying capacity of a ship.[9] Exports from Cork during the sixteenth century included hides, wool and woodfells (skins with wool on them) to France and England. Imports during the century covered a wide range of household items, including metals such as iron, brass, lead, pewter and tin.[10] From 1600 onwards Cork had left its medieval period behind and by 1641 had become a much stronger economy and a major centre for the import and export of goods. The export of hides, pipestaves, rugs and tallow increased and imported goods including wine, salt, and other commodities; with trade to the West Indies about to begin in earnest.

The dairying zone was the bedrock element of the Cork region and was never more evident than in the 17th century particularly with the increase in butter exports. Agricultural

[8] Pettit (1986), p. 6.
[9] O'Sullivan, W, *The Economic History of Cork city from the earliest times to the Act of Union* (Cork, 1937), pp. 62-64.
[10] O'Sullivan (1937), p. 83; Mould, Daphne D.C. Porchin, *Discovering Cork* (Brandon, 2004), p. 23.

production increased to match market demand and Dickson maintains that Cork's reputation as a source of high quality provisions was made in the 17th century; particularly, as English and foreign investment found Cork had the advantage of having a natural harbour and was adjacent to South England's Atlantic sea route. As well, "there was a high volume processing centre adjacent to abundant grasslands where durable and appropriate foodstuffs were available for tropical markets".[11] As the century ended the dairy industry had been revived and butter was now the port's principal product. Merchants were, as Pettit describes, "looking seawards". Reclamation was taking place to build stronger quay walls and yet the over-riding need was for the river to be navigable.[12]

The last decade of the 17th century saw the emergence of the growing role of Cork and Cullen illustrates this by showing that Cork had 12.4% of the national revenue from duties on foreign trade in 1681/1682 and how this increased to 21% in 1700 and 22% in 1709/1710.[13] Whilst the Cattle Acts of 1667, which forbade the importation of livestock into England, had a major effect on Irish trade, it also made Cork look beyond Britain to the West Indies and North America. The provisions trade was seen to develop accordingly.[14]

At the start of the 18th century, Dickson in his examination of shipping and ship ownership states that a fundamental characteristic of Cork's maritime enterprise was that very little of the region's 'staples 'was carried to foreign markets on Cork shipping. Whilst Bristol, in particular, had played a pivotal role in the development of South Munster trade in the 17th century there was a change by the early 1760's with the role of Liverpool and London ports

[11] Dickson, David, *Old World Colony, Cork and South Munster 1630-1830* (Cork, 2005), p. 150.
[12] Pettit, Sean, *History of the Port of Cork* (unpublished 1996, Cork Harbour Commissioners), p. 1. The original manuscript is kept by the Port of Cork Company. The Port of Cork Company succeeded Cork Harbour Commissioners in 1997. p. 11.
[13] L.M. Cullen, 'Economic Development 1750-1800' in T. W. Moody and W.E. Vaughan, *A New History of Ireland,* volume iv, eighteenth –century Ireland, 1691-1800 (Oxford, 1986), p. 181.
[14] Pettit (1996), p. 8.

becoming more prominent and that is clear when examining the shipping movements of Cork.[15]

It was the second half of the 18th century that the mercantile trade of Cork jumped from routine to something approaching the spectacular. The source of the expansion in the shipping trade and the consequent generation of wealth was the export of provisions, especially salted butter. The provision trade had the enormous advantage of being an indigenous industry drawing its product from the rich pasture lands of south Munster. This could be seen, in that there was a fivefold increase in tonnage through the port during the century whereas Dublin and Limerick recorded lower increases.[16]

As early as 1720, before any regulations came into play, 38% of Irish butter exports passed through the city of Cork. By 1774 Cork's share of the continental market had risen to 66% and 88% of the American market. The 1729 Act was passed for the cleansing and deepening of the river and harbour of Cork and the building of a ballast office. It could be said that the 1729 Act was the first piece of legislation that defined the port as being separate from the city and, how tonnage rates were to be charged on all vessels using the harbour.

Transatlantic markets, such as Barbados, Leeward Island and Jamaica were all serviced from Cork. Lisbon and Oporto were important ports for cargoes coming from Cork which were then transhipped to Portuguese colonies in South America. Already, Cork had captured an appreciable share of the export of beef to Britain and Europe and in 1782 45.7% of the total exports of beef from Ireland passed through Cork.[17] Thus it could be said that the city emerged

[15] Dickson (2005), p. 154.
[16] Pettit (1996), p. 12.
[17] Pettit (1996), pp. 12-13.

as a major economic centre not only in Ireland but in Europe, the West Indies, and North America.

An important event took place in 1769 with the formation of a committee of merchants of the Cork butter market. A group of 23 merchants had formed a voluntary organisation with the purpose to improve the regulation of the butter market. They had also proposed to set up an inspectorate at their own expense. However, it must be seen that their true motive was to weaken the power of the city butter buyers. O'Sullivan points out that the trading organisation established by the merchants lasted over a century and a half and was without legal sanction for many of those years and depended solely on the integrity of those who controlled and administered it to maintain its existence.[18] By 1768/1769 Cork had over 35% of Irish butter exports and had increased to 50% by 1790.[19] Needless, to say, salted butter became an important export, if not the most important, for the port. The regions fertile valleys supported dairy herds which supplied Cork with butter and the growing population of Cork which increased from 17,600 in 1706 to 57,000 in 1796.

In the period 1760 to 1770 in value terms the port was exporting more than it was importing and Cork, according to Leland, was a ''conveyor belt for the agricultural richness of Munster''.[20] Yet, as Pettit points out local merchants involved in the export trade were very passive in seeking out further export markets. The port took an important step in its future when in the late 1770's work began on the 'New Wall' built downriver from the expanded city. This wall extended along the current site of shipping and whilst of no great significance

[18] O'Sullivan, W, *The Economic History of Cork city from the earliest times to the Act of Union* (Cork, 1937), p.279.
[19] Breen, Mary, *Waterford port and harbour,1815-42*, (Dublin, 2019), p.13.
[20] Leland, Mary, *The Endless Adventure, History of Cork Harbour Commissioners* (Cork, 2001), p. 22.

to-day, at the time it was one of the first major decisions to accommodate imports and exports.[21]

The prosperity of the city and port was seemingly assured by the expansion of British colonial interests, however, change was on its way; the Act of Union came into effect on the 1st January 1801 and from that point onward, activity changed radically with the economic system evolving into a more centralized laissez-faire structure.[22]

In the medium term, the economy of Cork harbour was affected as the port no longer hosted Royal Navy fleets with the result that there was a decline in the supply of provisions. It should be remembered, as well, that the provisioning of British naval vessels during the revolutionary and Napoleonic Wars buffered many merchant fortunes.[23]

From the late 18th century there was little funding available and this had left the port, and in particular quays, in a poor state of maintenance. These economic and structural challenges were going to be a daunting challenge for a future harbour authority.

[21] Pettit (1996), p. 15.

[22] McCann, Gerard, *Ireland's Economic History: Crisis and Development in the North and South* (London, 2011), p. 5; Article 6 states there would be a mechanism to abolish tariff protection for Irish produce and that the Irish exchequer would be abolished, and the currencies merged.

[23] Fahy, A.M., 'Place and Class in Cork' in *History & Society: interdisciplinary essays on the history of an Irish county, (*eds.), Flanagan, P. and Buttimer, C. (Dublin, 1993), p. 794.

Chapter 1:The Emergence and Consolidation of the Cork Harbour Commissioners

1: Cork Port in 1800

By 1800, Cork port was unregulated as regards shipping activities and had no port authority structure. The port was under the control of Cork Corporation, the municipal authority, in terms of financing, investment and shipping matters. The corporation had benefitted from the growing revenues of a prosperous city with revenues increasing from £900 in 1715 to about £1,200 by 1732 and had reached £7,000 by 1820.[24] It must be remembered at this time the part of the city, where later, the City Hall, the Gas Works and the Marina Industrial Estate were built was still slob and marsh land with the area being referred to as a series of lakes.[25] At low water, the lakes became slob with the river as a channel and significantly, the state of the river was in such bad condition, it was described as being "most primitive".[26] So, in essence, the port consisted of river, marsh, channels and estuarine mud; with an urgent need to improve and invest in the infrastructure of the port.

This was the biggest challenge in port development in the eighteenth and nineteenth centuries.[27]

[24] See Keane, John Joseph, 'Four Tales of a city the transformation in the social, economic and political geography of Cork city 1780-1846' (unpublished M.A thesis, University College Cork, 1990).
[25] Pettit (1996), p. 23.
[26] McCarthy (1949), pp. 1-9. He also states that Cork port was in a ''primitive state'' up to the middle of the 19th century.
[27] Cullen, L. M, A*nglo Irish Trade 1660-1800* (Manchester, 1968), pp. 21-2; O'Sullivan, W, *The Economic History of Cork city from the earliest times to the Act of Union* (Cork, 1937), p. 148.

2: The Butter Weighhouse Act of 1813 and 1814 'Cocket Tax' [28]

A first step to improve the port's infrastructure was the passing into law of The Butter Weighhouse Act of 1813 under which commissioners were appointed to improve the 'harbour and river of Cork'. Significantly, twenty-one merchants of the city were appointed as commissioners. These merchants along with the mayor and both high sheriffs made up the total of 24 commissioners. One third (1/3) of the fees received by the Weighmaster from the butter trade in the city went to the commissioners with the purpose to deepen, widen and improve the harbour and river of Cork. To illustrate Cork's position nationally the port had 35% of Irish butter exports in the year ended 1st June 1815 and Waterford 23%.[29]

The following year, in 1814, the infamous 'cocket' tax was imposed as another form of revenue and was regarded as simply a tax on trade. It was known as the 'Cocket and Entry Tax' Act[30] or 'The Commercial Buildings Act' of 1814. The 1814 Act noted the need for further port improvements due to the increase in the city's trade. It provided for a tax of one shilling upon every entry, cocket, or warrant for all goods, inwards or outwards in the port less 10% to be retained by the Collector of Customs. The tax was peculiar to Cork and was a tax on customs documents rather than the value or quality of goods. The tax affected the retail trade the most and whilst, it may have seen to be an important source of revenue, it must be borne in mind that 10% of income was retained by the Collector of Customs with the balance equally divided between Cork Harbour Commissioners and the Commercial Buildings Company. Revenue from the tax in respect of Cork Harbour Commissioners in 1871 was £182 and

[28] *The Butter Weighhouse Act* of *1813.* (53. Geo, 111.c.70).

[29] Hearne,J.M., 'Waterford: economy ,society and politics,1780-1852' (UCC: PhD, 2001), p.10.

[30] Lantry, Mary, 'The Cocket tax in Cork; a tax in the context of its time and place' (unpublished M.A thesis, University College Cork, 2018); Statutory Instrument No. 274/1947 - Harbours Act, 1946 (Abolition of Cocket and Entry Tax at Cork Harbour) Order, 1947.

decreased during the remainder of the 19th century and the early decades of the 20th century; it increased subsequently with income of €1,600 reported in 1936.[31] The 'cocket' tax was repealed under the 1946 Harbours Act. The tax was not levied on coast-wise vessels but after the passing of the Irish Free State Agreement 1922, the amount of tax was significant as England was deemed to be a foreign country.

3: Cork Harbour Commissioners-early beginnings

There were now two sets of commissioners, the first appointed under the 1813 Act and the second under the 1814 Act and both charged with the same responsibilities. They agreed to come together to form themselves into one board and the first meeting of the Cork Harbour Commissioners took place on the 21st September 1814 specifically to deal with its legal status and procedures to be adopted. The meeting regarded the purpose of the legislation as being two-fold: first, to raise money for the Commercial Buildings Company and secondly, rates to be charged on ship movements. An analysis of those present shows that the following groups were well represented: The Committee of Merchants, Quakers, Trustees, Corn and Butter Merchants and more significantly, members of the Commercial Buildings Company. So, the 1814 legislation which was primarily set up to raise money for the Commercial Buildings Company had directors of that company as commissioners. The third meeting of Cork Harbour Commissioners decided that the chair of each meeting would be taken by either the sheriff or mayor; if neither were present it would be taken in rotation by members of Cork Corporation and other commissioners. It is interesting, in terms of board governance, this practice lasted till 1883 when C. J. Cantillon was elected as chairman when the position was

[31] McCarthy (1949), p. 29.

formally instituted. With the condition of the port uppermost in the commissioners mind the meeting on the 1st October 1814 set up a committee to enquire into the state and condition of the river. The committee consisted of five members of the board, three of which were directors of the Commercial Buildings Company with one member involved in shipping.[32] The investigation arose out of various complaints by ship users and its terms of reference were: "...to enquire into the state and condition of such parts of the river and quays of Cork as vessels general load and discharge their cargoes, together with the state and condition of the 'New Wall' …". The Committee reported on the 15th October "...it is essentially necessary to alter the mode in which vessels at present receive their ballast, which is both a disgrace to this city and ruinous to those parts of the river where vessels take and discharge their cargo, the ballast being suffered to lie in great heaps upon the quays, and banks being formed in the line of rubbish accumulated'' and that "few of the quays are built with timber framing; the large topping stones remain without support or fastening; vessels rising with the tide lift them with their guards; the stones fall into the river; the quays become dilapidated and the berths where the vessels lie are occupied with masses of stone". As regards, the 'New Wall' the committee noted: ".... the removal of the banks lying in every part of the bed of the river...requires considerable attention...vessels are inclined to heel upon them to the imminent danger to ships and cargo and as shallows, they obstruct the channel so that loaded vessels cannot pass at neap tides".[33] The 'New Wall' was from 1814, an obsessive subject of debate, argument and expense. The committee also highlighted the situation at Blackrock

[32] The committee consisted of commissioners Cotter, Callaghan, Goold, Morgan and Bickerton.

[33] Cork and County Archives (CCCA), Cork Harbour Commissioners Collection (PC), minutes of board meetings of 1st and 15th October 1814; Cork City Council, *Planning Application No.1938589*, Custom House Tower. Tower Development Properties Ltd, Custom House Quay Development, Environmental Impact Assessment Report, p. 114. The Port of Cork Company sold the Custom House Building in 2019 and the Environmental Report outlines the architectural and engineering development of the city quays. (Accessed January 2020).

that "...an encroachment has already been made of several feet upon the bed of the river where the channel particularly runs, and which, if not looked to, may become of serious consequences".[34] This report was very important, as it outlined in detail the actual state of the river and quays of Cork and did, in fact, constitute a blueprint for the future work of Cork Harbour Commissioners (CHC), particularly, in the nineteenth century. The immediate areas of concern were the need for the river to be dredged and secondly, the quay walls needed emergency treatment. The basic objectives of the port as regards port maintenance were to keep the river channel clear and to secure the quay walls. The board approved of the suggestion that Alexander Nimmo carry out a survey of the river and report on suggestions for the improvement of navigation.

CHC was seen to be involved in the business of the port through importing, exporting and shipping. The commissioners appointed under the 1813 and 1814 Acts, most of them were earning a livelihood from the port, were well aware of the state of the port; in 1813 only small vessels drawing 11 feet of water could get to Cork city and then at high water and on berthing at Cork they had to be aground on a gravel bottom to discharge. Banks were formed in the river at Blackrock and the channel was blocked in places. In terms of quay structure, large topping stones were laid without foundations or fastening and more repeatedly deposited in the bed of the river by movement of tides and vessels moored alongside.[35] Between Passage and Cork, it was only 3 feet deep in places with large vessels being unable to proceed to the city and having to unload cargo which was taken to Cork subsequently by lighters. Knowing that dredging was to be the way of the future, as regards the port, the commissioners in February 1815 placed an advertisement seeking "... person or persons ....to contract with the

[34] CCCA/PC, Cork Harbour Commissioners, minutes of board meeting, 15th October 1814.
[35] McCarthy (1949), pp. 12-13.

Board for the removal of the rubbish, earth and stones which have accumulated at the beds of the different quays of Cork....".[36] The contract was awarded to Samuel and Andrew Hobbs. There was a clear acceptance for the development of the city quays, as there was dissatisfaction with the condition of city quays, which manifested itself, in complaints from Lloyds Coffee Shop of London in 1815, on behalf of some 64 masters of vessels who were trading with Cork. By July of the same year, there was news for the port that Trinity House had approved of a lighthouse for Cork Harbour. The lighthouse, which initially was named Roche's Tower, became known as Roche's Point and a famous landmark for Cork citizens.

4: Alexander Nimmo 1815

The Commission for the Bogs of Ireland was set up in 1809 and was arguably the first attempt by the government after the Union to address the infrastructural deficit of Ireland. The commission brought to Ireland Alexander Nimmo, a friend of Thomas Telford and until then rector of Inverness Academy. He had a major influence in the emergence of the Irish Ordnance Survey, the Office of Public Works, the Hydrographic Survey of Ireland and the Fisheries Commission.[37] Subsequently, Cork Harbour Commissioners engaged Nimmo, to investigate as to how the port facilities could be restored. Joseph Pim, a prominent harbour commissioner, guaranteed the cost of Nimmo's survey. The main issues that arose were:
1: the issue of ballast; 2: the significant gap in the 'New Wall'; and 3: criticism of quay construction. Nimmo's report, recommended, better river navigation for shipping and a

[36] CCCA/PC, Cork Harbour Commissioners, minutes of board meetings, February 1815.
[37] See Wilkins, Noel P., *Alexander Nimmo, Master Engineer, 1783-1832: Public Works and Civil Surveys,* (Dublin, 2009).

proposal for a system of wet docks in the city and a canal to the deep-water in Loughmahon. He was very critical of the condition of the quays which he referred to as "....mostly imperfect masses of rubble stone...".[38] He also referred to "merchant ships lie off Cove or ascend the harbour to Passage which is five miles below Cork. Vessels that draw ten or eleven feet of water only can go up to the city with spring tides. With neaps, they can go no higher than the King's Quay (Blackrock) about two miles, or in the channel about one mile below the city". As regards the 'New Wall' Nimmo questioned the benefits of the Navigation Wall, a view that was shared by many others subsequently. Before 1813, many quays were built in a piece-meal fashion with individuals carrying out the necessary repairs following permission from Cork Corporation and much of this work was carried out between 1800 and 1808. Such quays bore the names of the developers-Penrose, Lapp and Anderson. Nimmo's report identified clearly for the commissioners the main structural issues and possible solutions facing the port authority. However, the cost was seen to be prohibitive to the commissioners. It is important to point out that Nimmo even though he went outside his remit, was able to illustrate to the board the natural and man-made difficulties of navigation in the port. Pettit suspected that Nimmo was re-designing the whole natural fairway in his proposals but that he was spurred on by the "visionary enthusiasms of the time".[39]

By 1816, the city was experiencing an economic slump with agricultural prices declining by up to half wartime prices and Cork, no longer hosted Royal Navy fleets and with that scenario, the provision trade was badly affected. There was a feeling that the cost of infrastructure could not be undertaken without parliamentary aid and to implement some of Nimmo's

[38] Nimmo, Alexander, *Report to the Harbour Commissioners on the Means of Improving the River and Harbour of Cork* (Cork, 1815).
[39] Pettit (1996), pp. 23, 26-7 and 44; Pettit (1986), p. 6.

recommendations, in 1816, grant aid was requested on behalf of Cork Corporation and Cork Harbour Commissioners but was turned down by the Lord Lieutenant on the advice of the Chief Secretary for Ireland, Robert Peel. In the delegation that met Peel, CHC was represented by Gerard Callaghan, who was prominent in Cork business circles; Cork Corporation was represented by Aldermen Newsom and Evanson, together with Sheriff Deane. Whilst this decision was disappointing, more so, was the fact that Waterford, with a similar petition, was successful in getting funding and, funding of Cork port, Peel argued, should be raised at local level.[40] This request for aid was the first with which the commissioners were associated with. In the submission, there was mention of the progress of the 'New Wall' until 1790 and how "internal disquiet and agitation in Ireland had so interrupted all public works". This reference was to the French War and the 1798 rebellion. In the submission for funding, it was noted; "....established packets hired by and under the control of Government plying between it and Bristol...principal port ...embark and debark troops...that generally the baggage of the regiments is shipped from and landed at the quays of Cork...that the coal trade is carried on exclusively by English vessels, which being very frequently prevented working up to Cork by strong westerly winds, rapid floods and the shallowness of the river, suffer considerable detention, while the inhabitants also suffer from want of fuel".[41] A more significant point was raised in the submission, in relation to the nomination of the 'Weighmasters of Butter and Hides', the fees belonging to such offices and "which was the undoubted right of the Corporation was assumed by the Irish Parliament in 1723 and the fees received by persons appointed by Parliament used for their own private benefit until the year 1813". From 1813

[40] For the Waterford perspective see Breen, Mary, *Waterford port and harbour,1815-42*, (Dublin,2019), pp.18-20.
[41] Leland, Mary, *The Endless Adventure, History of Cork Harbour Commissioners* (Cork, 2001), p. 43; McCarthy, Cal, *Cork Harbour* (Dublin, 2019) p. 111.

revenue was used to support the Weighhouse and city improvements and it was further pointed out that the revenue raised between 1723 and 1813, which amounted to, £130,000, could have been used for the completion of the 'New Wall' along with other developments; it was also pointed out that 1/3 of yearly income was applicable to the improvement of the river but that 1/3 would not be sufficient in meeting the annual expense of maintaining the quays.[42] It was argued that during the twenty years of war Cork Corporation did not require payment from any privately owned vessel, engaged in public service, in respect of "legal anchorage and ballast dues" and that such sums would have been quite significant.

The Deane brothers in the autumn of 1817 were involved in the resumed work on the 'New Wall' with 400 personnel employed and this included, masons, stone cutters and labourers. Thomas Deane was an architect and Alexander, a contractor. The Deane brothers became very influential in the affairs of Cork Harbour Commissioners. In carrying out the protracted work on the city quays a vast amount of work lay ahead: a large part of Merchants Quay had fallen into the river; Charlotte Quay, now Fr. Mathew Quay needed urgent attention; Victoria Quay still needed to be built as did the depot for later cross-channel steamer traffic. Penrose, Patrick's, George's, and Pope's quays all needed urgent attention. Nimmo in his report had specifically asked that Merchants Quay be under-pinned and piled along 532 yards. By April 1818, portion of the quay was re-built by the Deane brothers, but some 300 feet still needed to be completed. A tender was advertised in relation to the building of nearly 200 feet and three tenders were received with the contract being awarded to one of the Deane brothers, Alexander. The work to be carried out was to give the 'New Wall' a gradual and impressive increase of breadth so that the quay near the Custom House could be widened by ten feet.

[42] Under the 1813 Act one third (1/3) of the fees received by the Weighmaster from the butter trade in the city went to the Cork Harbour Commissioners.

5: Cork Harbour Act 1820

In 1819 consideration was being given by Cork Harbour Commissioners and Cork Corporation to the passage through parliament of a Ballast Act. On the same issue, the Committee of Merchants and the ship owners of the city called a meeting regarding the proposed act; however, it was to decide the number of commissioners to be appointed in future. Julius Besnard, as the board's law agent, was sent to London to oversee the legislation being enacted. His family were influential members of the 'Friendly Club' with several members holding the ex-officio offices of sheriff and mayor in Cork Harbour Commissioners (CHC). The bill received royal assent in July 1820.[43]

This was the most significant piece of legislation relating to Cork Harbour Commissioners since they were established and would remain important until the passing of the 1946 Harbours Act. The significant features of the act included:

1: Extensive powers were given to Cork Harbour Commissioners for the improvement of the river and port.

