

A MARITIME HISTORY OF THE PORT OF WHITBY, 1700-1914

Submitted for the Degree of Doctor of Philosophy in  
the University of London

STEPHANIE KAREN JONES

UNIVERSITY COLLEGE LONDON

1982



## A MARITIME HISTORY OF THE PORT OF WHITBY, 1700-1914

## ABSTRACT

This study attempts to contribute to the history of merchant shipping in a manner suggested by Ralph Davis, that 'the writing of substantial histories of the ports' was a neglected, but important, part of the subject of British maritime history. Aspects of the shipping industry of the port of Whitby fall into three broad categories: the ships of Whitby, built there and owned there; the trades in which these vessels were employed; and the port itself, its harbour facilities and maritime community. The origins of Whitby shipbuilding are seen in the context of the rise to prominence of the ports of the North East coast, and an attempt is made to quantify the shipping owned at Whitby before the beginning of statutory registration of vessels in 1786. A consideration of the decline of the building