2: A Harbour Master was to be appointed along with power to license pilots.

3: The commissioners were confirmed to meet as a body and "keep records of proceedings".

4: The board had power to regulate all traffic in the port and river and to make bye-laws for the rates of all shipping. Under the act, CHC could impose duties on imports and exports and this led to an increase in income of 100% between 1822 and 1829 albeit from a low base.

5: There were to be sanctions on masters of vessels guilty of throwing coal, rubbish, stones and gravel into the river.

[43] *Cork Harbour Act 1820.* (1. Geo.iv.c.52); O'Riordan, Patrick, *Portraiture of Cork Harbour Commissioners* (Cork, 2015), P. 288.

Following the passing of this legislation, the commissioners appointed John Cotter and Henry Hardy, treasurer and secretary respectively.[44] Cotter was a director of the Commercial Buildings Company, sheriff in 1804 and a prominent member of the 'Friendly Club'. The commissioners later in 1820 set about securing permanent premises for the board as up to then meetings were held in the old Mansion House (the residence of the mayor and the municipal offices). Later the commissioners met at the Commercial Buildings Offices, of which many of them were directors. For the building of the premises on Lapps Quay CHC received tenders in the names of Leycester, Foley, Doyle and Hall. Leycester was the successful bidder. The Leycester family became prominent members of Cork Harbour Commissioners with Robert Leycester being a commissioner from November 1821 to October 1822 in an ex-officio capacity as sheriff. The Leycesters were prominent members of the 'Friendly Club'.

At this time, the commissioners set about structuring the pilotage system in a more formal manner and a public notice was mentioned in the newspapers of August 1820. By December the board had set out its first schedule of pilotage rates. In setting out the regulations relating to pilotage it was clear that at this stage those vessels of over 220 tons were not capable of being received at the Cork quays thus emphasizing the river restrictions and the need for improvement. The year 1820 witnessed the appointment of the first harbour master along with deputies for Cove and Passage. Significantly, the 1820 Act allowed the commissioners to benefit from additional income accruing which rose significantly to nearly £7,000 in 1822.

6: Early Port Developments and a view of The Port in 1846

The 1820's saw work progressing slowly on the refurbishment of the city quays, mainly under

[44] Henry Hardy was the secretary of Cork Harbour Commissioners from 1814 to 1847.

the direction of the Deane Brothers, and the commissioners began to turn their attention to the need to deepen the river between Passage and the Custom House. The commissioners, at a meeting of the 8th March 1821, engaged Mr John Killally, a Government Surveyor,[45] to complete a report but again, the cost was beyond the resources of CHC. His report being a modification of Nimmo's report. He proposed to build a canal to improve the navigation of large vessels from Passage to Cork at a cost of €103,500, however, by June the board had referred to Killaly's plan as "inexpedient to execute".

This period in time saw what Pettit referred to as a development that was to transform "the traffic of the sea as dramatically as the railways did on land"; steamboats had arrived on the Lee and this was seen when there was a request for boats to have exclusive berths for lying at Merchants Quay.[46] But steam was bringing its disadvantages as was experienced in 1828 when a letter from the ship owners and merchants of the city requested the commissioners to enact a bye-law to protect shipping interests as steamers were using excessive power.

With finances scarce, this had the effect that between 1820 and 1833 repairs could only be carried out as money allowed. Nonetheless, the commissioners could see that the major investment required was to invest in dredging to overcome the limitations in the depth of the channel and indeed, the city quays. The size of ship coming upriver was limited and then there was the question of the lighters in Passage which had to be used because of the inadequacy of the channel.

In 1836, Jacob Owen carried out a survey on behalf of the commissioners, of the channel between Blackrock and Cork city. He recommended the completion of the 'New Wall' as far as Kings Quay and in the same year, the board were discussing the possibility of a rail

[45] CCCA/PC, Cork Harbour Commissioners, minutes of board meetings, June 1821.
[46] Pettit (1996), p. 23.

connection from Cork city to Passage.[47] The railway companies brought a new dynamic to Cork, however, it is important to put the commissioner's role in context as it could be described as one of giving support but also, the need for due diligence, particularly when the harbour interest was at stake. An example was when land for rail tracks was required by the railway companies and on occasion, this conflicted with the position of the commissioners. In relation to that period, Saunders stated that "... a race was now on between port accommodation and draught and length of ships. Cork was in the race along with other ports".[48] Almost two centuries later Cork is still trying to find a solution to that problem.

By November 1840 CHC had invested in their first crane and by 1842 they were reacting to unprecedented unemployment in the city with extra labourers been employed which increased labour inputs into the harbour maintenance work. Just as the commissioners were reaching the mid-point of the century there was an independent analysis recorded of the physical and economic state of the harbour.[49] The salient points were: the state of the harbour ….showed the port in a very backward state; quays extending from St Patricks Bridge in the north channel and Parliament Bridge in the south channel to about 200 yards east of the Custom House Quay, were built on the strand, the foundations being at low water level; the depth of water in the centre of the channel was from 4 1/2 to 6 feet. There were no lighthouses or buoys to mark the channels and at that time only vessels of 15 feet draft could only get to Cork on spring tides and at neap tides, only 12 feet draft vessels could get up. At

[47] CCCA/PC, Cork Harbour Commissioners, minutes of board meeting, 27th April 1836.

[48] Saunders, F.O'C, 'The Development of the River Port of Cork City', *The Institution of Civil Engineers of Ireland,* vol. 82, March 1956, p. 120.

[49] Coakley, D J. *Cork: Its Trade and Commerce* (Cork, 1919), p. 84; Ordnance Survey *map 1841 1:10.,5060 map, Co. Cork sheet 74* and Ordnance Survey *map 1869 1:10,1056 map, Cork City sheets 74-46 and -56,* in Cork City Council, *Planning Application No.1938589*, Custom House Tower. Tower Development Properties Ltd, Custom House Quay Development, Environmental Impact Assessment Report, p. 114.See Appendix 1.2 Map of Cork Port and Harbour mid 19th century.

Cork quays, all vessels had to lie aground and the large vessels would have to lie some distance from the quay. All overseas vessels had to anchor at Passage where about half the cargo was discharged into lighters to be taken to Cork with the subsequent extra cost to merchants.

7: Port finances 1800-1850

Cork Harbour Commissioners income derived from the following main sources, tonnage rates, imports and exports charges. With no capital funding forthcoming from the Government and having been told that any maintenance should be financed from the port's resources, it was not the most auspicious of starts for the new harbour authority.

One third of the fees (1/3) from the butter industry, under the 1813 Act, received by the Weighmaster went to CHC with the purpose "to be by them expended in deepening widening and improving the harbour and river of Cork''.[50] For the financial year, 31st July 1814, 1/3 of butter proceeds amounted to £499 and based on the quarter February returns it can be estimated that CHC income amounted to £576 in respect of 1815. McCarthy has estimated that the income from the butter receipts in subsequent years reached £700.[51] The 1813 Act was repealed under the 1820 Act.[52]The 1820 Act was a start as regards financial control and within a few years, the commissioners wanted their financial affairs audited annually. Whilst the records of the period from 1820 have been lost in a fire, it is possible to put together a financial picture of CHC. The 1820 Act allowed the commissioners to raise tonnage and goods income that was not applicable under the 1813 Act with the result that income in respect of

[50] *The Butter Weighhouse Act* of *1813.* (53.Geo, 111.c.70).
[51] McCarthy, Patrick J, 'An Economic History of the Port of Cork: 1813-1900' (unpublished M. EconSc. thesis, University College Cork, 1949) p. 41.
[52] O'Riordan (2015), p. 288.

the year 1822 amounted to £6,894. Table 1. 1 shows an analysis of income for the years 1822-1832.

Outside of the tonnage and goods income from butter, there does not seem to be any other significant income. There was no financial structure in place during this period particularly as finances were in the hands of agents.

Table 1. 1 Cork Harbour Commissioners Income 1822-1932

Year	Total Income	+/-%
1822	**£6894**	
1830	**£7872**	**14%: (1830-1822).**
1831	**£8172**	**18%: (1831-1822).**
1832	**£6655**	**-3%; (1832-1822).**

Source: Pettit (1996); McCarthy (1949); O'Riordan, Patrick, *Portraiture of Cork Harbour Commissioners* (Cork, 2015); CCCA/PC, Cork Harbour Commissioners, annual accounts and minutes of board meetings, 1822-1832.

Ballast income has been recorded in gross terms for all years except for 1848 and 1849 when the surplus was shown under income. This distorts any analysis of ballast income for the period 1830-1849. Similarly, in 1849 total income amounts to £14,018 which includes a miscellaneous once-off receipt of £2,650. Table 1. 2 shows an analysis of income for the years 1835-1849.

Revenue from imports suffered badly during the years 1832-1835 and as mentioned rates were reduced in 1832 by 25% reflecting the commissioner's concern. Income varied from £1,218 in 1832 to £1,511 in 1835. Income began to increase in the remaining period of the decade, but it was not till 1840 that there was a marked improvement; with income increasing from £2,456 in 1840 to £5,036 in 1849. Imports in the period 1830--1849 increased by 147%

and of which, 77% applied to the years 1845-1849. The increase can be attributed to grain and feedstuffs imported during the famine period. The increase in income during the review period is primarily due to imports, which on average, amounted to 27% of total income.

Export income in respect of 1835 amounted to £1,076 which was the lowest figure in the 1835-1849 period and when CHC reduced their rates in 1845 income rose to £2,604 but had declined to £1,843 by 1849.

From a base income of £1,660 in 1830 tonnage income gradually increased reaching £3,970 in 1849, reflecting a 139% increase.

Table 1. 2 Cork Harbour Commissioners income 1835-1849

Year	Imports	Exports	Tonnage	Total	%
	£	£	£	£	Total Income
1835	1511	1076	2140	4727	64
1840	2456	2018	2751	7225	78
1845	2833	2604	3133	8570	87
1849	5036	1843	3970	10849	77

Source: Pettit (1996); McCarthy (1949); O'Riordan, Patrick, *Portraiture of Cork Harbour Commissioners* (Cork, 2015); CCCA/PC, Cork Harbour Commissioners, annual accounts and minutes of board meetings, 1835-1849.

An analysis of expenditure is shown in Table 1. 3. A major cost over the period under review was quays which increased by 96% and, it was no surprise to find that dredging costs had increased by 184% during the same period. Quay expenditure along with dredging costs consistently amounted to over 60% of total expenditure during the review period. This expenditure mostly related to the upper river. Salaries costs declined to 5% of total costs as did rents going from 5% to 3%. Ballast costs were consistently over 21% during the period of

review, however, with no amounts shown under expenditure in 1849, as the surplus/profit was shown under income, this had the effect of distorting the analysis of ballast and indeed, total expenditure. The second quarter of the nineteenth century was an important phase of development and investment for the port, and many of the quays built remain in situ and constitute a defining feature of the port's history.

Table 1. 3 Cork Harbour Commissioners Expenditure 1830-1849

YEAR	QUAYS	DREDGING	RENTS	SALARIES	BALLAST	TOTAL
	%	%	%	%	%	%
1830	54	12	5	8	15	94
1835	42	13	6	7	28	96
1840	15	46	6	7	21	95
1845	34	29	4	6	21	94
1849	65	22	3	5	0	95

Source: Pettit (1996); McCarthy (1949); O'Riordan, Patrick, *Portraiture of Cork Harbour Commissioners* (Cork, 2015); CCCA/PC, Cork Harbour Commissioners, annual accounts and minutes of board meetings, 1830-1849.

8: The Shadow of the Famine and Emigration

The Irish economy was crippled by the failure of the potato. The crop of 1845 failed as a result of potato blight with the subsequent famine bringing disease and death to Ireland, thereby, reducing the population and having far reaching economic and social effects. In respect of the port, the famine had economic consequences which were reflected in changes that took place

in the merchant class and this, in turn, had an effect on the general character of the port which led to the near extinction of the general merchant as a ship owner.[53]

The twenty year period, 1845-1865, was to witness a phenomenal growth in cross-channel steamer traffic, principally in the carriage of passengers and cattle and the harbour was to become famous as a major transatlantic port of call, however, more immediately the shadow of the famine was to fall over the Port of Cork. Following the repeal of the Corn Laws, the then Prime Minister Sir Robert Peel authorised the importation into Ireland of corn, including Indian corn from the United States to alleviate the distress of the Irish people. By 1846 Peel had set up the Relief Commission to organise local committees, landlords, clergy and businessmen to raise subscriptions to buy and distribute food; local employment schemes were put in place as was, the building of fever hospitals. Peel ordered, without cabinet or parliament approval, £100,000 of Indian corn to be delivered to depots in Ireland from the United States.

Relief of communities can be traced as far back as the 1820's with officers and ratings stationed in Ireland requesting that a portion of their wages be allocated for the relief of 'distress' in Irish coastal communities.[54] Still, the harbour authority must have been aware of the social conditions that prevailed in the city, particularly with unemployment high during the 1830's; in May 1837 the commissioners decided "... in consequence of the number of labourers who are unable to procure work in this City, and of the high price of provisions...." to authorise the placing of one hundred labourers clearing the river in front of the 'New Wall' with the proviso they had to be residents of Cork. By June 1842 meetings of the commissioners were dealing with the whole question of unemployment, for example, at the

[53] Pettit (1996), p.150.

[54] Brunicardi, Daire, *Haulbowline: The naval base and ships of Cork Harbour* (Dublin, 2002), p. 39.

request of Mayor Thomas Lyons, there was agreement that 150 labourers be employed with each person applying for work to produce a recommendation from a commissioner; each commissioner was to have the power to recommend six resident labourers and as well, the applicants should be the head of the family.[55] Following on, in less than a week, 200 more workers were to be employed and a further 430 by the end of the month.[56] This is reminiscent of a programme of work that was in operation in the port each Christmas and lasted well into the 1970's/1980's and became known as Christmas Relief work with the politicians of the day recommending individuals to the harbour authority for work. Maybe, it was coincidence or otherwise, it was the same faces that turned up for work each year.

Biscuits and oats were stored in the Ordnance Depot in Haulbowline with naval magazines being used for storing Indian corn. Reflecting the inadequacies of Cork and its port, the ships that arrived could only discharge part of their cargo at Haulbowline and would have to be further lightened at Passage before proceeding to Cork. Part of the problem was getting the corn milled and this caused considerable movement from seagoing ships to the mills, which were mostly in Cork city, and from there back down to Haulbowline for distribution around the coast. To all intents and purposes, the navy was acting as an aid to the civilian authority.[57] As people left, food ships sailed into Cork city, as early as 1846 with consignments of Indian corn from the USA and as these vessels arrived in Cork harbour they often had to wait for 2 weeks as the preparation for milling and distribution was incomplete.[58]

Yet it was not until 1846 that the commissioners, judging from the board minutes, became concerned with the famine catastrophe. The Commissary General, Hewetson, asked for

[55] CCCA/PC, Cork Harbour Commissioners, minutes of board meeting, 10th June 1842.
[56] Ibid, Cork Harbour Commissioners, minutes of board meetings of 15th and 29th June 1842.
[57] Brunicardi, p. 40.
[58] Pettit (1996), p. 179.

remission in dues payable on cargoes. He was responsible for receiving, unloading, storing, drying, milling and dispatching supplies of Indian corn, the board agreed that the American relief food vessels arriving in Cork would have their dues remitted and among, the vessels arriving was the American sloop ''Jamestown'' from Boston.

The significance of the hardship that the famine had brought was highlighted to the commissioners when a labourer, employed by them, died as a result of famine fever.[59] By May 1846, there was a request from a local famine relief committee which was offering an interest free loan of £1,000 for 12 months on the basis that it should be spent in 3 months on additional work requiring labour.

The Quaker business and religious connections proved to be important factors during the famine and none more so than in Cork, when there was a relief committee set up under Ebenezer Pike who had been appointed to look after the city and the committee included names such as Carroll and Newsom, who were prominent commissioners.[60] With Pike, as chairman of Cork Harbour Commissioners, he proposed and authorised an increase in wages to be paid at nine shillings rather than eight shillings a week for labourers. The end of the month saw the board agree that 50 extra labourers be given work at 14 pence a day and that all necessary gangers to be paid 16 pence with work to commence on the 'New Wall'.[61] By December of 1846, the board agreed payment to labourers for a full week at Christmas including holy days with the implication being that only for the famine there would be no

[59] £5 was to be paid to the widow of Daniel Lane a labourer with CHC who had been employed for 22 years.

[60] Harrisson, Richard S., *Merchants, Mystics and Philanthropists, 350 years of Cork Quakers* (Cork, 2006), pp. 90 and 118.

[61] CCCA/PC, Cork Harbour Commissioners, minutes of board meeting, 7th October 1846.

payment for holy days.[62] Where there was famine emigration was not far behind.

From the Great Famine, emigration accelerated. Small numbers had emigrated in the 18th century and they mainly came from Ulster. An estimated 68,000 sailed from Irish ports in 1844 for a new start in America, with an estimated 2 million leaving between 1845 and 1855 and up to 70,000 emigrating from Cork city between 1845 and 1851. The general practice was to travel by steamer to Liverpool and embark for America but firstly, several days had to be endured in the city. After 1851, Cove emerged as an emigrant port due primarily to the arrival of the transatlantic steamship companies, making the harbour an important point of transatlantic departure and arrival thereafter. In 1857, Inman Line was first to arrive making the calls to Queenstown and became a regular caller by 1859 with ships calling the day after leaving Liverpool to embark cabin passengers and mail, subsequently, it began to take steerage passengers. A huge benefit to Queenstown was announced in 1859 when it was to become a port of call for the Royal Mail Steamers.[63]

In economic terms, there was a profitable trade in timber from North America, which increased the number of transatlantic voyages and to solve the problem of ballast caused by the inability of the timber ships to find suitable cargoes for North America, minimal changes were made and the ships were able to carry people as outward cargo. An early mention of a ship coming to Cork for passengers bound for the United States was in April 1845 when there was a request by a merchant for a reduction in tonnage rates on the vessel “Ocean”. Whilst

[62] CCCA/PC, Cork Harbour Commissioners, minutes of board meeting, 23rd. December 1846. Referring to Indian Corn, the phrase “present scarcity”, used in the minutes, is an understatement of the situation that pertained in Cork.

[63] In 1859 Cork Harbour Commissioners received confirmation from the UK government that Queenstown was to be made a port of call for the Royal Mail Steamers and that the British and North American Royal Mail Steam Packet Company was to deliver and receive the mails.

the board on that occasion refused the application, they were more accommodating when the number of ships arriving into port increased.

Even with the shadow of the famine over the harbour, port developments continued.

9: Shipbuilding in Cork port

The first Irish made paddle steamer was launched on the 15th June 1815 at Passage by Andrew Hennessy, who designed and built "The City of Cork". A dry dock was built in Browne's yard in Passage in 1830 and along with Robinson's yard, built most of the Atlantic and Continental trade with Wheeler's yard concentrating on ship repairs. Brown's close rival Robinson was getting orders from England which involved ships that varied from sail to steam. The success of the shipping industry can be seen that by 1840 aggregate registered tonnage, in the port, was 32,000 and by 1854 was over 50,000. By the 1850's it has been estimated that 1,500 to 2,000 jobs were employed in the industry. The industry was boosted by factors such as the emergence of the steam packet era and the war involvement, nevertheless, the technology of the Cork yards was primarily a timber based one and unlike, Belfast, never adapted to the age of iron.[64] Still, merchants in the second half of the century relied on clippers which were fast and sharp built sailing vessels which held off competition for some years.[65] Eventually, the period saw the arrival of steam powered transport; nevertheless, steam was regarded as slow in displacing sail. The middle of the 19th century saw shipbuilding in Cork at its peak. Eventually, there was a decline in the construction of ships with the last steamship built in Cork in 1861 and repair work was then only carried on

[64] Dickson, David, *Old World Colony, Cork and South Munster 1630-1830* (Cork, 2005), p. 409; Pettit (1996), p. 60.
[65] Pettit (1996), pp. 61 and 94.

in the harbour. As well, the West Indies market had reached its peak by the 1850's and collapsed by 1864.

By 1854, Robinson had launched the 210-ton brig ''John Harley'' for Harley's of Patrick's Quay and 1855 saw the yard building a 1,220-ton iron steamer for the Malcolmson's of Portlaw. Needless to mention these were examples of keeping contracts within Quaker networks. George Robinson went on to build in 1857 the largest iron steamer, at that time, and a dredger was also built for Cork Harbour Commissioners (CHC) in 1859 and four iron barges were also being built for the harbour authority. By 1860 George Wheeler completed the Rushbrook Docks and had sold his Lower Glanmire Road Dockyard to George Robinson, who had built various vessels for the Hardy's of Cork.

It was not just in the major towns that shipbuilding was taking place. The Malcolmson mill in Portlaw had ship production as a by-product of the local economy in Waterford.[66] The merchant houses of Cork were associated with the shipbuilding industry and it could be argued that the demise of the industry came about as a result of the middlemen being undercut between wholesalers and cross channel suppliers particularly with the arrival of the steam packets.[67] As well, it must be seen that Cork lost its supremacy in shipbuilding due to principally not being able to move with the changing times and this, it could be argued, was neglect or even, incompetence. Cork had been to the forefront in shipbuilding developments which ranged from paddle-steamers to the ''Sirius''.

Industrial decline in the hinterland of Cork deprived the engineering industry of vital linkages from other industries in the region and not having necessary deposits of coal and steel found

[66] McCann, Gerard, *Ireland's Economic History: Crisis and Development in the North and South* (London, 2011), p. 43. Joseph Malcolmson was a major shareholder in the Cork Steamship Company.

[67] Dickson (2005), p. 409.

its industry in stagnation and shipbuilding went into decline.[68] It was only in areas such as the brewing, distilling, butter and bacon trades, that any significant profits were made, reflecting the strong industrial links to the city's agricultural hinterland.

Few businessmen of international calibre emerged in post-famine Ireland. In the case of Belfast, immigrant businessmen made a major contribution to the city's economic development. Shipbuilding in Belfast was originally established by William Ritchie from Ayr, in Scotland. The famous Harland and Wolff shipyard was founded by Edward Harland, an Englishman and G. W. Wolff an English educated German. Belfast had become the hub of the shipping building industry by the 1860's.

10: Advent of Steam

Steam imposed and brought a different urgency to loading and unloading as shorter voyages and the new mail traffic came to the forefront and there was also the race between port accommodation, draught and length of ships. It was clear that trading patterns were changing and an erosion of the supremacy of the port in supply terms was gradually happening. The first passenger steamer was the "Clermont" which sailed between New York and Albany in 1806; the "Comet" was the pioneering vessel launched on the Clyde and sailed between Helensburgh and Glasgow. There was a transition from sail to steam and on to iron and this change to iron was much quicker and by 1850, iron-built ships were in demand.[69] By 1872, steel used in shipbuilding had introduced a great improvement in speed reliability and regularity, especially when fitted with the new compound engine and surface condenser.

[68] Bielenberg, Andy, *Cork's Industrial Revolution: 1780-1880* (Cork, 1991), p.114.
[69] McCarthy, Patrick J, 'An Economic History of the Port of Cork: 1813-1900' (unpublished M. EconSc. thesis, University College Cork, 1949), p. 8.

To summarise, the shipbuilding industry was marked by economic success, flourishing in the 1850's and declining from the late 1860's. This was partly due to a lack of capital and failure to adapt the local wooden shipbuilding skills to the newly developed methods of iron shipbuilding. Local yards failed to compete with English and Scottish operations and even though some yards won Admiralty contracts it did little to boost the industry in the long term. By its nature, the shipbuilding industry was subject to fluctuations.[70]

To get an overview of the shipping industry it is important to look at some of the companies that made up that sector. St George Steam Packet Company was established in the early 1820's and was one of the ''first steam navigation ventures in maritime history''.[71] By 1835 all of the company's vessels were registered in Dublin. Joseph Robinson Pim, who was the founder of the company in 1821, along with his brother-in-law R.J. Lecky, the Cork shipbuilder and they were later joined by Charles Wye Williams. The first ships built were the "St. Patrick" and the "St. George" which were built by the Cork man Thomas J. Wilson who subsequently opened his own yard in Liverpool. James Beale was another well-known director of the company and became a prominent member of Cork Harbour Commissioners.

Pim had encouraged English businessmen to join the company as directors but they did not understand or appreciate the cross-channel trade. Towards the end of the company's life shareholders were finding it difficult to get an adequate return on their capital investment.

The "Sirius" was a 703 gross ton vessel and the first ship to cross the Atlantic entirely under steam, which sailed to New York in 1838 with 40 passengers and beat the much larger "Great

[70] Cronin, M., 'Work and workers in Cork City and County 1800-1900', in P. O'Flanagan and C. G. Buttimer (eds), *Cork History and Society. Interdisciplinary Essays on the History of an Irish County*, (Dublin, 1993), p. 733.

[71] Pettit (1996), pp. 79, 87 and 93.

Western" by a few hours; the vessel was a wooden side-wheel steamship owned by the St George Steam Packet Company.

The St. George's regular trade was in passengers, goods and cattle between Cork, Dublin, Liverpool, Bristol and London with two of its vessels, the "Lee" and "Severn", trading directly from Cork. The two vessels had been placed on the Liverpool and Bristol routes in 1824. Meanwhile, reflecting the success of the shipping line in 1825 Cork Harbour Commissioners granted exclusive berth rights in respect of the steamboat "Lee". By 1837 the company had vessels trading to Dublin, Bristol, Liverpool and London and by the mid 1840's there was a fleet of 7,500-ton steam vessels. However, by 1844 the St. George Company was merged into the Cork Steam Ship Company.[72] The capital of the Cork Steam Ship Company was £170,000 in £100 shares and in 1847 the first screw-steamer "Blarney" was built by Lecky for the company. Pike seeing the need for ship repairs promoted a ship repair yard at Hargraves Quay and helped Cork be more independent of the English repair yards. The Cork Steam Ship Company or Pike's yard, as it became better known, was the largest shipbuilding operation in Cork city with a staff of about 200 employed and a monthly wage bill of £200.[73] By 1852 almost 370 workers were employed.

The success of Cork shipping can be illustrated by examining the shipping register for Cork in 1849; the numbers of vessels were 109 and the tonnage was 50,363 tons. Of the vessels 23 were steamers and of those 9 were iron built with ten of the largest vessels owned by Cork Steam Ship Company. Ships were built for the cross-channel line but by 1861 all its vessels were built in England with the repair work kept for Cork, however, by 1868 fire had destroyed

[72] The directors of the company included names such as Pike, Hayes, Gould, Lane and Connell, all well-known harbour commissioners.
[73] *Cork Examiner*, 3rd July 1848.

the whole operation. Pike, by this time, was an influential member of Cork Harbour Commissioners and other harbour companies. With shipbuilding not revived in Pike's yard, Robinson dominated with iron shipbuilding in the city during the 1860's, and the lower harbour yards concentrated on repairs.[74] Robinson sold his Water Street premises to Cork Harbour Commissioners, the contract was completed in 1877. Robinson's shipbuilding yard at the Lower Road was converted into workshops, stores and a yard. Barry's timber merchants bought the premises in the late 20th century; by then the premises had become superfluous to the needs of the board, as a lot of the activities at 'the Yard' were carried out in Tivoli which had become, along with Ringaskiddy, the centre of Cork Harbour Commissioners operations. There was criticism of the shipping industry by newspapers reporting that "...vast amount of money spent on repairing old and antiquated vessels and the fleet as a whole is inefficient and defective and quite unfit for the requirements of the port".[75] By the 1870's the coming into being of the limited liability laws allowed Pike to divide the company into two and this primarily came about as a result of the success of Cork shipping. Two distinct companies came out of the St George Steam Packet Company and Cork Steamship Company merger with the Continental Lines known as Cork Steam Ship Company and the Home Lines became City of Cork Steam Packet Company Ltd, which was largely controlled by Unionists.[76] The City of Cork Steam Packet Company Ltd. through various commercial experiences was eventually taken over by the B and I Line in 1936.

So, in general, the decline in shipping came about as a result of the following factors:

[74] Pettit (1996), pp. 65-67

[75] C*ork Examiner*, 9th July 1875.

[76] d'Alton, Ian, 'Keeping faith: an evocation of the Cork protestant character 1820-1920' in P. O'Flanagan and C. G. Buttimer (eds.), *Cork History and Society. Interdisciplinary Essays on the History of an Irish County*, (Dublin, 1993), p.773. d'Alton stated that the Protestant and Unionist influence was still evident in the shipping business.

The ports Atlantic trade after 1864 collapsed and it was cheaper to send goods to London/Liverpool by steamer for transhipment rather than waiting for a full cargo load in Cork; Belfast's proximity to the Clyde and British coal and iron supplies gave it advantages over Cork port.[77] Ship repairs continued in the Port of Cork.

11: Dredging development in the 19th Century

The commissioners, in August 1824, had received a report from Henry Price on the possibility of excavating by a steam dredging machine. Price had brought such a machine over from London and had completed work for Waterford port. By December the steam machine was working in Cork port and this led to the commissioners advertising for one to be purchased for their own use. The advertisement was looking for a machine that could be "used for dredging rivers". Investment in dredging equipment was to be the initial priority of CHC and the first dredger was purchased from Shoreham Harbour Authority (a 12hp machine), the cost was less than the price advertised; within two years the upper channel had been deepened to allow up to the city quays ships with a draught of 7 feet, at neap tides and over 16 feet at spring tides and as Saunders pointed out such vessels "...could pass freely up to the city berths…" and this, of course, was dependent on prevailing winds.[78]

By 1828 23,000 tons had been raised and by 1832 182,877 tons had been dredged; a second dredger was bought in 1839 in order to accelerate the deepening of the riverbed, but it was still the case that certain Austrian vessels and almost all-American ships could not reach the city quays.

[77] See Bielenberg, Andy, *Cork's Industrial Revolution: 1780-1880* (Cork, 1991); Pettit (1996), p. 67.
[78] Saunders (1956), p. 120.

There were drawbacks to the new machine in that the dredged material was dumped behind the Navigation Wall. There was continuous pressure on the board to improve the port and its facilities even where it did not have all the financial resources required. A major development in this area was the decision to build a dock and quay premises on land owned by William Penrose and between 1827 and 1834 £34,000 was spent on the quay; with CHC forced to issue debentures in payment of some of its debt. The dredged output by the year 1849 was costing 4 1/2d per ton.[79] Cork could not buy a dredger of the same class or size as Belfast did, due to their financial situation. Still, the dredged material was being dumped behind the Navigation Wall and this was being swept out to the riverbed again. There was also pressure on the commissioners arising from the new steam powered schedules. Another dredger was built in 1851 at the local Lecky's yard at a cost of £5,600 and this was to deepen the channel from Blackrock to Cork and was to be known as the "Lee". The dredged material was put into wooden barges from which it was wheeled ashore at considerable expense to form the Marina embankment. Sheet piling was carried out in 1855 to allow dredging from 5ft to 7ft at low tide for all quays. By 1857 a fourth dredger was bought and for the next seven years piling was carried out allowing dredging of 7 and 8 feet at low water along the quays.[80] Between 1857 and 1864 a total length of 18,580 feet of quays was piled.[81] Dredging was carried on to produce a channel 11 feet deep from Horse Head (near Passage) to Cork but progress must have been slow with the old shovel barge method, as soundings taken in 1874 show the depth was only 9 feet in places.

[79] CCCA/PC, Cork Harbour Commissioners, annual accounts and minutes of board meetings, 1848-1849. The cost was £27,816.16.7 with 1,277,502 tons dredged.
[80] CCCA/PC, Cork Harbour Commissioners, details extracted from various board minutes, 1837-1857.
[81] Saunders (1956), p. 122.

In 1865 Cork Harbour Commissioners sent their Mechanical Engineer to the Clyde to look at their system of dredging by hopper barges. This was regarded as the way forward and four steam hoppers were subsequently, built for the commissioners by Robinsons of Cork between 1867 and 1871.[82] In 1867 the dredging operation consisted of the dredgers delivering into the barges from which the spoil was barrowed ashore to back up the 'New Wall'. Deepening of the channel from Horse Head to the Custom House, which had commenced in 1867, was completed in 1873 to a depth of 11ft l.w.os.t. (low water at spring tides). By September 1870 dredged material was amounting to 1,200 tons per week.[83] In 1874 the first attempt was made to allow overseas vessels to discharge afloat at Cork, this required dredging along some quays; work was completed in 1875 and this gave 100 feet in length of deepwater quay space with further work leading to 1,100 feet of wharfage. A Wingate dredger was built at Glasgow and one extra steam hopper was purchased in 1876 with another added the following year. The whole plant was regularly working by 1876 with the help of the ''Lee" and three of the older steam hoppers to carry out dredging to a depth of 14 feet and a width of 250 feet from Horse Head to Cork. By 1880 14 feet cut was complete up to Dundanion and by 1884 the cut was completed from Horse Head to the city; the NorthDeepwaterQuay (NDWQ) had now a length of 1,400 feet with 20 feet l.w.o.s.t and the SouthDeepwaterQuay (SDWQ) had 600 feet in length and 23 feet l.w.o.s.t. Around 1896 it was decided to make the channel 16 feet deep from Horse Head to Cork with a width of 350 feet. Fleming & Ferguson of Paisley were awarded a contract which consisted of the "Loughmahon" dredger and two twin screw

[82] CCCA/PC, Cork Harbour Commissioners, minutes of board meeting, Sept. 8th 1870.
[83] CCCA/PC, Cork Harbour Commissioners, minutes of board meeting, Sept. 27th 1870.

hopper barges of 1,200 tons carrying the most modern capacity in Ireland. The plant was delivered in 1896 and work was finished in 1904.[84]

Following World War 1, Cork Harbour Commissioners had suffered significant financial losses and asked M.V. Conlon to look at all aspects of the business. Conlon found that dredging was the largest expense for the harbour authority and that there could be "...a lot of efficiencies...". As regards dredging, he was very critical in respect of dredging operations and the significant costs that followed such an operation. He specifically pointed out that the cost of dredging could "swamp the Revenue of the Board "and that greater supervision was required. Such criticism could also be applied to previous decades of CHC dredging expenditure. Conlon found that figures regarding dredging loads were not reliable and "therefore calculations of the average cost of dredging per ton, based on such figures are worthless". Figures were being returned by the captain with no method of verification and there was no person in charge to ensure tanks were empty before loading. The correct method, according to Conlon, was that each tank should be ½ full of water when loading began. These inefficiencies had probably been there for many years. [85]

12: Cork Harbour Commissioners: A legislative process

In the mid 1840's, the Tidal Harbours Commission report was to examine the United Kingdom's major harbours with the intention of having all ports and harbours centralised. In September 1845, Captains, Washington, Frazer and Woulfe came to Cork to discuss proposals with the commissioners. The purpose was to centralise control of all UK ports in London. It

[84] CCCA/PC, Cork Harbour Commissioners, extracted from board minutes of various years 1867-1873.

[85] Report for Cork Harbour Commissioners. "*Report on the Organisation and Management of the Several Departments*". Presented by: Michael V. Conlon, (Cork, 1922), p. 20.

has been argued that the Tidal Report was strongly influenced by naval officers and engineers and it was to be from this group that the central staffs were to be recruited.[86] The commissioners asked its River Committee to investigate. The committee were scathing in their analysis of the report and described the Captains' as being ''wholly unfit'' to undertake the management of the port. Likewise, major ports in Ireland and the U.K objected. The proposals were eventually dropped.

In 1847 there was a general consolidating act passed into law, namely, The 1847 Commissioners Clauses Act and the same year saw the passing of the Harbours Docks and Piers Clauses Act of 1847 which widened the powers of harbour boards and allowed them to take possession of land for construction of quays and wharves etc.

However, not all legislation was as easy to process, as evidenced by the Cork Docks and Harbour Improvement Bill. There were significant objections to the proposals in that private enterprise should be to the forefront of such expenditure and that particularly, the commissioners would have to increase their dues if they underwent the project, with private enterprise paying higher rates. The shipyard Brown's of Passage was one of the main objectors. Brown's had invested in a new Graving Dock and cost in the region of £10,000 which was to ensure the safe discharge and lighterage of cargo. The argument was that Passage people should not have to pay the levies imposed on Cork shipping. Also, the railway arriving meant that transhipment of goods between Passage and Cork was cheaper and safer now.[87]

[86] McCarthy (1949) and Pettit (1996), both make the point that naval personnel and engineers were very influential in drafting the report; Pettit stated that the proposals amounted to nationalisation".
[87] Pettit (1986), pp. 123-125.

Opposition to the bill came from local ship owners who argued that there was little point in constructing costly accommodation for ships, if the ships in the first place, could not get upriver. There developed over the decades a widening gap between the concerns of the lower and upper harbour. The Cork Docks and Harbour Improvements Bill was never passed but it resurrected itself in legislation passed in 1875, 1877 and 1881 which was significant from a port viewpoint, in that, it involved the erection of new bridges, construction of the Deepwater Quay and the North Bank.

The port was in serious disrepair with major quays built on the strand and foundations were too shallow to allow any further deep dredging. There were no lighthouses or buoys to mark the best areas of the channel when vessels of a certain size could only get to Cork and even then, it was dependant on tides. Finance or the lack of it, was another issue that faced the commissioners particularly as it was needed to carry out the necessary construction and dredging plans they were committed to.

Cork Harbour Commissioners felt it was losing its place in maritime matters and preservation of trade and shipping was the essence of its remit and yet, the port had the lowest dues in the U.K. Many ports trebled and quadrupled their income in 18 to 20 years; nevertheless, Cork had only doubled its income in 50 years. Importantly, in the eyes of the commissioners, Cork had natural advantages which most ports did not have, and they felt they had a viable case for funding.

Pettit outlines how the commissioners made two petitions for financial aid, to the Government in 1848. Both were refused and instead, the commissioners requested the enactment of a bill to allow them to borrow for construction work on the city quays. The proposals owed something to the reports of Nimmo and Killally. The building of a wet dock to the east of Penrose Quay was to cost £80,000 taking in 8 acres of water and was to be funded

through the Board of Public Works and from public subscription in the form of transferable bonds. Once the north docks were finished similar accommodation was to be built in the south channel at a cost of £120,000 taking in 6 acres. [88]The Bill was never passed but elements appeared in legislation some 25 years later.

The commissioners felt that the real requirement was to have foreign vessels particularly the Austrian ships from the Mediterranean, the Black Sea, the Gulf of Venice and the Danube ports capable of being able to come upriver to Cork city. In 1849, 67 such ships with cargoes of wheat and Indian corn had to unload at Passage. Not surprisingly, there was evidence of ships damaged in Cork and reports of American captains not willing to discharge at Passage which was 6 miles from their eventual destination.[89]

It was not until after 1850 that a steady improvement took place in the river port. The river was dredged, the berths at Cork were deepened, the quays extended, and improved, and lighted buoys provided in the channel and by 1859 there were 12 miles of lighting in the estuary. By 1875 a thousand feet of deepwater berthage had been provided at Cork.

In terms of future development, the 1850's saw a debate develop about dues on American vessels using the port and harbour. In 1849 to increase the eligibility of Cork as a transatlantic packet station, the commissioners decided there would be an exemption from tonnage dues on steam vessels departing and arriving from the American continent. It was inevitable that pressure would come from other port users and it did. It was agreed that Austrian, Prussian, Swedish and Norwegian vessels would pay similar pilotage rates as those available to British, American and French ships.[90]

[88] Pettit (1996), pp. 122-23.
[89] Pettit (1996), p. 124.
[90] Pettit (1996), p. 144.

The battle for packet mail service began. By 1858, the Australasian and Pacific Company received remittance of port dues for five years. Atlantic Royal Steamers got remission of twelve months in respect of their steamers sent to Cork for repairs and importantly, in 1859 Queenstown became a port of call for Royal Mail steamers.

Another piece of significant legislation was passed in 1866-the Cork Harbour Amendment Act 1866- which allowed the commissioners to levy harbour dues on all vessels entering Cork port and not just those reporting to the Custom House. Of course, this meant an increase in revenue for the harbour authority. As well, the 1866 Act allowed the chairman of the Queenstown Town Commissioners to be an ex-officio member of the board. The total membership of the board now stood at 35 members. In 1868, the Cork Improvement Act was passed, and this allowed the commissioners to borrow based on a mortgage.[91] The act significantly embodied an agreement between the Cork Harbour Commissioners and Cork Corporation where the commissioners were able to buy some land for disposal of dredging subject to the corporation getting permission to divert a portion of the railway line Cork, Blackrock and Passage West. The Board of Trade in 1864 granted the commissioners land and foreshore at Tivoli which turned out to be an important development in the long term. However, in the same year, the West Indies sugar trade ceased, once important to the port.

In summary, whilst there was over a 100% increase in port income during the 20 year period 1830-1849, and whatever increases there had been in trade and finance must be seen in the context of the poor condition of the port and yet, Cork was still the third most significant port in Ireland in terms of imports and exports.

[91] O'Riordan (2015), pp. 306-307.; See Appendix 1.3: Cork Harbour Commissioners: Summary of legislation- 1813-1900.

13: Haulbowline and Dockyard

There had been calls for the establishment of a dockyard in Haulbowline for quite some time. It is interesting that in June 1864 a deputation was met by Lord Palmerston, the Prime Minister; the deputation included prominent businessmen and the local M.P J. P. Maguire. The deputation made a strong case for Cork to have a dockyard and some of the arguments included:

1: Cork was an excellent harbour with plenty of deepwater to accommodate large vessels.

2: There was accessibility at all stages of the tide.

3: The western location of Cork harbour had a strategic advantage attached.

4: Ireland was not getting a fair share of the Admiralty vote. Argument was based on tax raised in Ireland as % of the UK as a whole and comparing the proportion of Admiralty vote spent in Ireland. Such an argument was based on local interests and did not consider the strategic arguments. The dockyard eventually opened in 1887.[92]

In terms of the Royal Navy, Cork harbour never became a base for major units however they did call for fuel and provisions.[93] City and lower harbour interests of the Cork Incorporated Chamber of Commerce and Shipping in 1888 urged the Admiralty to utilise Haulbowline as a repairing yard. Over £700,000 had been expended on the construction of the dock and basin but had been left derelict for many years. The then First Lord of the Admiralty, Earl Spencer, eventually approved some minor work which included dredging and the repairing of a few gunboats. Some years later, in 1895, the local M.P. Captain Donelan, was still making

[92] Brunicardi, pp. 46-47 and 50.

[93] Dockyard was opened in 1887 but lacked necessary equipment to carry out major repairs to naval vessels; Brunicardi, p. 18; McCarthy, Cal, *Cork Harbour* (Dublin, 2019), pp. 62 and 74. Political pressure was brought to bear over the decades by local M. P's, Donelan and Maguire.

representations as to how best to utilise the Dockyard.[94] At the outbreak of World War 1, it was estimated that over 3,000 men were working at the dockyard.[95]

14: Railways and other Utilities in the Nineteenth Century

Many of the public institutions and public utilities essential to the infrastructure of Cork city date from the nineteenth century. The railways, which transformed Europe and America during the industrial revolution, arrived in Cork in the late 1840s and 1850s. The Cork, Blackrock and Passage Railway, the Cork South Coast and Bandon Railway and the Cork-Dublin line were all operational during the early years of that decade. Gas was initially used for public lighting in the city in 1826 with electricity first used in 1881 when a portable generator was used to power electric lights during the construction of Parnell Bridge. It was not used for public lighting until 1898 when it was supplied by the Cork Electric Tramways and Lighting Company Ltd. The trams of the same company provided public transport.[96]

In 1834 the first rail link in Ireland between Dublin and Kingstown was established and two years later a provisional committee of the Cork Harbour Commissioners examined the possibility of a railway system linking the city port to Passage. The commissioners approved in principle and an agreement was signed on the 13th January 1847. In 1849 the first arrival of a train from Dublin to Cork took place and in the following year the Cork Blackrock and Passage railway line opened. The capital of the Cork Blackrock and Passage railway was £200,000 of which 6% was held by Quakers. The Cork to Passage line was opened in 1850 and

[94] *Cork Incorporated Chamber of Commerce and Shipping, Commercial Handbook 1918*, p. 32.
[95] Senator Alan Haughton, Parliamentary Debates *Seanad Eireann,* 28th November 1928, vol. 10, no. 34. He stated that in Haulbowline, during the war there was ''…over 3,000 people employed there, expenditure in wages alone being over £150,000 a year".
[96] http://www.corkcity.ie/aboutcork/historyofcork/19thcenturycork/ (Accessed January 2020).

subsequently there followed competition between the railway company and the local river company in supplying a steamer service. The river company ceased to exist after 1890. Several harbour commissioners were involved in the development of railways and steamers in Cork. These included Thomas Sommerville Reeves and John McNamara who had bought shares in the local Citizens River Steamers Co. Sir John Arnott, a prominent commissioner, was also involved in the Citizens River Steamers Co.

The Cork, Youghal and Cobh line was opened in 1862, Cork Bandon line in 1851, and 1872 the Cork Macroom line. By the end of the century, the port was a hub of a wide and busy network of railway transport with much of the activity centred on the quays with rail links facilitating the movement of cargoes from ship to station.

Chapter 2: Cork Harbour Commissioners-1870-1900: A period of progression

1: Overview: Cork port in the early 1870's

In 1870 produce of the rich Munster farmlands which included butter, beef, eggs, wheat and oats were passing through the Port of Cork. Imports included an array of foodstuffs and raw materials such as coal, timber and clothing.[97] Coal was to become an important financial earner for the port authority in the decades that followed. Exports in 1871 included butter, livestock, flour, porter, whiskey and pitwood.

The period from 1870 to the end of the century was to witness a considerable amount of further development in the city quays which finally allowed larger ships to berth upriver and saw Cork improve and develop into a port and harbour with adequate facilities for the safe accommodation of vessels; this was in comparison to the period 1813 to 1850 when the port and harbour was inadequate to cater for even small vessels, many of which had to off-load in Passage before coming upstream. This process came about as a result of a major programme of river dredging along with what Pettit describes as "…a consistent expansion of space for quay berthage".[98] The immediate priority for Cork Harbour Commissioners (CHC) was dredging of the port and harbour and a major start was made when the older part of the Navigation Wall was replaced in 1864 by the construction of Victoria Quay and it was also deemed necessary to deepen the river further by ''…driving timber sheet piling along the toes of the walls".[99] Using such a method between 1857 and 1864 a total of 18,580 feet of quays had been piled and with four dredgers at work, the channel from Passage to the city had also

[97] Lahiff, Edward, 'Industry and labour in Cork: 1890-1921' (unpublished M.A thesis, University College Cork, 1988), p. 48.
[98] Pettit (1996), pp. 23-7.
[99] Saunders (1956), p.122.

been deepened. The early 1870's saw the end of trans-shipping cargoes at Passage even though in 1871 almost 400 ships had their cargoes discharged onto lighters in the river off Passage.[100]

By the year 1872 foreign tonnage entering the port amounted to 143,381 tons and this was a 7% increase over 1861. Dublin's, foreign tonnage, in contrast, amounted to 163,000 tons in 1866.[101] Cross channel traffic, in respect of Cork, was on the increase and had reached 262,227 tons in 1872. Export of livestock in 1861 amounted to 124,953 animals which comprised of pigs, sheep, cows, calves and horses; this increased ten years later except for the export of horses. Butter firkins increased by less than 4% in the decade ended 1872; this was during the period 1867-76 which O'Donovan describes as the decade of greatest prosperity for the butter industry.[102] The export of bacon had increased over a 20 year period from 12,822 bales in 1853 to 59,292 bales in 1871.

Shipbuilding was an important industry to Cork port but had declined from the 1860's and this was as a result of the demise of the port's transatlantic business which led eventually to transhipments through the larger English ports. As a result, the industry was deprived of lucrative contracts.[103] In that context, Solar points out that there was modest growth in Irish shipping till the mid-1820's which was followed by faster growth with a "deceleration'' in the late 1870's through to World War 1.[104]

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[100] O'Mahony, Colman, *The Maritime Gateway to Cork* (Cork, 1986), p. 54.
[101] Gilligan, Henry A., *A History of The Port of Dublin* (Dublin, 1988), p.131.
[102] O'Donovan, John, *The economic history of livestock in Ireland* (Cork, 1940), p. 315.
[103] Bielenberg, Andy, *Cork's Industrial Revolution: 1780-1880* (Cork, 1991), pp. 113 and 122.
[104] Solar, Peter M., 'Shipping and economic development in nineteenth-century Ireland', *Economic History Review*, LIX, 4 (2006), pp. 719-37.

2: Capital Infrastructure, facilities and dredging

The next period of the port's history was to be hugely significant particularly from a legislative perspective and was to give the harbour authority important financial powers of independence. The first legislative piece of significance was passed in 1871 and this had the effect of repealing some seven sections of the 1820 Act; the 1820 Act had provided for the formalisation of CHC's constitution and procedures. The Pier and Harbour Orders Confirmation Act 1871 (no. 2) was significant as previously the construction of any quay required the consent of the Board of Trade before work commenced and also, under this legislation, the commissioners were granted further borrowing powers of £110,000.[105]

Cork Harbour Commissioners in 1872 felt that a plan was required for the future development of the port and city quays. The lighterage expenses from Passage to Cork combined with other losses and inconvenience to merchants influenced Cork Harbour Commissioners to embark on expensive deepwater quay construction and dredging for a channel to the Cork quays. This was because heavier vessels used to stop at Passage and transfer part of their cargoes into lighters for their onward journey to Cork. The significance of lighterage is illustrated as follows: in the year ended April 1872, 220 vessels discharged entirely at Passage with gross tonnage of 101,836 tons and 109 vessels lightened at Passage to about fourteen feet of water; the lightened vessels then came upriver to Cork and their gross tonnage amounted to 50,917 tons.[106] The cargoes which discharged at Passage were principally grain and timber.

A report was commissioned from Bell and Millar, Glasgow Consulting Engineers, in 1872 in which they recommended the construction of deepwater quays at both sides of the river

[105] O'Riordan (2015), p. 307.
[106] Pettit (1986), p. 2.

below the Custom House, to be followed by the construction of docks at the City Park and most interesting, a similar dock system at the Tivoli slob lands. The importance of Tivoli had been realised at this stage.[107] Bell and Millar also regarded as ''first importance'' the proper connection of the railway system with the harbour.

Philip Barry replaced Sir. John Benson in 1873, with the new title of harbour engineer and observed that there were no deeper berths for vessels than at the old quays with 7 feet at low water and he saw that there was an urgent necessity for vessels to have better shipping accommodation. Barry said it was 1874 before the first attempt was made to allow vessels from overseas to discharge afloat; this consisted of constructing several timber jetties along Victoria Quay and dredging to 20 feet depth at low water. The timber wharf cost £11,544 and was immediately used by grain vessels that had previously discharged their cargoes at Passage and then onto lighters. This work was completed in 1875 and gave 1,000 feet in length to deepwater berthage. Subsequently, these jetties were improved upon and extended to form the Victoria Wharf with 1,100 feet of berthage[108] and in the same year, 18 feet had been dredged which allowed larger vessels to come upriver.

In 1875 an Act of Parliament was passed authorising a large extension of deepwater quays along the Marina. This act granted further powers for the improvement of the harbour, to construct a deepwater quay on the south side of the river and £20,000 was allowed for the development of the lower harbour. The act allowed the harbour authority to raise a sum of £140,000 in total. Under this act, Cork Harbour Commissioners were defined as a body

[107] Report for Cork Harbour Commissioners: R.D. Bell & D. Millar. *"Report on the Harbour & dock accommodation and the General Improvements of the Port of Cork"* (Glasgow, 1872), pp. 131-2.

[108] Barry, Philip, 'The Deep Quays in the Port of Cork', *Minutes of the proceedings of the Institution of Civil Engineers of Ireland* (January 1890), vol. 100, part 2, p. 316.

corporate under the name Cork Harbour Commissioners with perpetual succession and now had a common seal.

The Cork Improvement Act 1875 enabled Cork Corporation to replace the Sundays Well and the Anglesea bridges. CHC was to contribute £10,000 towards the removal of the Anglesea Bridge and construction of a new one, under the act CHC were given powers to raise a loan accordingly. The Cork improvement (Extension of Time) Act of 1881 granted further time for the completion of the Anglesea Bridge which was named subsequently Parnell Bridge. This act was repealed by the Harbours Act 1946.

In 1876, Cork Harbour Commissioners, ever watchful of the public interest, opposed a Bill promoted in parliament by the Great Southern & Western Railway for the purchase of land, formerly known as Dring's Marsh, and compelled the railway company to convey free of charge, a frontage of 40 feet for a new deepwater quay from Penrose Quay to Water Street and the company were also bound to convey to Cork Corporation 40 feet of ground for a new roadway north of the new quay.

Two years later under the Cork Harbour Act of 1877, Cork Harbour Commissioners, were able to construct a deepwater quay on the north bank of the river for 1,421 feet from Penrose Quay to Water Street with construction commencing in 1878. The act also allowed for the construction of a Boat Harbour in Queenstown and the purposes of the act allowed CHC to raise a sum of £120,000. This act was repealed by the 1946 Harbours Act.[109]

Developments continued with the completion in 1883 of the Deepwaterquay (DWQ) at Queenstown which provided a depth of 24 feet for a length of 600 feet (low water spring

[109] The Cork Harbour Act of 1875 was repealed under the Harbours Act,1946, Schedule 3, Section 190. Other acts repealed included the Cork Harbour Amendment Act 1866, Cork Harbour Order 1871, Cork Harbour Act 1877, Cork Improvement (Extension of Time) Act 1881, Cork Harbour Act 1883, Cork Harbour Order 1889, and Cork Harbour Act 1903.

tides). This quay was used almost exclusively by government ships and transports and during the second Boer war, 143 means of transport berthed at Queenstown and trains with troops and war materials were able to run alongside the ships. It was 1899 that saw the invasion of the Transvaal with many troops embarking for the war from Queenstown.

Saunders observed that by 1884 the 'New Wall ' had been virtually replaced and that all of the old rubble walls, of which Nimmo had complained about in the early years of the century, had been replaced by cut-stone walls.[110] It could be argued that the old rubble of the quays was partly to blame for the cost of dredging and McCarthy points out that between 1877 and 1883 an average of 570,000 tons was dredged.[111] A general trade depression had now set in with the effect that it would be another 10 years before any major capital work would be carried out. In 1884 the North Deepwater Quay with 20 feet depth (low water spring tides), and a length of 1,400 feet was completed stretching along the river from Water Street to the westward end of Penrose Quay;[112] also, the South Deepwater Quay was completed with 23 feet depth (low water spring tides), for a length of over 600 feet, and both quays were opened for traffic. A year later in 1885, Penrose Wharf was completed.

The revival of trade in 1894 made it possible to consider additional port improvement, more particularly to facilitate the cross-channel trade. Early that year a contract was entered into to construct 1,260 feet of timber wharves along St. Patrick's and Penrose Quays, with 13 feet of water (low water spring tides), to accommodate cross channel steamers and allow them to sail and berth at any time, except for about three hours at low water.

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[110] Saunders, F. O'C, 'The Development of the River Port of Cork City', *The Institution of Civil Engineers of Ireland* (March 1956), vol. 82, p. 126.; See Nimmo, Alexander, *Report to the Harbour Commissioners on the Means of Improving the River and Harbour of Cork* (Cork, 1815).

[111] McCarthy, Patrick J, 'An Economic History of the Port of Cork: 1813-1900' (unpublished M. EconSc. thesis, University College Cork, 1949), p. 79

[112] McCarthy (1949), p. 86.

In the space of 30 years, the total amount of dredged material amounted to 14 million tons and this was done by investment, borrowing and purchase of equipment. Cost per ton in 1875 was 9.5 pence and in 1900 was 2.5 pence. Conlon in his report was very critical of CHC dredging operations and regarded the method of calculating the cost per ton as being unreliable.[113] Nearly three and a half million tons of material was dredged to deepen the channel. By 1899 dredging methods had advanced to such an extent that for berth cleaning work, a grab and crane were fitted on two hoppers with the dredger ''Loughmahon'' used for channel dredging only.[114] The cost of dredging was examined each year and in the latter half of the century, a certain amount of dredging was charged to capital with the balance charged to expenditure. It could be argued that it was convenient to charge a certain portion of the cost to capital thereby reducing the cost charged to maintenance.[115] The War Office wanted to lay cables in the harbour in 1888, Cork Harbour Commissioners objected as the cables could be a danger to shipping and possibly disrupt dredging operations. In the end, the War Office accepted responsibility for damage to shipping by cables only and in, 1900 CHC had signed an agreement regarding the laying of cables for wartime mining operations in the lower harbour channel.[116] Upriver, the future development of Tivoli took a step forward in 1901 when CHC was given a grant by the Board of Trade of almost 3 acres of land and foreshore which extended their portfolio of property. Another 3 acres were acquired in 1902 and further land

[113] Report for Cork Harbour Commissioners. "*Report on the Organisation and Management of the Several Departments*". Presented by Michael V. Conlon (Cork, 1922), p. 20.
[114] Pettit (1996), p. 148.
[115] CCCA/PC, Cork Harbour Commissioners, minutes of Law and Finance Committee, May 24th, 1901.
[116] Pettit (1986), p. 6.; McCarthy, Cal, *Cork Harbour* (Dublin, 2019) p. 72.

was given to Cork Harbour Commissioners in 1919 which was some fifty years after the initial grant of land. Such developments were financed by raising mortgages on CHC property.[117]

3: Cork Harbour Commissioners: Port Finances 1870-1900

There are various methods used in measuring the growth of a port, namely, tonnage using the port, imports and exports, relative share of trades, capital expenditure, key performance indicators (KPI's) and financial accounts.[118] Financial accounts, along with trade figures, were examined from the 1870's to 1900 and the accounting year during this period ended on the 31st July.

3.1: Cork Harbour Commissioners Revenues

In the case of the Port of Cork, tonnage, imports and exports were the principal income commodities which amounted to over 65% of total income with ballast and anchorage dues, in the main, making up the balance. Ballast dues were 11% of total income in 1885 but declined to 3% by 1900.

Between 1860 and 1900 import revenue increased by almost 74%, with exports increasing by 38% and tonnage income increased by 194%. (See Table 4. 1). The increase in tonnage income averaged 5% per annum with imports and exports less than 2% and 1% per annum

[117] The special Cork Harbour Commissioners board meeting of 20th November 1916 dealt with a proposal from Henry Ford & Son to set up a factory for "Motor Traction and Agricultural machinery". The setting up of the Ford operation was a significant revenue earner for the port.

[118] Hyde, Francis. *Liverpool and the Mersey,* (Newton Abbott, 1971), p. xv.
Hyde outlines the various methods used in measuring the growth of a port and used Liverpool as an example.

respectively. The period 1880-1885 showed a huge increase in tonnage income and this was primarily because of the increase in rates.

It is worth noting that from 1867 harbour dues were payable under legislation passed that year on all vessels entering the port and not, as heretofore, only on vessels reporting at the Custom House. This meant a major increase in revenue.[119] As well, prior to the mid-1890's quantities of different types were the form of measurement used with tons subsequently becoming the norm. Butter and firkins would be an example. Analysis of import and export products was only possible on an individual basis and to get a real comparison in the review period monetary values were used.

In the latter half of the century, there were three main shipping companies operating in the Port of Cork and these were: The City of Cork Steam Packet Company, Clyde Shipping Company and Cork Steam Ship Company. Significantly, the companies also had representatives on the board of CHC and they would take part in discussions relating to business that concerned them.[120] An example would be that in April and May 1893 there were discussions regarding the reduction of rates by 10% and various representatives of the companies involved were present at the meetings. The end proposal agreed by the board followed agreement with the companies involved.

Tonnages measure the capacity of ships however vessels ''in ballast'' were not recorded or

[119] McCarthy (1949), p. 85.

[120] Cork City and County Archives, City of Cork Steam Packet Co Ltd**,** U370/A/001.
The City of Cork Steam Packet Company, Clyde Shipping Company and Cork Steam Ship Company, had most of the shipping business in the Port of Cork. The City of Cork Steam Packet Co. Ltd. was the largest of the companies involved and its directors included names like Pike, Lyons, McNamara, and Green. Many of whom were members of CHC. Directors were to be paid the sum of £1,000 per annum. In the accounts for 1878, the Book Value of Tonnage is shown as £180,000 and the chairman pointed out with such a valuation, they would fail to realise value if placed on the market. The Tonnage valuation (steamships etc) amounted to over 60% of assets.

maybe, even kept separate in various port's shipping statistics. Over time what was described as ballast changed and by 1872 cargoes such as china, clay, bricks and iron ore were counted as ballast. The values of these commodities were insignificant in Irish terms.[121]

In some years ballast income was shown in the CHC accounts as gross income with ballast expenditure being shown under expenditure and similarly net profit would be shown under income.

3.2: Control by shipping companies

In the latter part of the century, shipping was largely controlled by the City of Cork Shipping Company and Clyde Shipping amongst others. The City of Cork was estimated to have had 31% of CHC business. The control that the City of Cork had over CHC is illustrated by the following: CHC, by law, were entitled to a copy of a ship's manifest or the bill of lading. The tonnage rate or levy could be ascertained this way. What happened was that a clerk from CHC would go to the City of Cork offices and have the manifests read to him. This cost CHC £40 p.a. In October 1895 there was a vacancy to specifically carry out the duties of helping the City of Cork Company. The CHC board recommended "… £40 to be paid to City of Cork in consideration of their affording the Collector all necessary assistance whilst employed at their office, on the business of the board it being understood that the company will make such arrangements as to prevent their clerk from being unnecessarily interrupted during the time so occupied".[122]

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[121] Solar, Peter M., 'Shipping and economic development in nineteenth-century Ireland' *Economic History Review, LIX, 4 (*2006), p. 719.

[122] CCCA/PC, Cork Harbour Commissioners, minutes of board meeting, 28th October 1895.

3.3: Tonnages: Port of Cork 1873-1901

Total tonnage in 1873 amounted to 678,234 and by 1901 had reduced to 606,392. Total tonnages for the 1873-1901 period amounted to 19,592,717 and the breakdown is shown in the table.

Table 2. 1 Cork Port - Ship Tonnages 1873-1901

Type	Tonnage	%
Foreign	**4,040,116**	**21**
Coasters: Cross-Channel.	**10,016,394**	**51**
Colliers	**4,722,894**	**24**
Coasters Ireland.	**813,313**	**4**
Total	**19,592,717**	**100**

Source: CCCA/PC, Cork Harbour Commissioners, annual accounts and port statistics of Cork Harbour Commissioners, 1873-1901.

The cross-channel coasters, with the highest number of tonnages, are reflective of the trade connections with Britain. For each of the years under review, the cross-channel coasters had the highest tonnage in and out of the port. In percentage terms, it amounts to over 51%. Colliers had a significant tonnage throughput during the period and were ahead of foreign tonnage. Colliers peaked in 1883 with a tonnage of 204,950.

The 7-year period ended 1879 saw total tonnage averaging 699,000 and this average declined in the 10-year period ended 1889 to 682,000; dropped further to 664,000 for the period ended 1899 and declined further to 656,000 for the 12-year period ended 1901.

The decline is primarily down to foreign tonnage declining from 173,360 in 1873 to 89,884 in 1888.[123]

Tonnage income in 1870 amounted to 25% of total income and had increased to 40% by 1900. In 1873 foreign tonnage amounted to 29.5% of total tonnage income, cross-channel income amounted to 48.9% with collier's tonnage income amounting to 21%. Comparing tonnages against income, the main difference is that tonnage income is higher in percentage terms than the actual tonnage throughput which reflects the method of charging foreign vessels. In 1883 there was a slight change where the foreign tonnage percentage dropped by 7% with the cross-channel colliers increasing by a similar amount.

The major change took place in 1884 when foreign tonnage increased dramatically. In 1883 the percentage was 26%, increased to almost 38% in 1884 and this came about due to a very large increase in foreign tonnage rates. In 1883 foreign tonnage per ton was 3d and this increased to 1/- which is a 300% increase whilst the cross-channel rate increased from 3d to 4d per ton or 33.33%. In 1894, in respect of foreign tonnage, a new rate of 6d was introduced, in addition to the rate of 1/-. The lower rate amounted to 6% of foreign tonnage income and gradually increased to 17% in 1901 with colliers and coasters (Irish) also having significant increases. By 1901, tonnage income amounted to over 40% of total income.

[123] CCCA/PC, Cork Harbour Commissioners, the detail was adapted from the annual accounts and port statistics of 1873-1901.

3.4: Maritime Shipping Legislation

The Merchant Shipping Act of 1894 was a major piece of legislation and dealt with rules regarding ship register tonnage. The act gave the British Board of Trade the right to administer shipping throughout the British Empire, limiting the power of a Dominion to alter the act and requiring the King's permission before changes were made. When the Free State came into being it was unable to legislate in this area, and whilst the tricolour was flown on Irish ships, it was not legally recognised. The Attorney General at the Imperial Conference in 1926 argued that each member should be given the right to control every class of shipping within their jurisdiction.[124] The Merchant Shipping Act allowed for considerable deduction from the registered tonnage of steam vessels in respect of space occupied by propelled machinery.

The transition from sail to steam, larger vessels being used and the improvement in port facilities must be borne in mind when examining tonnage factors. Sailing vessels were recorded as gross tonnage, which was very similar to net tonnage, as regards steam vessels registered tonnage was the tonnage net of the engine room.[125]

Starkey in his analysis of coastal traffic [126] showed how Cork was slow to change from sail to steam relative to the rest of Ireland and this is illustrated in the following table.

[124] McCullagh, David, *The reluctant Taoiseach: John A. Costello*, (Dublin, 2011), pp. 77-87.
[125] Vasudevan, Aji, 'Tonnage measurement of ships: historical evolution, current issues and proposals for the way forward' (unpublished thesis, M.Sc., in Maritime Affairs, World Maritime University, Malmo, 2010). The thesis gives a detailed account of historical net and gross tonnages.
[126] Starkey, David J., Gorski, Richard, Milward, Sue, Pawlyn, Tony, (Editors). *Shipping Movements in the Ports of the United Kingdom, 1871-1913: A Statistical Profile* (Exeter, 1999).

Table 2. 2 Irish Coastal Traffic -Sail and Steam:1876-1901

Coastal Traffic:	Cork		Ireland	
	Tonnage	Tonnage	Tonnage	Tonnage
Year	Sail	Steam	Sail	Steam
1876	66%	34%	57%	43%
1881	60%	40%	48%	52%
1886	49%	51%	38%	62%
1891	44%	56%	31%	69%
1896	36%	64%	22%	78%
1901	35%	65%	18%	82%

Source: The table was adapted from Starkey, David J., Gorski, Richard, Milward, Sue, Pawlyn, Tony, (Editors). *Shipping Movements in the Ports of the United Kingdom, 1871-1913: A Statistical Profile,* (Exeter, 1999).

3.5: Import and export revenue

Revenue from imports in 1869 amounted to 41% of total income and remained at that level for the next 2 years. However, from 1872, imports income had declined to 36% in 1891. Subsequently, imports as a percentage of total income then increased almost on a yearly basis so that by 1900 it had reached 40%. With income of £10,009, 1874 was the lowest year in respect of imports income during the period of review and this is reflected in Table 2.3 which shows the income for the five years ended 1875 as the lowest in the 20 years ended 1900. Yet the years 1891-1895 shows a return of 25% which is the highest for the period. In the overall context imports income for the period 1871-1900 amounted to £399,816 which only gave an average return of 1.6% per annum.

The main concentration and analysis will be on the following products as they amounted to over 50% of total imports revenue: wheat, Indian corn, flour and coal. (See Appendix 2.1).

In summary, wheat and Indian corn declined over the 25-year analysis and coal was the biggest earner for the period albeit from a low base.

Table 2. 3 Cork: Imports Revenue - 1871-1901

Period	Imports Revenue		Rate of return	
	£		%	
1871-1875	55,776			
1876-1880	65,734		18	
1881-1885	61,727		-6	
1886-1890	62,154		1	
1891-1895	77,640		25	
1896-1900	76,785		-1	
Total	399,816			

Source: CCCA/PC, Cork Harbour Commissioners, the detail was adapted from the annual accounts and port statistics of Cork Harbour Commissioners, 1871-1901.

The main commodities imported in the period were the following: wheat, Indian corn/maize, coal, flour, timber deals, sugar, tea, salt, iron and steel and oil.

The period 1878/1879 was the best year for wheat imports and the year 1901 was the lowest. When we look at Indian corn there is no correlation with wheat imports as the best year was 1876/1877 and 1883/1884 the worst. Coal had its best year in 1883/1884.

Wheat, Indian corn, barley all had a similar rate per ton with coal having one of the lowest rates of import. It is interesting to note that the Cork Harbour Commissioners wrote to Belfast Harbour Commissioners pointing out that imports of coal from South Wales would be cheaper

to import into Cork and then, deliver to Belfast rather than importing from the north of England and that also, wages would be cheaper. Needless to mention the suggestion failed.[127]

The Coal tax was abolished in 1878 with the final payment of £3,150 made to Cork Corporation by the commissioners. This tax was often referred to as the "Mayor's Tax" and was a tax imposed on coal imports through the port. The passing of the Parliamentary Coal Act in 1719 allowed proceeds of a coal tax to be used to build a church as in the case of Christchurch, which was the civic church of Cork city. This act levied a tax of one shilling on every ton of coal Imported into the city for seven years.[128] Caulfield points out that another purpose of the coal tax was contributing towards the building of a workhouse and ''.... your coal tax will revert to you for the annual support and maintenance of the poor and the foundlings ...''.[129] The average yield of this tax from 1719 to 1726 was about £256.[130]

Exports were analysed over the 25 year period 1877 to 1901. The commodities examined included the broad area of livestock which comprised pigs, sheep, cows, calves and horses. Agricultural commodities included butter, oats and flour.

Revenue from exports in 1869 amounted to 16% and remained at that level for the next 2 years. However, from 1872 till 1892 exports income remained static ranging from 13% at its highest to 11% at its lowest in 1892. Subsequently, exports as a percentage of total income declined marginally and by 1900 had reached 10%.

The year 1898 recorded the lowest level of income during the review period and the years 1894 and 1895 reported the highest return with income of £5,606 and £5,333 respectively.

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[127] CCCA/PC, Cork Harbour Commissioners, minutes of board meeting, 15th September 1899.
[128] https://triskelartscentre.ie/christchurch/christchurch-history/18th-century-rebuild/
[129] Caulfield, Richard, The *Council Book of the Corporation of the City of Cork from 1609 to 1643 and from 1690 to 1800* (Surrey, 1876), pp. 550-1.
[130] O'Sullivan, W, *The Economic History of Cork city from the earliest times to the Act of Union* (Cork, 1937), p. 220.

The decline of provisions and the rise of protectionism in other markets increased competition in the British market which remained open. The decline of the provisions trade was inevitable because some countries became self-sufficient through tariffs and developed their own export markets and there seemed to be a slow reaction in Cork trying to stem the tide. On a more positive note, Cork's agricultural hinterland was seen to be a significant factor in helping the port's trade. Cognisance must also be taken of how ships could come directly to the upper harbour by 1900 unlike the situation earlier in the century when goods/cargo had to be off-loaded at Passage on to lighters for the onward journey to the city quays. This made handling cargoes more efficient and cost effective. Commodities such as flour, bacon, oats, porter, timber, hides, glass, tanning, sugar and bran may be of significance in terms of the Cork economy but were insignificant revenue earners for the harbour authority.

3.6: Butter

In the space of two hundred years, Cork had emerged as one of the leading exporters in the world of dairy produce primarily as the climate was ideal for pastoral agriculture. The provision trade and in particular, salted meat and butter, gained as a result and that was allowing for restrictions which were imposed on exports of live cattle. By the 1870's Cork still had 30% of the Irish butter market with the butter trade a major source of employment and contributed much to the prosperity of Cork. Over the 19th century, the butter trade declined as a result of heavy duties on imports imposed by the Portuguese government and this had a major effect on what was one of Cork's major markets. The markets in the Americas were also affected and declined accordingly. A poor-quality control system along with the market entry of butter substitutes had a further effect on the export market, as well, the butter merchants failed to respond to changes in the industry. So, the inability to react to changes

in the industry and the lack of innovation meant Cork lost its dominant position in the market.[131] Nevertheless, butter exports were one of the major revenue earners for the harbour authority during the period of review. In the period 1870-74, the five-year average of firkins exported was 2,057,096, subsequently declined to 1,757,109 in the period 1880-84 and further in 1890-94 to 1,507,394. Between 1870 and 1894 there was a decline of over 26% in the export of firkins.

3.7: Assets and Liabilities

Total assets of Cork Harbour Commissioners were valued at £32,000 in 1868, £40,000 in 1869 and £49,000 in 1870. By 1872 plant was valued at £44,000 and by 1876 £66,000.

A Sinking Fund was set up in 1878 which saw the commissioners invest in consols and a Reserve and Contingencies fund was also set up. A principal aim of the sinking fund was to fund deepwater costs. The 1885 accounts show the commissioners investing in Irish railway debenture stock in respect of the Reserve and Contingencies fund. By 1900 total assets were valued at £337,000 and comprised mainly of Estate £205,000 and Investments valued at £66,000.

With the significant expenditure works undertaken by the Cork Harbour Commissioners, particularly regarding repair and creation of quays and coupled with the extensive dredging programme it was obvious that borrowings had to be undertaken. The first account of mortgages begins in 1872/1873 with the amount of £40,000 appearing in the financial accounts. By 1874/1875 mortgage debt amounted to £70,000. At the end of the ten-year period 1883/1884, debt had increased by £239,000 to reach a level of £278,685 which was

[131] Rynne, Colin, 1998, *At the sign of the cow: The Cork Butter Market, 1770-1924* (Cork, 1998), p. 34.

the highest level of debt incurred. The level of debt by 1900/1901 was £276,308. The amounts mentioned are in most cases net amounts-difference between additional mortgage and repayment.[132] In terms of liabilities in 1900 Consolidated Stock is the primary item and was valued at £278,000. Interestingly in the list of creditors names such as Robinson and Scott appear, and they were also members of the board. Likewise, the City of Cork Steam Packet Company appeared as a creditor and some of their directors were members of Cork Harbour Commissioners. Other members of the board who were shown as creditors included the Deaves Bros and members of the Sutton family.

The board were able to borrow for harbour developments once the necessary legislation was passed, for example, under The Pier and Harbour Orders Confirmation Act 1871 (no.2), amounts were borrowed at 4.5%.[133] Expenditure included the purchase of land at Carrigreenan and work on the DWQ's, in Cork and Queenstown, leading to additional mortgage of £34,900 in 1882. The year 1884 saw payments made to the Cork Corporation in respect of Parnell Bridge. Included in income received was £20,000, from the Marquis of Bute regarding the sale of no. 3 dredger and no. 5 and 6 hopper barges. The 1889 accounts show £153,798-13-4 of mortgage debt converted into 4% stock which effected a permanent saving of interest. [134]

Cork Harbour Commissioners, with the purpose of raising equity, would issue stock holdings from time to time. Primarily this would be 4% redeemable or irredeemable stock. Most of the stockholders were individuals, shopkeepers, clergymen and others. The more significant

[132] CCCA/PC, Cork Harbour Commissioners, annual accounts: 1870-1901.
[133] The Pier and Harbour Orders Confirmation Act 1871 (no. 2); O'Riordan (2015), pp. 307-8.
[134] CCCA/PC, Cork Harbour Commissioners, annual accounts 1882.

holdings were held primarily by business owners and company directors. There were many interesting purchasers of the 4% stock, and these would have included:

The Munster and Leinster Bank £4,700, Provincial Bank of Ireland £5,600 and commissioners such as Pike and McMullen who had stockholdings of £7,400 each.

The twentieth century saw Cork Harbour Commissioners investing in different shares including Great Southern Railway stock and interestingly, some commissioners would have had a shareholding in the Great Southern and Western Railway. The investment in railway shares yielded relatively good returns, but holdings of such shares were also useful in providing access and influence in railway company shareholder meetings.

3.8 Cork Harbour Commissioners and The Munster Bank [135]

Historically, in terms of banking, the Munster Bank was the commissioner's bank, which was established in 1864 and collapsed into voluntary liquidation in July 1885. William Shaw M.P was chairperson of Munster Bank and the directors included Nicholas D. Murphy, Joseph McMullen, Francis Lyons, William Lumley Perrier, James H. Belton and Edmund G. Dease. At the time of its closing, the bank had 41 branches including a head office at 66, South Mall, Cork and two branches in Dublin. The appointed liquidators were Robert Constable Hall, James Jeremiah Murphy and Frederick William Pim, and their solicitors were D & J Fitzgerald. The Munster and Leinster Bank was established subsequently in September 1885 and it took over the remaining assets and liabilities of the Munster Bank in November 1886.

[135] Cork City and County Archives, Munster Bank Liquidation Records, IE CCCA/B617. https://www.iar.ie/Archive.shtml?IE CCCA/B617.

Some of the directors of Munster Bank were very involved in the running of Cork Harbour Commissioners, William Shaw, chairman of the bank, was elected as a commissioner, under the mercantile banner, from 1887 to 1890 and was also director of the Cork Macroom railway and director of the South of Ireland Fishing Co. Ltd. Nicholas D. Murphy was director of City of Cork Steam Packet Co. Ltd. and as an M.P, he was an ex-officio member of the commissioners from February 1865 to April 1880 and was elected under the mercantile banner from August 1880 to December 1885.

In terms of shipping, Joseph McMullen, was involved with the St. George Steam Packet Company and Francis Lyons, was a director of both, Cork Steamship Company Ltd and City of Cork Steam Packet Company. They both were members of Cork Harbour Commissioners.

Likewise, some of the liquidators played a major role in the running of the commissioners. Robert Constable Hall was director of Hall's grain merchants and was elected a commissioner, as the mercantile representative, serving from 1881 to 1888. James Jeremiah Murphy was a mercantile representative on the board of the commissioners from 1860 to 1884 and 1893 to 1900.

Many firms, individuals and public bodies were affected by the closure of the bank and subsequent liquidation and these included Cork Harbour Commissioners. The liquidators of the bank were shown as debtors of the harbour authority at the suspension of the bank and this included £4,000 on a deposit account, £1,277-0-9 on current account less £17-3-6 on dredging account leaving a net figure of £5,259-17-3. The Cork Harbour Commissioners accounts show how various payments were made to CHC from the liquidators. According to the 1888 accounts, the final balance of £675-1-0 due by the liquidators was paid in full.

4: Cork and National Ports Trade

The returns of local taxation included income returns by all harbours and a comparison was able to be used in seeing how ports/harbours performed during the period of analysis. Using these returns I have been able to compile a picture of revenue receipts of ports/harbours covering the period 1875 to 1900. The analysis covered 93% of income received by harbour authorities, small harbours with insignificant income were excluded. The returns included all income receipts by the authorities but for this exercise, it is just tonnage, imports and exports revenue that are included. Some harbours would have had the added benefit of income such as lighthouse charges, but this did not apply to all harbours. [136] Belfast, in terms of income, was well ahead of other harbours and was the only harbour that shows an increase in income during each 5-year period. Interestingly, Londonderry was ranked as the fourth harbour on the island during the 25-year review. (See Table 4. 3 p.116).

5: Constraints on Investment

Railway companies and CHC-an uneasy relationship: CHC from time to time were objectors to railway developments in the port and never more so than in the last decade of the nineteenth century. For example, in June of 1896, there was an objection to the Cork Blackrock and Passage Railway Bill by means of a petition to the House of Lords. The same year also saw the major shipping companies objecting to bridges being built across the north and south

[136] http://www.dippam.ac.uk/eppi/documents/ (DIPPAM*:* Documenting Ireland: Parliament, People and Migration). Returns of Local Taxation included income details of each port.

channels under the Cork Junction Tramways Scheme.[137] However, the main area of disagreement that CHC had was with the Great Southern and Western Railway. (GSW). CHC were seen to be major objectors to the 1898 Fishguard and Rosslare Railways and Harbours bill legislation proposed by GSW.[138] Section 74 provided that GSW companies should give all reasonable facilities to induce traffic to pass to and from and via Cork and that by their rates or fares or otherwise the Port of Cork was not to be at an undue disadvantage as compared with any other Irish port.[139] CHC had in the past complained that the Port of Cork was at an undue disadvantage as compared with other Irish ports particularly as there were insufficient wagons to cope with coal traffic through the port. As well, CHC maintained that the railway company had in the past afforded facilities to traffic to and from the port of Rosslare which CHC claimed had been denied to the port of Cork.[140] Through rates applied to the carriage of commodity from an Irish port to a U.K. port through any of the routes by which the differential rate applied. A differential rate was set up in 1881 in the case of Cork and applied to Limerick, Waterford, Galway, Sligo and Wexford and these differentials were agreed by the members of the traffic conference representing the various railway companies. Interestingly, by 1931 GSW had applied to the railway tribunal for the differential in respect of Cork to be rescinded. The Ports and Harbours Tribunal in their report was critical of the GSW policy to have traffic through Dublin or Rosslare, "…if this policy is allowed free course it will be a matter of time

[137] Hansard: Parliamentary Debates, Cork Junction Railways Bill, *HC Deb 20 February 1905 vol 141 cc566-7.*

[138] Hansard: Parliamentary Debates, Fishguard and Rosslare Railways and Harbours Bill, *HC Deb 03 May 1898 vol 57 cc128F-54.*

[139] *Tribunal of Inquiry on Public Transport*, (Dublin, 1939), Evidence of Cork Harbour Commissioners, pp. 1-5. It is worth noting Rosslare Port to-day, is owned by Coras Iompair Eireann.

[140] Hansard: Parliamentary Debates, Fishguard and Rosslare Railways and Harbours Bill, *HC Deb 03 May 1898 vol 57 cc128F-54*. CHC had engaged counsel at a rate of 10 guineas each, which was expensive at the time.

before the south and western ports decline".[141]

6: Cork Corporation and CHC -a stressful relationship

The relationship between the Corporation and the Commissioners could be stressful at times and this was highlighted in 1927, at the Ports and Harbours Tribunal; when James Price, Harbour Engineer, in giving evidence, in relation to the Cork Improvement Act 1880, stated "they slipped in a clause that the Harbour Board should maintain the opening part of the bridge which the Corporation had always done previously. This escaped the notice of the Harbour Board… The bridge is a dead loss''. The purpose of the act was to grant further time for the building of the Anglesea Bridge. Regarding the act, Mr Price pointed out that an engineer and boy labourer were required to operate the bridge, and this required their full-time attention.[142] Maybe in retrospect, the commissioners should have been more diligent in their approach to the legislation. Philip Barry, the then harbour engineer, told the board of Cork Harbour Commissioners that the ''turntable'' of Anglesea Bridge was not being constructed as per the plans agreed by CHC and Cork Corporation. Seemingly the plans were changed by the corporation without notification to CHC.[143]

The tension between the two authorities was evidenced well into the 20th century when Seamus Fitzgerald who had been a member of CHC had not been reappointed by Philip

[141] *Report of the Ports and Harbours Tribunal*, 1930, par.1314, p. 400.
The history of harbours in the country showed that, prior to 1922, a general state of confusion and mismanagement existed. A tribunal was set up to examine the legislative, financial and charging powers of harbours and ports. The general conclusions reached by the tribunal were incorporated in two recommendations, firstly, that the provisions of the various general acts relating to harbours should be replaced by a general consolidating act and, secondly, the Department of Industry and Commerce be given the general oversight of harbour administration. Parliamentary Debates, *Dail Eireann,* Tuesday, 19th January 1926 and Wednesday, 28th November 1945.
[142] *Report of the Ports and Harbours Tribunal*, 1930, pp. 46-79.
[143] *Irish Builder*, vol. XXIV 1882, p. 45.

Monahan the then city manager and he argued it was a purely political decision. The Cork Corporation was able to appoint several of its members to the harbour authority. Nevertheless, Fitzgerald regained his position on CHC board as he was chair of Cobh U.D.C.[144] and the holder of that position was entitled to attend CHC meetings.

In a letter dated 1st July 1924 to the then chairman of CHC, J. J. Horgan, following the appointment of F. O'C Saunders as engineer, Fitzgerald argued that there were better qualified candidates than Saunders and he further stated that there were very few positions for republicans. He was referring to the situation where successful candidates were obliged to sign a declaration of loyalty to the Free State.[145]

From the 1840 Municipal Corporation (Ireland) Act to the Local Government (Ireland) Act of 1898 there was seen to be a broadening of the franchise with the commercial interest controlling 50% of municipal seats. One of the most fundamental pieces of legislation relating to local government was enacted in 1898, namely, the Local Government (Ireland) Act which opened municipal offices to working people.[146] It is interesting to see what J. J.

Horgan had to say on the matter. He was giving evidence to the Ports and Harbours Tribunal[147] "…. until the Corporation became representative of the whole body of the citizens and naturally, the harbour board also became broader in its representation. Men were nominated to the board to represent labour. In 1820 when the board was constituted, the corporation of Cork was a clique elected by a few people. The conditions then existing suited that clique''.

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[144] Quinlivan, Aodh, *Philip Monahan: A Man Apart, (Dublin, 2006), p. 91;* Cork City and County Archives, Seamus Fitzgerald Papers 1890-1975, PR/6/720(1).

[145] Cork City and County Archives, Seamus Fitzgerald Papers 1890-1975, PR/6/712 (1).

[146] Reddick, Stephen, McQuay, 'Political and industrial Labour in Cork 1899-1914' (unpublished M.A. thesis, University College Cork, November 1984), p. 3.

[147] *Report of the Ports and Harbours Tribunal,* 1930, pp. 46-79.

Chapter 3: CHC and American mails-the Queenstown experience

1: Introduction

In the second half of the nineteenth century, the port of Cork began to handle increasing quantities of mail and it became the most important port of departure for transatlantic emigrants. This was due primarily to the arrival of the transatlantic steamship companies, which began to call to Ireland in 1859. Lee noted that Queenstown was not a priority for Cork Harbour Commissioners (CHC) and that CHC "concentrated on upriver improvement and development for the benefit of mercantile trade''.[148] To put it into context, the upper river had to be developed particularly in the 19th century given the poor state of navigation; it was deemed to be too expensive to deepen the lower harbour with the harbour engineer of the day quoting a figure of £120,000 to carry out the necessary works. Most of the port's trade related to the upper river and most of the commissioner's board were merchants whose trade was city-based. In the latter part of the century the election of Queenstown shipping interests, including members of the Scott family, to the board of CHC was important to Queenstown.

The lower harbour, up to the middle of the 19th century, had a vital role in the economy of the port as the low draught of water in the river channel precluded all but small vessels from entering the city, as Philip Scott, pointed out, 776 vessels called at Queenstown in 1860 but that only 196 had discharged corn at the port with the remainder going on to other Irish ports. Scott also noted in the previous year 1,680 ships were calling to Queenstown and that 778 of

[148] Lee, William 'Aspects of the history of Queenstown (Cobh) and the Transatlantic Trade 1800-1921', (unpublished M.A thesis, University College Cork, July 2003), pp. 30, 47 and 84.

these had cargoes of corn.[149] Philip Scott had greeted Queen Victoria in 1849 on behalf of the people of Cove and later in honour of the visit, the name Cove was changed to Queenstown.

2: Galway Line

By the 1850's Irish mail to North America went to England initially and following political pressure in 1851, a parliamentary committee was set up to examine the possibility of establishing a mail service to North America from Ireland. Whilst Cork was seen to be a safe port, it was Galway that was recommended as the packet station for transatlantic communication, particularly as it had gained a railway connection to Dublin.

A shipping company was subsequently formed in 1858 and it became known as the Royal Atlantic Steam Navigation Company and later as the Galway Line. The company was set up by Manchester businessman John Orrell Lever and Fr. Peter Daly, who was a member of Galway Harbour Commissioners. The Treasury had agreed to pay subsidies to the Galway Line to carry British mail to Newfoundland and further subsidies were being considered if mails were delivered to America. With the demise of the American Collins Line opportunities for other shipping lines had been created. The Inman Line was one of the companies that would benefit. The Inman Line had suggested that their operation would be more satisfactory than the Galway Line, even though there was supposed to be a public tender process, private negotiations were going on with the Galway Line. In February 1859, the Galway Line secured a contract from the minority government of Lord Derby which needed the support of Irish members.[150] The contract brought immediate protests from lines such as Cunard and Inman

[149] Pettit (1996), p. 131.
[150] Hansard: Parliamentary Debates, *HC Deb 08 April 1859 vol.153 cc1568-75*.

and was criticised by a select committee which was set up by the new parliament.[151] To compete with the Galway Line, Inman began to call at Queenstown and that contract was without subsidies, but probably had a commercial view in that they could foresee the Galway Line not succeeding in the long-run. That is exactly what happened. The service was not successful with delays being quite common; it ceased operations in 1864.[152]

3: Royal Mail Steamers

In 1859 it was announced that Queenstown was to be made a port of call for the Royal Mail steamers and the authority received confirmation of same from the British and North American Royal Mail Steam Packet Company. However, complaints started as early as 1860, when the Post Office complained about the loss of time in handling mail. Cork Harbour Commissioners response was to issue an instruction to keep a berth clear at all times for the use of mail tenders and this was to apply to Penrose Quay and also, Queenstown.[153] By 1861, the revenue concessions granted to Inman and Cunard were extended to other companies and five years later Queenstown had become a major port of call for steamers; by 1867 Inman Line had three vessels calling each week, Cunard called twice weekly and the Guion Line fortnightly. These sailings were mainly during the busy emigrant season which was from March to September. By the middle of the 19th century, Queenstown was a prosperous town with a population of 9,000, with many dependants on shipping –shipping agents, chandlers,

[151] Brookfield, H.C., 'Ireland and the Atlantic Ferry; A study in changing geographical values', *Irish Geography*, vol. 3, no.2 (1955), pp. 69-78.
[152] *The Times*, 26 August 1861; For a view from a Galway perspective see Timothy Collins, 'The Galway Line in context: A Contribution to Galway Maritime History ', *Journal of the Galway Archaeological and Historical Society'*, vol. 46, (1994), pp. 1-42; Lee, William. 'Aspects of the history of Queenstown (Cobh) and the Transatlantic Trade 1800-1921', (unpublished M.A. thesis, University College Cork, July 2003), p. 39.
[153] O'Riordan, Patrick, *Portraiture of Cork Harbour Commissioners* (Cork, 2015), P. 304.

rope makers, lodging houses keepers, 'runners 'for emigrant ships and brokers.[154] The shipping business of Queenstown seemed to revolve around certain firms and indeed families. Looking at 1871 names such as Scott, Cummins, and Seymour, were very prominent, notably, where Consuls, Agents for Underwriters, Ship and Emigration Agents, were concerned.

4: Queenstown Local Authority

Queenstown Town Commissioners came into being in January 1854 and just two months later there was a notice of a motion that the Cork Harbour Commissioners should fund local improvements through harbour dues collected at Queenstown.[155] By September 1858 the Town Commissioners were requesting that the new pier ''be cleared as soon as possible''. By 1866 the Queenstown Town Commissioners were very much against proposed CHC legislation so much so that a special meeting was called and the motion adopted included the following wording: ".... legislation is against the interests of this port...".[156]

However, by July 1866 William Seymour, as chairman of Queenstown Town Commissioners, was appointed to the board of the Harbour Commissioners and this was provided for in the legislation of that year albeit that the appointment was in an ex-officio capacity. Seymour wrote to the local authority outlining his appointment and not forgetting his first allegiance, he said that his appointment could be "...useful in promoting the interests of the port and harbour ....and especially in relation to this town.''.

[154] Pettit (1996), p. 182.
[155] Cork City and County Archives, Queenstown Town Commissioners, minutes of meetings, March 6th, 1854, and September 6th,1858, TC/CQ/M001.
[156] Ibid, minutes of meetings, 14th February and 2nd July 1866, TC/CQ/M002

5: The Shipping Agents in Queenstown

The agent for the Inman line was William Deane Seymour, a shipping agent for various countries including Honduras, Hawaii and Uruguay. He was the proprietor of the *'Queenstown Gazette'* which had a very short life span as the paper published, in 1851, only 22 issues. As well, he was a prominent member of the Queenstown Town Commissioners and as chairman, he served on the board of Cork Harbour Commissioners, in an ex-officio capacity, from June 1867 to June 1868. A relation of William was Nicholas George Seymour who was Belgian consul and represented Lloyd's of London for over 22 years. He was principal of Seymour & Co. Shipping agency. Significantly, legislation was passed in 1866 which allowed the chairman of Queenstown Town Commissioners to be an ex-officio member of the Cork Harbour Commissioners board.[157] However, it was not until 1883 that the lower harbour had representation in its own right, which came about as a result of legislation passed that year which allowed for the election of commissioners to represent the lower harbour.[158] The same year, Queenstown Town Commissioners were arguing for a separate authority for the lower harbour but it was the 1883 legislation allowing separate representation that eased the growing tension between Queenstown interests and Cork Harbour Commissioners. Such tension between CHC and Queenstown was long lasting; in 1952 when Martin Corry T.D. said ''…there is only one harbour and that is Cobh harbour …'' and as regards Cork Harbour Commissioners he stated: "…jealousy on the part of the interests is enshrined in the harbour board…".[159] Corry had also argued that facilities should be constructed at Cobh instead of Tivoli. Queenstown was replaced in name by Cobh in 1922.

[157] *Cork Harbour Amendment Act 1866*, Section 4.(29 & 30 Vict. c. 31).
[158] *Cork Harbour Act, 1883*, Section 37. (46 & 47 Vict. c. 171).
[159] *Cork Examiner*, 20th March 1952.

Nevertheless, the main ship agents in Queenstown, without doubt, were the firm James Scott & Co. Ltd., who had an important influence on developments in the town. James Scott was the founder of the company James Scott & Co. and his sons, George and Philip developed it into a very successful business. Scott's were ship owners from 1821 and for a time owned as much as 6,000 tons of Cork registered tonnage and by the 1860's the company concentrated on cross-channel shipping. The James Scott Company by the late 1840's and early 1850's was engaged in the transport of emigrants to Canada, America and Australia and in the decades that followed, they were acting as emigration agents for lines such as, Guion, White Star and Allan. They were also agents for different underwriters such as Austrian Lloyd's and Liverpool Underwriters Association and as well, acted as ship agents.

James W. Scott was chairman of the Cork Harbour Commissioners from November 1892 to November 1894 and was the grandson of James Scott, the founder of the company. He served for three terms as chairman of Queenstown Town Commissioners and acted as agent for the White Star Line. He was also consul for Chile, Brazil and Peru and vice-consul for some other countries. Between 1897 and 1905 he was the United States consul at Queenstown and was also the nephew of George Scott, who had served also, as harbour commissioner. George Scott had served as a mercantile representative on the board of the commissioners from 1847 to 1866.[160] James Scott took an active part in matters relating to CHC but the lower harbour and Queenstown were never far away from his attention. During his period as a commissioner matters discussed, particularly at Finance Committee meetings, included queries relating to tonnage rates, Liverpool Ship-owners Association and White Star Line, to name but a few. These would have been matters of interest to the family shipping company and in most cases;

[160] O'Riordan, Patrick, *Portraiture of Cork Harbour Commissioners* (Cork, 2015), pp. 60 and 81.

Scott would have attended the meetings. An interesting request was for a refund of port dues; Scott's was acting as agent for a German company and the request was in connection with dues paid on coals supplied to the German Fleet. The request was refused by CHC.[161] Similarly, in 1895 there were queries regarding White Star and Scott's at that time were agents for the liner company. There is no doubt that the Scott organisation was astute in their commercial dealings with the harbour commissioners. At a Finance Committee meeting on the 5th May 1902, there was a discussion regarding a proposal to erect oil tanks on the Great Southern and Western Railway property and the easement of a pipeline through the Queenstown Deepwater Quay. The consensus was to "move it upriver" with the proposal rejected and the harbour engineer instructed to find alternative sites. Scott was one of the main protagonists in opposing the proposal.[162] Away from commercial activities, the Scott family were very involved in the building of municipal parks and certain terraces in Queenstown.

6: The Inman, Cunard and White Star Lines

The Inman Line had by 1857 decided to use Queenstown as a regular port of call. The first call to Queenstown was by the ''City of Manchester'', in May 1859, en route from Liverpool to New York. Inman's idea was to undermine the Galway Line which was offering a service between Ireland and America. In years to follow the emigration agent for the Inman Line was C.W Seymour, a harbour commissioner. In the 1860's and 1870's, the Liverpool, New York & Philadelphia Steam Ship Company which was universally known as the Inman Line was one of the major maritime enterprises on the North Atlantic. The premier routes served were from Liverpool to Philadelphia and New York, with feeder services developed from continental

[161] CCCA/PC, Cork Harbour Commissioners, minutes of Finance and Law Committee, July 24th, 1893.
[162] CCCA/PC, Cork Harbour Commissioners, minutes of Finance and Law Committee, May 5th, 1902.

ports such as Antwerp and this resulted in a wider casting of the net for cargo and passengers.[163]

Between 1850 and 1852, the Inman Line decided to enter the emigrant trade using steamships which up to then was the exclusive market of the sailing vessels. Various wars meant that the Inman Line was called upon to supply vessels with the added disadvantage that there was a possibility their trade could be lost to a competitor. Nevertheless, Inman Line survived and when New York took the place of Philadelphia as a port of call, other lines followed suit, and with an increased number of calls, it became more financially advantageous for lines to call to New York. In February 1858, the American Collins Line ceased operations shortly after subsidies had been terminated and with a gap in the market, Inman availed of the opportunity and entered rate-cutting competition with Cunard.

The Inman Line endured some setbacks, as in 1864 when the ''City of New York'' became embedded on Daunt's Rock. It was claimed that the Rock lay in the direct approach of steamers entering Cork Harbour and only offered clearance of 12 feet at low water.[164] The inquiry that followed found that the first officer was at fault and considerable debate followed over the next few years at CHC board meetings and indeed, correspondence with the Irish Ballast Board regarding Daunt's Rock. The Rock was some 4 to 5 miles from Roches Point and was outside the harbour limits.

The American civil war concluded in 1865 and brought about a temporary decline in freight bound for America as the wartime demand slackened. The American economy suffered post-war retrenchment with the knock-on effect on North Atlantic steamship lines; the Inman,

[163] Flayhart, William Henry, 'The InmanSteamship Company Limited: Innovation and Competition on the North Atlantic,1850-1886.' in *The Northern Mariner /Le marin du nord,* xii, no. 4, (October 2002), p. 29.

[164] *Cork Constitution,* 8th August 1875.

Cunard, National and Guion all had to reduce their sailings. Before 1867, the primary responsibility for the transportation of ocean mails was with the Admiralty. This was a carry-over from the days of navy packets which carried mails to important areas of British concern. By the end of 1867, the responsibility for ocean mails was transferred from the Admiralty to the PostMasterGeneral (PMG) and with the change-over the Inman Line was successful in their bid to carry Canadian mails from Queenstown to Halifax on a fortnightly basis. Inman had beaten Cunard, who had held the contract since 1840, however with a reduced payment of £375 per voyage. The Inman Line also benefited financially from having a share of the Royal Mails that were being carried between Liverpool and New York. There was a renewal of economic prosperity after 1870, with Inman having 68 sailings and Cunard with 70 sailings but in terms of passenger numbers, Inman was the largest operation on the North Atlantic with 40,465 steerage passengers compared to Cunard's 16,871.[165] However, some major issues were facing the Inman Line. Firstly, there had been five major shipping disasters which affected the company. Secondly, in 1869 the compound engine was invented and perfected, so much so, that Inman had to re-engine almost its entire fleet. But the biggest challenge was the arrival on the scene of the White Star Line or Oceanic Steam Navigation Company Limited in 1871 and its very presence, within five years forced Inman into a major re-organisation and its very survival was threatened within fifteen years. Nevertheless, it could be argued that the line that had the greatest impact and influence on Queenstown was Cunard.

Samuel Cunard, a prominent merchant and shipowner, was awarded an initial contract in 1838 to carry transatlantic mails by steamer. Importantly, the contract carried a subsidy. With the help of Robert Napier, the Clyde shipbuilder and along with partners, Burns and McIver

[165] Flayhart (2002), p. 38.

he set up the British and North American Royal Mail Steam Packet Co. The service started with four wooden paddle steamers in 1840 and by 1847 the service was increased to a weekly sailing in each direction. The early Cunard steamers were regarded as uncomfortable with the passengers squeezed into the cramped spaces fore and aft. The dominance of the Cunard Line was initially challenged by the Collins Line, which had started with sailing ships but then switched to steam in the hope of getting a subsidy. Collins built a fleet of wooden paddle steamers and within two years was carrying more than 50% first-class passengers. Collins was seen to treat his passengers with comfort and elegance while Cunard, on the other hand, seemed to be more austere in style. Tragedy struck the Collins line in 1854 with the loss of the ''Arctic'' and this was followed by the loss of the ''Pacific'' some two years later. Collins lost his subsidy and eventually turned his attention away from shipping to iron and coal.[166]

Cunard began their association with Queenstown in 1859 with some 22 sacks of mail and two cabin class passengers being embarked on the initial sailing.[167] But Cunard was not happy as the following year in evidence to the Select Committee on Packet and Telegraph Contract Committee of 1860 Samuel Cunard argued that the Queenstown call made the sailing take longer.[168] This was the start of Cunard disillusionment with Queenstown.

Subsequently, Cunard over the decades expressed concern at the cost of calling to Queenstown and this was becoming evident as early as 1867 when discussions were taking place regarding a mail contract. John Burns of Cunard argued in evidence to a Select Committee that it would be difficult to maintain a satisfactory service from Liverpool to

[166] Whitney, Ralph, 'The Unlucky Collins Line', in *American Heritage*, volume 8, issue 2, 1957.
[167] *The Times*, 9th November, 1859; Lee (2003), P. 41.
[168] Archives of the Royal Mail Post: POST 29/93 Pkt 329L/1860, Q3528.

Ireland under such conditions.[169] In 1868 the argument regarding substitution of subsidies by ocean postage rate carried on with Burns warning that Cunard would pull out of Queenstown if the Post Office would not accept the offers made by Inman and Cunard Lines.[170] For almost thirty years the method of payment was by fixed subsidy which was to underwrite the cost of the vessels. By 1868 the PostMasterGeneral felt that the steamship vessels on the North Atlantic had developed trade enough so that the subsidy could be dispensed with in favour of one based on weights. The result was not as successful as the Post Office hoped for, nor as profitable as the lines had expected. The result was that in 1869 the old fixed-subsidy formula was reintroduced.[171] Cunard, on the 29th October 1877, wanted to increase the payment for letters and newspapers and went as far to say that they would cease to call at Queenstown if the reply was unsatisfactory.[172] The Queenstown call was it seemed constantly in question;[173] with the shipping community, of Queenstown, along with merchants becoming very nervous with the possibility that the mail steamers might cease to call at Queenstown.

Subsidies seemed to be one method of survival on the sea, as was evidenced during the period 1865 to 1874 when the US Congress was inundated with subsidy bills. The President approved an Act which gave the Commercial Navigation Company of New York monopoly for fifteen years carrying all European mails to Queenstown, Southampton and Bremen weekly or semi-

[169] John Burns evidence to the Select Committee on Mail Contracts 1867, Q1363-4 in Lin, Chih-lung, *'The British Dynamic Mail Contract on the North Atlantic: 1860-1900'*, XIV International Economic History Congress, Helsinki, 2006 Session 107, p. 8; See also *The Times*, 30 November 1867.

[170] Archives of the Royal Mail Post: POST 29/154 Pkt 145U/1869.

[171] Flayhart (2002), p. 38

[172] John Burns' letter to *The Times*, 19th March 1878. The request was to raise the payment to 4s. 8d. per pound for letters and 4d. per pound for newspapers.

[173] Cunard Archives, University of Liverpool, D42/CA41, letter to the Cunard Line, 31st May and 11th June 1886.

weekly, but the PMG objected and countered with an offer of a contract to carry mail four times a week however the company never took up the offer.[174]

Cunard was also mindful that he was losing ground to other lines and responded in the 1880's with new vessels, the single screw, ''Umbria'' and ''Eturia'' and they were intended to be amongst the most powerful ships afloat. The decade saw the lines compete to produce the most advanced and luxurious vessels with the Inman Line's "City of Paris"' and the "City of London" being built in 1888 and not to be outdone, White Star in 1889 had the "Teutonic" and "Majestic" on display. But their days of influence were coming to an end with the arrival on the scene of the North German Lloyd and Hamburg-Amerika Lines which by 1903 saw Germany owning the four fastest ships crossing the Atlantic.[175] The North German Lloyd was now carrying more first-class passengers than Cunard. Cunard to keep up with the other lines produced the larger "Campania" and the grander "Lucania" and from 1895 both vessels would call to Queenstown regularly.

The 1890's saw a period of improved shipbuilding technology with larger vessels working on the North Atlantic route but the lines felt that the ''old harbour equipment in Ireland was out of date'' and the bad weather in winter on the North Atlantic also discouraged the call to Ireland.[176] The Post Office found they were unable to control the homeward voyage of contractors and they saw that companies were reluctant to call to Queenstown as it was felt there was not sufficient business there. This situation culminated in Inman terminating their call to Queenstown in 1893. An indication of the size of the mail service market can be gauged by the numbers of mail bags carried by the mail packets to New York during the year 1898:

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[174] Meeker, Royal., 'History of Shipping Subsidies*', American Economic Association*, 3rd Series, vol. 6, No. 3, Aug. 1905, p. 164.

[175] Preston, Diana, *Lusitania: An Epic Tragedy* (London, 2002), p. 59.

[176] H. C. Brookfield, 'Cobh and Passage West' in *Irish Geography,* vol. 2 no. 4 (1952), p. 164.

from Liverpool, 57,331; from Queenstown, 65,498. The numbers landed were Queenstown, 34,781; at Liverpool, 56,892.[177]

Four years later in 1902, White Star was taken over by the banker J.P. Morgan and he was also very interested in taking over Cunard. This would mean that the major lines would be American owned which left the British government with the dilemma as to whether to allow the takeover of Cunard or rescue ''Cunard for the nation'' through a large government subsidy.[178] Around this time, what was seen as an embarrassing situation for Cunard occurred when the "Eturia" broke down in the middle of the Atlantic and had to be towed to the Azores by a tramp vessel owned by Morgan. The government eventually decided that Cunard could not be seen to be going into American hands so in 1903 an agreement was concluded between the PMG and the Cunard Company of which, the Board of Admiralty and the Board of Trade were interested parties. The contract increased the subsidy to the Cunard Company received for the carriage of American mails from £57,000 to £67,000 per year and also, there was a loan made to the company of £2,600,000 to increase the fleet by two extra ships which were to be used for this service.[179] The two vessels concerned were to be the "Mauretania" and "Lusitania" which were to be in the 32,000-ton range. They were to be the most powerful and fastest transatlantic liners of the day and were expected to generate a top speed of at least twenty-four and a half knots which would beat the German liners, but the specification was to be approved by the Admiralty. In return, the Admiralty had a right to commandeer ships for use as cruisers, troopships or hospital vessels. On only her second Atlantic sailing,

[177] Information was given in reply to a Parliamentary Question. *HC Deb 10th February 1899 vol. 66 c499.*

[178] Hyde, Francis E., *Cunard and the North Atlantic 1840–1973: A History of Shipping and Financial Management*, (Palgrave, 1975), pp. 145-47

[179] Herbert Samuel, PostMasterGeneral: *HC Deb 14th August 1913 vol. 56 cc2662-755.* The debate included comments by M. P's Muldoon and Redmond.

the “Lusitania” journey time was under 5 days and brought the symbolic Blue Riband back to Britain.[180] The following year 1904 saw the steam turbine-powered 20,000 ton ‘’Carmenia’’ built and by 1907 speeds of 20 knots were common on the Atlantic route. Liverpool Chamber of Commerce, on occasion, wrote to the PMG making the point that the fast Cunard steamers could go direct from Liverpool to New York without making the Queenstown call and that it would be more efficient for Cunard to give up Queenstown. In 1907, the chairman of the Cork Harbour Commissioners asked the Parliamentary Secretary to the Admiralty was it possible that part of the Turbot Bank be removed. This was an effort to avert further liner company protests and objections. In the previous year, the Admiralty had given £20 million to Gibraltar, Malta, Portsmouth and other royal bases in the British Empire for improvements. The Admiralty rejected the argument on the basis that they did not fund commercial facilities.

Cunard had during the first decade of the century regarded the entrance and anchorage, of Cork Harbour, as dangerous for their large ships-turning on the shoals bow and stern and had less than a fathom under the keel at the entrance at low springs.[181]

The year 1907 was a momentous year for the American mails, the White Star Line decided to change its terminus from Liverpool to Southampton which meant that Cork was replaced by Plymouth on the eastbound voyages. The commissioners lobbied the Irish Members of Parliament and the PMG but to no avail and by 1910 the Cunard Line stopped calling into Queenstown for January, February and March. Critics of Cunard argued that it was on the grounds of inconvenience and the length of the journey, which was putting them at a

[180] Preston, pp. 60-62; *The Irish Examiner*, May 5th, 2015.

[181] H.C. Brookfield. ‘Ireland and the Atlantic Ferry; A study in changing geographical values ‘ *Irish Geography*, vol. 3, no.2 (1955), p. 69.

disadvantage with their competitors.[182] Cunard said in February 1913, the company was considering the overall position regarding calls to Queenstown. It was maintained there was not sufficient clearance in the event of bad weather, as CHC were too late in carrying out the improvements required and in any event, mails embarked at Liverpool should sail direct to New York.[183] In a letter from Cunard's chairman to the PostMasterGeneral (PMG) dated the 19th March 1913, it was suggested the calls to Queenstown should stop and specifically referred to an incident involving the ''Mauretania''. The liner had suffered a delay of four hours as she had to wait for flood tide so that her bow would be brought abreast the harbour and that she could steam out. By the 10th April Cunard informed the PMG that the ''Mauretania'' and ''Lusitania'' were not to enter the harbour and M. P's from Liverpool, were suggesting that the call to Queenstown should be abandoned altogether. A subsequent letter of the 19th June 1913 from the General Manager of the Company referred to how unsafe the port was and gave the experience of the ''Lusitania'' on the 29th December 1907 as an example. The commissioners in reply to the secretary of Cunard, pointed out that it was an error of the pilot that caused the incident and seemingly the company were happy as long as a severe reprimand was issued to the pilot concerned. It seemed clear at this stage that Cunard had decided that the large Cunard liners would not call to Queenstown. Correspondence from Cunard shows that a letter dated 25th August 1913 issued instructions to the effect that neither the "Lusitania" nor the "Mauretania" was to enter the harbour at Queenstown in future. The vessels were nevertheless to continue to halt outside the harbour

[182] "Cork Harbour Commissioners: Chronology of Interesting Events 1813-1992". CHC Internal document, in possession of author, pp. 18-20; *Cork Constitution,* 7th February, 1907.

[183] Pettit (1996), pp. 219-22.

to collect and deposit mail whenever the weather permitted.[184] The instruction came as the "Lusitania" resumed its cross Atlantic travels having spent the previous eight months in dry dock after trouble with turbines which required an overhaul of the vessel.

The PMG had sought the opinion of the technical advisers to the Post Office, Board of Trade, and the Admiralty and they were of a similar view, in that, large vessels would be at risk in trying to enter the port, particularly, in bad weather. Factors such as the narrowness of the entrance to Queenstown harbour, the small depth of water, restricted area of anchorage, it was argued, would put vessels such as "Lusitania" and "Mauretania" at considerable risk. Considering the suspension of the American Mails the PMG maintained that mails from Belfast would require posting seven and a half hours earlier and that the south of Ireland would require the posting of mails no more than a day earlier.

Critics of Cunard argued that the company had skillfully engineered the position and particularly how relevant correspondence was only laid before the House of Commons just as the House was going to prorogue. It was also argued that the vessel "Olympic" (White Star Line) had no specific problems entering or leaving the harbour, as the vessel was seen to be more manageable than the "Mauretania" and "Lusitania" particularly as the "Olympic" had reciprocating engines, even though she was longer and had bigger tonnage than the "Mauretania" and "Lusitania".[185] The ''Olympic'' went on to serve as a troop carrier during World War 1.

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[184] The instruction received by Cunard officials at Queenstown read: 'Please note that after the 24th inst. the "Mauritania" and "Lusitania" will cease to call at Queenstown. We shall be glad therefore if you will advise the passengers that it will be necessary for them to proceed to Liverpool and embark there.'

[185] *Report from the Queenstown Harbour Committee appointed by the Postmaster-General to consider the omission of the call at Queenstown on the American Mail Service*, pp. 54-55. *HC Deb 28 September 1915 vol 74 c704*.; See also, *HC Deb 14th August 1913 vol. 56 cc2662-755.*

Irish M.P.'s made various arguments against the dropping of Queenstown, which included the breaking of a contract, loss of trade to the region and that, the largest ''Dreadnoughts'' of the navy frequently went into the harbour without danger. However, it was all to no avail or certainly, too late. The action of the Cunard company had drawn criticism from several Irish M.P.'s, among them John Redmond and his brother William who had repudiated the charges in Parliament against Cork Harbour's shortcomings and had called for a local inquiry. Whilst, in 1912, Winston Churchill, the First Lord of the Admiralty paid a popular visit to the port, that year also saw Cunard ruling out the resumption of calls by both the "Mauretania" and "Lusitania". Cunard had since 1840 a contract with the British government for mail service and the ending of the Queenstown stop galvanised political and business opposition in Ireland.[186] Queenstown UDC regarded the decision of the Cunard Company as a gross violation of the terms of contract.

Under the 1903 agreement, Cunard could have been fined for not collecting mail at Queenstown, however, there was also a clause in the agreement which stated that fines did not apply when events were outside of Cunard's control. The PMG further argued that mails to America had increased considerably since the agreement came into operation and that the Cunard Company had not received any additional revenue. Another significant player in the American mail trade to Queenstown was the White Star Line.

The White Star Line was originally founded in 1845 by Henry Threlfall and John Pilkington. The shipping line operated a fleet of sailing clippers, sailing from Britain to Australia. On 18th January 1868, the house flag and name of the White Star Line were purchased by Thomas

[186] Cunard discontinuing the Queenstown American mails connection was mentioned for discussion at the third reading of the Consolidated Fund (Appropriation) Bill on the 14th August 1913. *HC Deb 14 August 1913 vol 56 cc2662-755*.

Ismay for £1,000. Thomas Ismay wanted to have a fleet of steamships and the first ship built for the White Star Line was the “Oceanic”, built by Harland and Wolff, Belfast in 1870 and at one time it was the largest ship afloat.[187] Ismay had decided to work the North Atlantic trade and to do so would need new ships and he came to a mutually beneficial agreement with Harland and Wolff, that they would build the ships at cost plus a fixed 4 per cent. To help Ismay raise the capital, both Harland and Wolff bought a substantial number of shares in Ismay's company. The first White Star ship, “Oceanic”, was ordered in 1869 with the last vessel, “Georgic”, built in 1932. On the 23rd November 1899, Thomas Ismay died and by that time his son J Bruce Ismay had taken over as head of the White Star Line.

Some of the White Star liners were able to siphon some of the passenger trade away from their competitors with the result other companies went looking for new tonnage. Several new liners came on stream for the Inman Line; however, there was difficulty in keeping up with the impressive White Star. Even though the years 1870 to 1872 were seen as boom years for all liner companies, by 1876, in the aftermath of a severe maritime depression, White Star and Inman had come to a sharing arrangement which had become an economic necessity. The Ismay ownership came to an end when White Star was bought in 1902 by John Pierpont Morgan as part of his shipping conglomerate International Mercantile Marine.

7: The American Mails and the Queenstown Inquiry 1914

Cork Harbour Commissioners in June 1907 were fearful of the American mails being lost to the harbour and to allay the liner companies misgivings about the harbour, James Long, Chairman of Cork Harbour Commissioners, led a deputation to meet the Parliamentary

[187] Flayhart (2002), p. 40.

Secretary of the Admiralty. Some royal bases had got funding, but the Admiralty rejected the request because Cork was a commercial port and consequently would not finance such operations. However, that year saw liner companies taking action that would have serious repercussions as regards American mails; this was when White Star changed their terminus from Liverpool to Southampton and replaced Queenstown by Plymouth on the eastbound voyages. This followed the withdrawal of the Inman Line in 1893. The reaction of the port authority was to have a resolution passed which called on the entire body of Irish members of parliament to oppose the withdrawal of the American mail service from Queenstown. Another deputation met the PMG in London to urge upon him the necessity of using his influence for the retention of Queenstown as the port of disembarkation of the homeward American mails. Three years later, in 1910, following discussions a scheme was approved by Cunard and White Star whereby CHC would extend the deepwater anchorage so that large liners including the “Lusitania”, “Mauritania” and the “Olympic” could swing to anchor at the same time. However, Cunard, essentially, ignored the agreement and said that for January, February, and March their mail liners eastbound on Wednesdays would not call at Queenstown. The announcement came by way of a press release which annoyed Cork Harbour Commissioners. A meeting was held in the Mansion House, Dublin on the 21st April 1910 to protest at the action of Cunard in abandoning Queenstown as a port of call for their fast steamers. Deputations were sent to Dublin, London and on 3rd October a deputation was received by the PostMasterGeneral in Washington. The deputation included representatives of Queenstown UDC. Such responses were seen to be simply nothing more than a public relations exercise.

Representations were made at high levels in the United States with the former President of the United States Theodore Roosevelt promising to make representations on behalf of John Redmond and Captain Donelan, M.P for Cork East,[188] whom he had met earlier in London.

A late response from the Commissioners was to engage C.S. Meik, in 1913, to report on the state of the harbour entrance and liner anchorage for the reception of large liners. The report cost £22,000.[189] The report was completed reasonably quickly, and its main recommendations were:

(1) The improvement of the curve of the Western Entrance Channel by the removal of the Turbot Bank. (This had already been suggested to the Admiralty by CHC in 1907).

(2) The widening of the deep-water area of the anchorage up to 2,600 feet.

(3) The removal of the 35 feet patch in the anchorage.

(4) The construction of a groyne at Corkbeg to improve tidal scours.

Meik regarded the approach into the Queenstown harbour by either the eastern or western channel as being superior to the entrance at Liverpool as it was more sheltered from heavy gales whilst, as regards Southampton, he argued that the channels to Queenstown were much easier to navigate than that leading from the Solent round Calshott Castle up to Southampton docks. The plans were accepted by the commissioners and the work was to commence as quickly as possible. Meik's recommendations were phrased in such a way to reassure the commissioners as to the suitability of the harbour for the liner traffic of the day. The report described both approach channels as affording easy access as well as being sheltered from the worst gales from the south and that the Turbot Bank, which had caused some problems in the western channel, could be removed by the process of dredging away the sand and

[188] Captain Donelan was chief whip of The Irish Party.

[189] C.S. Meik, Report for Cork Harbour Commissioners, *"Queenstown Harbour",* November 1913.

gravel of which much of the mass was composed. Improvements of this kind to the western channel was to give a very favourable approach to the harbour and one which the largest steamers could make use of. Changes in the bank would necessitate adjustments in the system of leading lights and buoys but in the end, the channel would compare very favourably with the channels up to Liverpool and Southampton, giving a minimum depth at low water of 42 feet while at Liverpool the depth varied from 31 feet to 33 feet and at Southampton from 35 feet.

A new dredging programme along the Curlane Bank began in 1911 and continued to 1913. The commissioners saw that an improved tender service at Queenstown was required but Cunard and the other liner companies would not pay or indeed, contribute towards the provision of a new tender.

By the autumn, CHC published extracts from various statements, including harbour pilots, outlining how Queenstown was a safe harbour.[190] As well, the deputy harbourmaster also wrote referring to the harbour as being "a safe port and (was)…easy of approach....".[191] Earlier in July; a booklet was published by CHC pointing out the advantages of Queenstown as a port of call for American Mails. Yet, all these actions were merely part of a rear-guard action.

Nevertheless, the commissioners-maintained contact, particularly with the PMG and in February 1914, the harbour engineer, harbour master and Mr Meik made representations outlining the improvements carried out and, more importantly, the future proposals for the liner traffic. Dredging had commenced following Meik's recommendations but was stopped at the commencement of World War 1. (WW1.) Cork Harbour Commissioners files show that

[190] Some of the pilots who issued statements were: Pilot John Cotter, who was a White Star pilot and Pilot Thomas Nash was a Cunard pilot.

[191] *Report on Cork Harbour (Queenstown*) by Captain George Usborne for Cork Harbour Commissioners, September 4th, 1913.

there was no lower harbour improvement works carried out between August 1914 and July 1918.

Business interests regarded the Cunard decision as a blow to the entire region. J. J. Horgan mentions how for many years Cunard had used Cork Harbour as a port of call for its transatlantic liners and then proceeded to break its contract to land the eastbound mails at Queenstown. He also claimed that Cunard added 'slander to bad faith' by alleging that the port was unsafe for their new fast liners the "Lusitania" and the "Mauretania" when they announced that these ships would no longer call at Cork Harbour.[192] He argued that the White Star Line had bigger ships and they had no problem with Cork Harbour. In the final analysis, Cunard decided that the call to Queenstown would cease and later in 1913, an All-Ireland protest meeting took place in Dublin; where it was decided to seek a meeting with the Prime Minister which took place subsequently in London and an Inquiry was held in May/June 1914 again in London. The meeting, in Dublin, was convened by the Lord Mayor of Dublin and was attended by various representatives of local authorities and business interests. At the meeting, Sir. John Casement suggested independent communication lines should be established between America and Ireland. J. J. Horgan pointed out that Casement was very much involved in getting the German Line Hamburg-Amerika Line to call to Cork, as Casement saw this as an opportunity to renew contacts between Ireland and Europe. Casement had met the CHC chair Sir James Long and other members to discuss the project and on the 30th December 1913, the CHC board were going to organise a public reception for the initial liner call. The line requested that there be no public fanfare and Casement felt there was political pressure involved. By February 1914 the Hamburg-Amerika line formally announced they

[192] Horgan, J.J., *From Parnell to Pearse (*Dublin, 1948). p. 232.

were going to abandon the project altogether with Horgan arguing that it was the British Foreign Office that vetoed the scheme.[193] Coincidence or otherwise, decades earlier it was the Hamburg-Amerika line which was one of the German lines that were threatening the Cunard and White Star's Atlantic domination.

The impressive liner ''Lusitania'' was to suffer tragic consequences. On the 7th May 1915, the Cunard liner ''Lusitania'' was sunk by a German U-boat and at the Inquest, the deputy coroner J. J. Horgan, who was a prominent harbour commissioner, denounced the action as '' wilful and wholesale murder''. [194] There was a total of 1,201 lives lost.

In 1914 an inquiry was set up, the terms of which included: "...circumstances under which the Cunard Company have discontinued their call .....and to consider .....by means of improvements ... (how) calls could safely be resumed.'' [195]

The report stated that there was a "good service by very large boats.... still available" but that the advantage of the very large liners "had been lost to them". Reference was made to Cunard vessels in the 20,000-ton class, which would still be calling to Queenstown and likewise, the White Star Line would call with similar size ships.

The main argument in the report was that Queenstown has lost the American mail liners but still had large emigration liners calling regularly. Evidence was given to the committee by James Long, Chairman of CHC, J. H. Campbell, Queenstown Town Clerk and the CHC harbour engineer and the deputy harbour master. The CHC nautical and engineering representatives argued that the harbour approach and the entrance were navigable for large vessels, but the

[193] Horgan, p. 233.

[194] Imperial War Museum, "Proceedings of Coroner John J Horgan's Inquiry into the Death of Captain R Matthews as a Result of the Sinking of R.M. S Lusitania," May 1915.; *Cork Examiner*,10th May 1915.

[195] *Report from the Queenstown Harbour Committee appointed by the Postmaster-General to consider the omission of the call at Queenstown on the American Mail Service*. H.M.S. O, 1914. p. 1

committee argued that it was not for two large liners at the same time. The actual loss to CHC in financial terms was not disclosed to the committee and there was a clear emphasis that the real loss to Ireland was from a tourist point of view. In fairness to the committee, the actual loss in respect of tourism was never quantified. The chairmen of Cunard and White Star, in evidence, argued that there was no need for the call to Queenstown to be reinstated. Similar evidence was given by the respective captains of the "Mauretania" and "Olympic". Not surprising the report did not support the reintroduction of the large liners calling to Queenstown.

A campaign to develop a new port on the western seaboard had been given fresh impetus by the decision of the Cunard Company to end its use of Queenstown as a stop-over port for its steam liners. Against this backdrop, an editorial in *The Freeman's Journal* argued that without the provision of a new port Ireland risked being side-lined from the most important trade route in the world. The newspaper argued that there was no shortage of potential locations to develop such a port, but much of the discussions centred on the relative merits of Galway and Blacksod Bay. Of the two, Galway's case had been more strongly made. "It would be more suitable to Dublin, and, in my opinion, be the better scheme of the two in every respect", George Byrne, Chairman of the Dublin Port & Docks Board, said. [196] But nothing came of the discussions.

8: Pilotage

Pilotage is an integral part of port and harbour activity and pilotage activity in Cork harbour is centred at Cobh. The pilotage superannuation fund for pilots was set up in 1851, the pilots

[196] *Freemans Journal*, 20th August 1913.

were never regarded as employees but were regarded as fee-earning and their 'employment' was based on the renewal of their licence every year.

The Queenstown pilots used cutters belonging to several owners each receiving portion of the pilot's earnings. Another portion went to the 'hobblers'-men employed to work the boats. The remainder was divided among the pilots attached to each boat. This system meant that each boat operated in competition with the others, with the result that the service was irregular and the boats themselves were in a questionable condition.[197] Best off were the transatlantic pilots at Queenstown who were employed at good salaries to pilot the large liners.

In 1890, Cork Harbour Commissioners, as a pilotage authority, were concerned about pilot boats, none of which were controlled or owned, by the authority. They had been legally advised that CHC would be working outside the scope of their acts by contributing towards the purchase of privately-owned pilot boats, but they could licence the boats if the boat owners had formed a company. As well, Cork Harbour Commissioners sought a new pilotage act as licensed pilots could not operate outside the limits of the pilotage district. Vessels were arriving off the harbour having got their orders from signal stations on the headlands and as a result, were not obliged to enter the pilotage district and importantly to the harbour authority, no pilotage fees were paid and with unlicensed pilots, operating outside the pilotage areas the commissioners felt they could not make regulations.

By 1892 a new act came into being, the Cork Harbour (Pilotage Act) 1892 was significant as it extended the pilotage area, from its then position of Poer Head to Cork Head and Knockadoon Head on the northeast to Mizen Head on the south-west, some 1500 miles. The act was seen

[197] Pettit (1996), p. 196.

to have answered many of the Board's anxieties and also allowed CHC to act as the pilotage authority and purchase pilot boats. [198] By 1895, the commissioners were investing in new boats, a new pilot boat "Aileen" was built by Queenstown and Passage Docks Company and another boat was purchased in 1909.

Pilotage was very much in need of reform particularly as the number of pilots in 1893 amounted to 55 but declined over the years to 38 in 1903, 18 in 1943 and 15 in 1963. The number of pilots employed by the Authority remained at a similar level for the next fifty years. The same period also saw that with fewer ships calling to the harbour it was decided to reduce the number of pilot stations from 4 to 2.

The Pilotage Act of 1913 was a general consolidation act and made provision for pilot's representation on the Pilotage Committee. The commissioners, under the act, had submitted to the Board of Trade a scheme in which certain areas of the pilotage district would be compulsory and financially beneficial to the authority. [199]

9: James Long: Queenstown native and Harbour Authority Executive

Long was to be a central figure in the history of Cork Harbour Commissioners and, an influential harbour commissioner who would go on to be secretary of the harbour authority. In 1898 Long defeated the Unionist candidate Savage French in the local elections of that year. Savage French was very prominent in shipping circles in Queenstown and had been chairman of the Queenstown Naval Dwelling Co. Ltd. Long went on to serve on the Queenstown Town Commissioners and as ex-officio chairman was able to sit on the board of Cork Harbour

[198] CCCA/PC, Cork Harbour Commissioners, minutes of board meetings, 1892-1895.
[199] O'Riordan (2015), pp. 313 to 23.

Commissioners. He was elected and served as chairman of Cork Harbour Commissioners from 1901 till 1916 when he was appointed secretary and from 1922 was General Manager. He was knighted in 1910 but relinquished the honour in 1920 as a protest at the treatment of Terence MacSwiney.

In his evidence to the Queenstown Committee in 1914 Long mentioned he was chairman of the harbour authority for about 15 years and an "ordinary member for about 22 years".

Long said that he lived about 300 feet above sea level and had the opportunity to see the vessels entering and leaving the harbour and could see the importance of shipping to Queenstown.[200]

In 1922 the *Cork Examiner* reported that Long's grasp of detail and constructive criticism was very beneficial to the port and indeed, the city.[201] He had significant influence in matters relating to the port and Queenstown. An example of such influence was when Long was chairman of the Law and Finance Committee on the 20th January 1902, there was one recommendation regarding salaries: "... that John Farrell clerk in the Queenstown office is increased from 15/- to 20/- per week". This amounted to a 33.33% increase in salary and that was the only recommendation.

10: Deepwater Quay, Queenstown (DWQ)

With the economy of Queenstown benefitting from the mail service, there was now an apparent need for more quay space in Queenstown and legislation was passed in 1877 permitting the construction of a Deepwater Quay (DWQ) which was subsequently built in

[200] *Report from the Queenstown Harbour Committee appointed by the Postmaster-General to consider the omission of the call at Queenstown on the American Mail Service.* H.M.S.O, 1914 p. 54.

[201] *Cork Examiner,* 18th September 1928.

1883 and this allowed American mails to be despatched and troops to embark during the Boer War and subsequently, WW1. Queenstown interests had pressed for many years for the erection of such a quay but to no avail as the harbour authority only agreed when there was a similar need for deep-water quays in Cork city. The DWQ quay was built under the provisions of the 1877 Cork Harbour Act. The quay was built in front of the Great Southern and Western Railway Company's terminus at Queenstown. The successful tender was in the name of John Delaney and was awarded on the basis that the foundations should be dredged without charge to the contractor and that filling at the back of the quay-wall was to be supplied free of charge by the commissioners. The final cost amounted to £34,188.4.0 with the length of the quay front 600 feet. If vessels called to Queenstown to embark troops there was no port charges and charges only occurred when there was cargo aboard the vessels. Barry goes as far as to say that "… American Mails are now landed at and despatched from this quay, and Her Majesty's troops are embarked from the railway into troopships lying at the quay".[202]

DWQ Income amounted to a modest £756 in 1876, increasing to £1,115 in 1880 and £2,205 by 1890 however 1900 saw income marginally decline to £2,130. DWQ income increased substantially in the following decades to reach £4,028 in 1920 and £4,927 in 1925. It is important to note that during the years of WW1, income dropped from £2,907 in 1915 to £2,122 in 1918 or 27%.

[202] Barry, Philip, 'The Deep Quays in the Port of Cork', *Minutes of the proceedings of the Institution of Civil Engineers,* vol. 100, January 1890, part 2. pp. 324-25.

11: Anchorage and Admiralty dues

There was additional income in respect of liners which was known as anchorage dues and this was in situations where liners which were not able to come into the inner harbour waited at anchorage. Needless to mention the harbour authority charged tonnage rates on these vessels. This income up to the late 19th century was classified as port dues and from the early years of the 20th century became known as anchorage dues. A significant portion of the anchorage dues would have been from emigrant ships when liners were at anchorage and it would have been common for tenders to bring emigrants and the mails to and from the liners.[203]

The anchorage tonnage income over the 25 period 1876-1900 saw income at its highest in 1880 at £4,153 and income was to decline appreciably over the decades to reach a low of £2,282 in 1896. However, by 1901 income in respect of anchorage dues reached £2,845 and by 1909 and had reached £5,193 but dropped significantly subsequently to reach the low figure of £878 in 1920 but had recovered by 1925 to reach £4,769, which was at the 1913 level. [204]

As with DWQ income, anchorage charges did not get any rate increase during the period, unlike the general tonnage which had a substantial increase in 1883 when the foreign rate of 3d per ton increased to 1/- per ton. There was no significant correlation between DWQ and Anchorage income over the period with DWQ income increasing and anchorage declining

[203] Daire Brunicardi, Former Lieutenant Commander, Irish Naval Service and Senior Lecturer, National Maritime College of Ireland, in an e-mail dated 25th July 2018, states in relation to emigrant ships. "… it was very rare for the large passenger ship to enter the harbour. They usually anchored a couple of miles off Roches Point … The main factor would have been time, getting a large ship into the harbour and anchoring would be a slow process, adding 1.5 to 2 hours each way".

[204] CCCA/PC, Cork Harbour Commissioners, annual accounts and minutes of board meetings, 1870-1925.

during the period. There was little emigration during WW1 and of course, the American mails had ceased to operate during the war years and both these factors are evidenced particularly in anchorage tonnage. It is difficult to see a correlation between emigrant numbers and anchorage dues however it can be assumed that most of the anchorage dues were from emigrant ships.

As outlined, British troops embarked from the railway into troopships lying at the DWQ in Queenstown however, it seems that the British Government was slow to pay their dues particularly where dues relating to cargo were concerned and this is evidenced by the note that appears in the accounts ended 31st July 1923 and reads:

"There are outstanding claims against the Admiralty for Dues on British Government vessels portion of which is disputed and disallowed by the Admiralty". The note also refers to accounts which the Admiralty had not sanctioned for payment.[205] Conlon, in his report on Cork Harbour Commissioners departments, said that as at 31st January 1922 there was an amount of £48,614 outstanding and that the Admiralty debt was accumulating since the start of the war. He also points out that there was "no real effort made when new debts were being passed through the books, to obtain an acknowledgement of liability from the officer in charge…".[206] The harbour authority's financial and debtors control left a lot to be desired.

In auditor's reports for year's post-1922, there is a reference to the loss of tonnage and goods rates and one of the reasons attributed was the "stoppage of the railways for a considerable time". This was a reference to the disruption to rail traffic during and after the civil war.

[205] CCCA/PC, Cork Harbour Commissioners, auditors reports and accounts, year ending 31st July 1923, p. 9.

[206] Report for Cork Harbour Commissioners. *"Report on the Organisation and Management of the Several Departments".* Presented by Michael V. Conlon, (Cork, 1922), p. 9.

12: Conclusion

There is the argument put forward by ports that it is their respective regions that benefit more than individual ports from liner or cruise traffic. In that context, cognisance should also be taken of the loss of tourist traffic to the region as a result of the demise of the American mails. It was the loss of the tourist traffic to Ireland that brought about the various protests and deputations evidenced at the Queenstown Inquiry.[207]

As well, Cunard had for decades expressed concern at calling to Queenstown on cost grounds.[208] Cunard at every opportunity was looking to criticise the entrance to the harbour and even, in 1913 when Cunard wanted to by-pass Queenstown, one of the arguments made by the company related to an incident that took place some six years earlier, in 1907. If Melk's report were completed earlier and the necessary developments carried out would the liner companies and Cunard, in particular, have ceased to call at Queenstown? I would have grave doubts as to whether Cunard would have stayed, more so, as Inman had pulled out in 1893. Whether the judgment of the commissioners was an error in the whole debate is difficult to say for while their delay in carrying out improvements makes them culpable or at least, afforded another excuse to the liner companies. Still, Cork Harbour Commissioners were aware that the emigration traffic was an important source of income to them and this was recognised by not increasing the rate per ton on anchorage vessels for decades, unlike general port tonnage.

Speed was the only advantage that Cork had to offer, and this was whittled away by the evolution of the giant high-speed liners which destroyed the wider advantages of the

[207] *Report from the Queenstown Harbour Committee appointed by the Postmaster-General to consider the omission of the call at Queenstown on the American Mail Service*. H.M.S.O, 1914

[208] Statement by Post Office in December 1886, see POST29/432 Pkt158N/1887 and CA D42/CA41.

westward position and as well, the speed of the ocean liners was increasing every year. Subsequent developments in Atlantic shipping merely showed that the actual events were inevitable.

Maybe there is an element of truth in the argument that the reason the steamers called to Queenstown was purely economic as the town was ideally situated between the Liverpool and New York routes and not, as Lee points out, due to a lack of a marketing strategy by the commissioners. As regards American mails Brookfield argued that the harbour was excellent but had a limited deep-water area and Cork Harbour Commissioners were slow to spend money on necessary improvements in the lower harbour. [209] This, he argues, was a major flaw in the commissioner's management of the port, as the trouble with the mail steamers had been brewing for years with the result the major lines by-passed Queenstown. It has been argued, with some justification, that the harbour authority was slow to become alert to the pressures of modernisation in terms of speedy transmission of mails as well as cargo. An alternative view would be that the harbour authority with its board consisting of city-based businessmen felt that the capital expenditure required for the lower harbour would be committed at the expense of city-based developments to which the board had always given priority.

[209] Lee (2003), pp. 30, 47 and 84; McCarthy, Tom, *'American mails and Queenstown 1850-1915'* International Postgraduate Port and Maritime Studies Network Conference, 27th February 2020.

Chapter 4: Conclusion

By 1800, the port was in a poor state of maintenance and was described as consisting of river, marsh, channels and with an urgent need to improve and invest in infrastructure.[210] Before 1813, many quays were built in a piecemeal fashion with individuals carrying out the necessary repairs, having received permission from Cork Corporation, and much of this work was carried out between 1800 and 1808. Such quays bore the names of the developers- Penrose, Lapp, and Anderson and were found later to be have been built without proper foundations and not laid at sufficient depth.[211] There was inadequate capital expenditure spent on the port's infrastructure from the late 1770's and the local authority carried out little quay maintenance. In 1813, only small vessels drawing 11 feet of water could get to Cork city and then at high water and on berthing at Cork they had to be aground on a gravel bottom to discharge. Between Passage and Cork, it was only 3 feet deep in places with large vessels being unable to proceed to the city and having to unload cargo, which was taken to Cork subsequently by lighters. All of this added to the time and cost of vessels visiting the port.

In 1800, Cork port was unregulated as regards shipping activities and had no port authority structure. The port was under the control of Cork Corporation, the municipal authority, in terms of financing, investment and shipping matters. The corporation had benefitted from the growing incomes of a prosperous city with revenues increasing from £900 in 1715 to about £1,200 by 1732 and had reached £7,000 by 1820.[212]

[210] O'Sullivan (1937), p. 148.
[211] McCarthy (1949), p. 50.
[212] McCarthy (1949), p. 60.

A first step to improve the port's infrastructure was the passing into law of The Butter Weighhouse Act of 1813 under which commissioners were appointed to improve the 'harbour and river of Cork'.[213] Significantly, twenty-one merchants of the city were appointed as commissioners. These merchants along with the mayor and both high sheriffs made up the 24 commissioners. One third (1/3) of the fees received by the Weighmaster from the butter trade in the city went to the commissioners with the purpose to deepen, widen and improve the harbour and river of Cork. When the first Cork Harbour Commissioners (CHC) board was appointed in 1813 the membership resembled that of the protestant-controlled corporation structure; if you include Freemen, Friendly Club, Brunswick Club members and others their membership amounted to over 54% of the board. Quakers amounted to 21% and importantly the Commercial Buildings organisation amounted to 50%. In commercial terms brewing, shipping, butter, sugar, and timber interests amounted to 54% of the 1813 board membership. Even though harbour commissioners were appointed under the 1813 act Cork Corporation were seeking a share of port revenue but the commissioners resisted this successfully.[214] The following year, in 1814, the infamous 'cocket' tax was imposed as another form of revenue and was regarded as simply a tax on trade and the act noted the need for investment in port infrastructure.[215] By 1815, shipping interests were very concerned about the state of the quays and it became clear that significant expenditure was required to rectify the neglect of earlier years.

Nimmo, in 1815, was very critical of the condition of the quays, which he referred to as "... mostly imperfect masses of rubble stone...". Nimmo's report identified for the commissioners

[213] *The Butter Weighhouse Act of 1813*. (53. Geo, 111.c.70).
[214] CCCA/PC, Cork Harbour Commissioners, minutes of board meeting, 10th June 1819.
[215] Statutory Instrument No. 274/1947 - Harbours Act, 1946 (Abolition of Cocket and Entry Tax at Cork Harbour) Order, 1947. For a full history of this tax see Lantry, Mary, 'The Cocket tax in Cork; a tax in the context of its time and place' (unpublished M.A thesis, University College Cork, 2018).

the main structural issues and possible solutions facing the port authority.[216] However, the cost of the works was seen to be prohibitive. It was clear to the board that dredging had to be the way forward. Saunders maintained that if funding had been provided for Nimmo's proposals the port's infrastructure would have been built sooner, with both McCarthy and Pettit of a similar view. Saunders was the port's harbour engineer from 1933 to 1960. However, it must be noted that in such a scenario increases in port charges would not have been acceptable to the board of CHC. As well, It has been argued that the completion of the Navigation Wall, was at the expense of other quay projects and its benefit was questioned by many; the development of the Wall had extended for fifteen hundred yards below the Custom House but had to be discontinued due to lack of funding.[217] Applications were made for funding but to no avail. It has been argued that expenditure on the Weighouse could have been used for the completion of the 'New Wall' along with other developments. A third of yearly income dedicated to improving the river was insufficient to maintain the quays.

The inadequacies of the 1813 and 1814 acts led to the enactment of the Cork Harbour 1820 Act which constituted the Cork Harbour Commissioners as a port authority. There was no capital funding forthcoming from the Government and having been told that any maintenance should be financed from the port's resources, it was not the most auspicious of starts for the new harbour authority. Under the act, the total number of members of the board were 35. Five would be ex-officio, (Mayor, High Sheriffs and Members of Parliament). Thirty members would be elected by the Cork Corporation: of which five would be City Council members, and twenty-five members representing the mercantile community of the city.[218]

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[216] Nimmo, Alexander, *Report to the Harbour Commissioners on the Means of Improving the River and Harbour of Cork* (Cork, 1815).

[217] Saunders, F. O'C, 'The Development of the River Port of Cork City', *The Institution of Civil Engineers of Ireland,* vol. 82, March 1956, p. 120.; McCarthy (1949); Pettit (1996).

[218] *Cork Harbour Act 1820*. (1. Geo.iv.c.52).

Whilst there were several, acts relating to the structure of the board it was the 1820 act that was the primary legislation and remained in operation till the 1946 Harbours Act. Importantly, the new act outlined, how receipts and payments were now entirely the responsibility of the commissioners.

Investment in dredging equipment was to be the initial priority of CHC and the first dredger was purchased from Shoreham Harbour Authority (a 12hp machine). By 1828, 23,000 tons had been raised and by 1832, 182,877 tons had been dredged. A second dredger was bought in 1839 to accelerate the deepening of the riverbed; with another dredger built in 1851 at the local Lecky's yard for £5,600 and this was to deepen the channel from Blackrock to Cork. There were drawbacks in that the dredged material was dumped behind the Navigation Wall and in time swept out to the riverbed. Between 1857 and 1864, a total length of 18,580 feet of quays was piled. Dredging produced a channel 11 feet deep from Horse Head (near Passage) to Cork. By 1884 the NorthDeepwaterQuay (NDWQ) then had a length of 1,400 feet with 20 feet l.w.o s.t (low water at spring tides) and the SouthDeepwaterQuay (SDWQ) had 600 feet in length and 23 feet l.w.o.s.t. (low water at spring tides). Some decades later, inefficiencies were identified by Conlon, who was critical of the dredging operations. Conlon found that figures regarding dredging loads were not reliable and "therefore calculations of the average cost of dredging per ton, based on such figures are worthless".[219] Nevertheless, the dredging programme was seen as a success in the development of Cork port particularly as 1,277,502 tons were dredged, in the 10 years ended 1849. Having served the commissioners as secretary for nearly fifty years, Wm. Donegan, on his retirement in 1916 said the achievement of the

[219] Conlon, p. 20.

half century can be measured in ''feet of dredged river".[220] All this was in a period when the authority had to keep pace with issues such as the ever increasing length and draught of ships.

By 1846 more than half of the potato crop was unusable and widespread hardship was felt among the rural and urban poor. A relief committee in March 1846 organised the distribution of Indian meal, to the poor and started schemes of public works. In respect of the port, the commissioners were tasked with overseeing the importation of Indian corn which was to be shipped from the United States and Cork became the reserve depot for the whole country. Reflecting the inadequacies of Cork and its port, the ships that arrived could only discharge part of their cargo at Haulbowline and had to be further lightened at Passage before proceeding to Cork.[221] The cost of lighterage was estimated at 2/6 per ton. Yet it was not until 1846 that the commissioners became overly concerned with the Famine catastrophe. The Commissary General, Hewetson, asked for remission in dues payable on cargoes. The board agreed that the American relief food vessels arriving in Cork would have their dues remitted. The Famine period was nevertheless significant in terms of the volume of shipping in the port and generating finances for the authority; with tonnage and imports, during the fifty years ended 1849, at their highest in 1847 and 1849.

As outlined in Appendix 4.1 income increased by almost 570% between 1830 and 1900, of which imports increased in each ten year period. Likewise, tonnage, increased except for the period 1890-1900. Exports on the other hand only increased by 105% in the 70 year period.

[220] CCCA/PC, Cork Harbour Commissioners, minutes of board meeting, May 1st, 1916. Donegan made these comments during his resignation speech. In the early decades of the 20th century coal became a large cost when dredging was disposed at sea.
[221] Pettit (1996), p. 179.

As outlined earlier ballast income had been recorded in gross terms for many years and sometimes the surplus was also shown under income. This distorts any analysis of ballast income and the total income shown in Appendix 4.1 does not include ballast income or surplus. The end result shows the importance of tonnage, Imports and exports to the port. There were exceptional items in the years 1849 and 1880 which distorted the financial picture for relevant years.

Up to the mid-1820's, the tonnage of ships entering and leaving Irish ports tended to be more or less the same; however, from 1824 there was a sharp drop in tonnage cleared which was substantially lower than tonnage entering. This is evident in the case of Cork port with figures inwards and outwards similar up to 1824 and tonnage outwards declining from 163,000 tons in 1820 to 106,000 in 1825.[222] Solar points out that this change did not come about as a result of the 1825 Customs union with Britain but it had more to do with the introduction of steamships and how tonnage was counted.[223] After the steamships appeared many colliers seem to have returned in ballast. During the mid-1820s the gap between clearances and entries of sailing ships opened up just as steamers started to be introduced. This gap widened as steamers became more prevalent. The introduction of steamships on the Irish Sea in the 1820's had many important effects on the Irish economy, particularly as steamships also changed channels of distribution.[224]

There are indications that the economy was on an upward trajectory up to the mid 1820's. The value of butter exports from Ireland increased by 42% between 1806 and 1824, with Cork

[222] http://www.dippam.ac.uk/eppi/documents/ (DIPPAM: Documenting Ireland: Parliament, People and Migration). (Account of Imports and Exports of Port of Cork, 1825-31; Tonnage of Ships, 1816-30).
[223] Solar, Peter M., 'Shipping and economic development in nineteenth-century Ireland', *Economic History Review*, LIX, 4 (2006), p.721.
[224] Solar (2006), p.726.

port a major contributor. Butter exports in subsequent years declined but recovered by the 1830's. By 1825 Cork's butter exports in value terms amounted to 62% of total exports but declined during the years 1826-28 and had recovered to reach 68% by 1831.[225]

The tonnage of shipping entering and leaving Ireland grew rapidly from the late eighteenth century until the mid-1870s, after which there was a distinct slowdown. This slowdown is reflected in Cork tonnage, which in 1873 amounted to 678,234 and by 1901, had reduced to 606,392. Nevertheless, Cork ship tonnage in 1870 amounted to 25% of total income and had increased to 40% by 1900. It is worth noting that from 1867 harbour dues were payable under legislation passed that year on all vessels entering the port and, not as heretofore, only on vessels reporting at the Custom House. This meant a major increase in revenue. The Custom House offices were built in 1818 and were subsequently leased to CHC, in 1904, from the Commissioners of Public Works for a term of 999 years. The extension which included the new boardroom was completed in 1906.

Revenue from imports suffered badly during the years 1832-1835 but it was not until 1840 that there was a marked improvement; revenue from imports in 1869 amounted to 41% of total income and declined to a level of 36% in 1891. Subsequently, imports as a percentage of total income increased almost yearly so that by 1900 it had reached 40% with the revenue generated from imports used for investment in the infrastructure of the port.

[225] http://www.dippam.ac.uk/eppi/documents/ (DIPPAM *:* Documenting Ireland: Parliament, People and Migration). (Account of Imports and Exports of Port of Cork, 1825-31; Tonnage of Ships, 1816-30).
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Table 4. 1 Cork Harbour Commissioners Income 1861-1900

YEAR	IMPORTS	EXPORTS	TONNAGE	Total
	£	£	£	£
1861	9047	2984	5356	17387
1866	7708	3415	5740	16863
1870	10887	4156	6785	21828
1875	10995	4351	6882	22228
1880	12760	5212	9237	27209
1885	13261	4682	16426	34369
1890	12837	4213	15972	33022
1895	16810	5333	17539	39682
1900	15723	4107	15758	35588
Return: %	74%	38%	194%	

Source: CCCA/PC, Cork Harbour Commissioners, the detail was adapted from the annual accounts of Cork Harbour Commissioners, 1861-1900

Quay expenditure along with dredging costs consistently amounted to over 60% of total expenditure during the 19th century period. This expenditure mostly related to the upper river. The second quarter of the nineteenth century was an important phase of development and investment for the port, and many of the quays built remain in situ and constitute a defining feature of the port's history and character.

The Merchant Shipping Act of 1894 allowed for considerable deduction from the registered tonnage of steam vessels in respect of space occupied by propelled machinery. Under the 1894 Act, the reduction in tonnage calculation was a benefit to port users but seen as a loss of income to port and harbour authorities. Total assets of Cork Harbour Commissioners were valued at £32,000 in 1868, £40,000 in 1869 and £49,000 in 1870. By 1872 plant was valued at £44,000 and by 1876 £66,000. By 1900 total assets were valued at £337,000 and comprised mainly of Estate £205,000 and investments valued at £66,000. With the significant

expenditure works undertaken by the Cork Harbour Commissioners, particularly regarding quays and coupled with the extensive dredging programme it was obvious that borrowings had to be undertaken. The first account of mortgages begins in 1872/1873 with the amount of £40,000 appearing in the financial accounts.

A significant shift took place in the religious makeup of the mercantile members of the board during the 1870-1900 period as is illustrated in the following table.

Table 4. 2 CHC Mercantile Members 1870-1900

Mercantile Members			
Year	**Catholic**	**Protestant**	
1870	**43%**	**57%**	
1900	**56%**	**44%**	

Source: O'Riordan, Patrick, Portraiture of Cork Harbour Commissioners (Cork, 2015).

This slow shift reveals the growing power and influence of the Catholic middle classes in running the harbour, but the Protestant influence was still strong at the end of the nineteenth century, reflecting its significant over representation within the Cork city establishment. Within the port, the Protestant ownership of a significant share of the steamship companies at this stage had a strong influence on the composition of the board. A patriarchal structure was very much to the fore in the operation of the board particularly where operations and staffing were concerned, and nepotism was part and parcel of managing the authority.

It was not until the 1860's and later that the investment provided dividends. Shipping was now able to come up the river without the aid of lighters making imports more price competitive. In the case of Cork, imports were seen to grow over the century, unlike exports. It could be argued that the evidence of imports increasing could be an indication that

consumption was rising from increased living standards in the port and its agricultural hinterland and was more important than the exports generated by agricultural and industrial production. Illustrating this viewpoint, imports between 1870 and 1901 increased by 40% with exports remaining static. With a combination of borrowing and increased income from imports, the state of the harbour improved significantly for shipping coming up into the city. The period between the 1860s and the end of the nineteenth century, therefore, stands out as the critical period in the development of the city quays and the channel up from Passage, in addition to the development of Queenstown for American mails and migrant traffic. In this window, the Cork Harbour Commissioners were able to mobilise sufficient capital resources to shape much of the infrastructure of the port and harbour which we can still see today. The increase in income generated by imports allowed the authority to invest in infrastructure. To illustrate the importance of imports to the port during the last quarter of the nineteenth century, import revenue increased by 43%, while exports declined by 6% when income overall was increasing by 13%. It is evident that CHC was able to exploit rising import revenue from a range of bulk commodities, and this helped to place the ports financial position on a far more solid footing.

Several books and articles have been written about the history of Cork Harbour Commissioners from its commencement, these publications could best be described as comprehensive and descriptive in detail. In this thesis, to fill a void in the literature, greater focus was given to infrastructure, governance, and financial matters as these were vital in getting a clearer picture of the history of the Harbour Commissioners in these years.

Regarding the city quays, if funding had been provided for Nimmo's proposals the port's infrastructure would have been built sooner and it seems clear that greater priority should

have been given to this issue earlier on, which would have reduced the time and costs of shipping to merchants, which could, in turn, have been funded by applying slightly higher dues to traffic, which fell within the powers vested in CHC from 1820 onwards. As regards the lower harbour Brookfield and Lee maintained that CHC was at fault for not investing in infrastructure to allow larger liners to come into the harbour.[226] The thesis showed how lower harbour infrastructure investment, in the 19th century, was not seen as cost-effective by CHC, particularly as activity in the upper harbour was financing investment in the lower harbour.[227]

Like many organisations, it seems that CHC responded quite slowly to the immediate challenges it faced after it was established. It took some years to develop the harbour into a safe, cost effective and coherent operation adequately handling the import and export demands of the port. Improvements took place over decades rather than years, but once the necessary infrastructure was put in place the benefits were immediate. Given that the region failed to industrialise, and the population of the city stagnated in the second half of the nineteenth century, and the population of its hinterland actually declined, the port performed reasonably well relative to its competition in the Munster region, Limerick and Waterford, and it was better served by rail and road links and its more central location to Munster's wealthier agricultural districts. Dublin and Belfast in contrast both had demographic

[226] Brookfield, H.C., 'Ireland and the Atlantic Ferry; A study in changing geographical values', *Irish Geography*, vol. 3, no.2 (1955), pp. 69-78**;** Lee, William 'Aspects of the history of Queenstown (Cobh) and the Transatlantic Trade 1800-1921', (unpublished M.A thesis, University College Cork, July 2003),

[227] Pettit (1996), p.328. Pettit refers to a submission made by Sir James Long, to the Ports and Harbours Tribunal 1930, where he pointed out that the lower harbour was being subsidised by the upper harbour.

advantages and greater industrial development and were in a better position to handle the expansion of Anglo-Irish trade in the nineteenth century.

Table 4. 3 Income of Irish Ports 1875-1900

Port	1875-9	1880-4	1885-9	1890-4	1895-00	Total	Ranking
	%	%	%	%	%	%	
Belfast	28	30	33	34	37	34	1
Cork	14	14	13	14	13	13	3
Drogheda	1	1	2	2	1	2	
Dublin	31	31	26	24	23	26	2
Dundalk	3	2	2	2	2	2	
Galway	1	1	1	1	1	1	
Kingstown	1	1	1	0	0	0	
Limerick	3	3	3	4	4	4	
L/derry	6	6	6	6	6	6	4
Sligo	2	2	2	2	2	2	
Waterford	4	4	3	3	2	3	
Total	94	97	93	93	92	94	

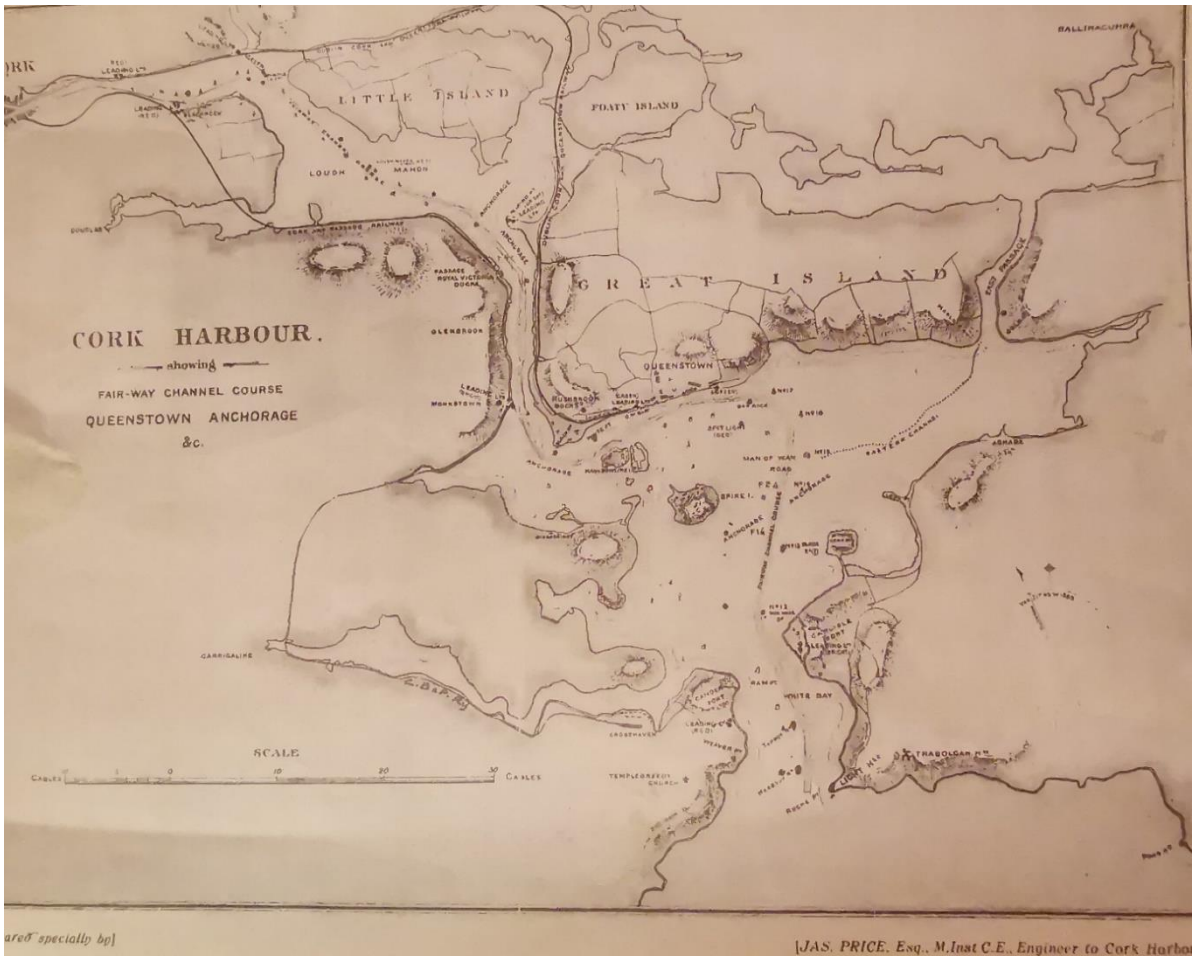
Source: http://www.dippam.ac.uk/eppi/documents/ (DIPPAM: Documenting Ireland: Parliament, People and Migration). Returns of Local Taxation included income details of each port.

Appendix 1.1 Map of Cork Port and `Harbour November 2011



Source: Cork harbourproject.blogspot.com 27th November 2011 .

Appendix 1.2 Map of Cork Port and Harbour mid-19th century



Source: Coakley, D J. *Cork: Its Trade and Commerce* (Cork, 1919), p. 84.

Appendix 1.3 Cork Harbour Commissioners: Summary of legislation 1813- 1900

The Butter Weighhouse Act of 1813.	Under the Act Commissioners were appointed and were to receive 1/3 of the proceeds of butter trade.
Commercial Buildings Act 1814 also known as 'Cocket and Entry Tax' Act	Tax on 'cocket' and 'warrant' on goods inwards and outwards. Tax proceeds divided between different parties including Cork Harbour Commissioners (CHC).
Cork Harbour Act 1820.	Formalised constitution and procedures of the board with power to charge tonnage and goods rates.
The 1847 Commissioners Clauses Act.	Consolidating Act regarding the constitution and regulation of public bodies such as Commissioners.
The Harbours Docks and Piers Clauses Act 1847	A general Act authorising the construction and improving of Harbours, Docks and Piers.
Cork Harbour Amendment Act 1866,	Amended the tonnage rates and dues structure; Section iv provided for the Chairman of Queenstown Town Commissioners to be an ex-officio member of CHC.
The Pier and Harbour Orders Confirmation Act 1871 (no. 2)	Sections of the 1820 Act were repealed and Board of Trade permission was required before construction of any quay.
Cork Harbour Act of 1875	Powers were granted to construct a deepwater quay on the south bank and finance to improve the Lower Harbour.
The Cork Improvement Act 1875	The Act enabled CHC to pay 50% of the cost of removing Anglesea Bridge and building a new one.
Cork Harbour Act 1877	Powers were granted to construct a deepwater quay on the north bank and construct a deepwater quay in Queenstown.

Cork Improvement (Extension of Time) Act 1881	Further time was granted for the building of Anglesea (Parnell) Bridge.
Cork Harbour Act 1883	Section 37 provided for three Commissioners to be appointed to represent the Lower Harbour.
Piers& Harbour Orders Confirmation Act 1889	General powers were granted as to the issue of stock and sale of land at Carrigrennan, Little Island.
Merchant Shipping (Pilotage) Act 1889.	Powers enacted to make byelaws regarding contributions to Pilotage funds.
Cork Harbour (Pilotage) Act 1892]	An Act which greatly extended Pilotage powers and enlarged the field of operations.
Merchant Shipping Act 1894	Dealt with mainly the registration and ownership of ships.
Local Government Act 1898	Established a democratic system of local government in Ireland.

Appendix 2.1: Cork Harbour Commissioners Commodities as % of Imports income

Commodities					
Period	**Wheat**	**Ind. Corn**	**Flour**	**Coal**	**Total**
	%	**%**	**%**	**%**	**%**
1877-1881	**27**	**26**	**1**	**7**	**61**
1882-1886	**24**	**10**	**3**	**21**	**58**
1887-1891	**18**	**17**	**7**	**20**	**62**
1892-1896	**14**	**14**	**7**	**19**	**54**
1897-1901	**12**	**16**	**6**	**18**	**52**

Source: CCCA/PC, Cork Harbour Commissioners, the detail was adapted from the accounts and port statistics of Cork Harbour Commissioners, 1877-1901.

Appendix 4.1 CHC Imports, Exports, Tonnage Income as % of Total Income- 1830-1900

Year	Imports	Exports	Tonnage	Harbour	Total	Overall Income
	£	£	£	£	£	%
1830	2038	2000	1660		5698	93
1840	2456	2018	2572	179	7225	98
1849	5036	1843	2804	1166	10849	79
1861	9047	2984	5356	2362	19749	98
1870	10887	4156	6785	2681	24509	99
1880	12760	5212	9237	4153	31362	86
1890	12837	4213	15972	2670	35692	99
1900	15723	4107	15758	2434	38022	98

Source: CCCA/PC, Cork Harbour Commissioners, the detail was adapted from the annual accounts of Cork Harbour Commissioners, 1830-1900.

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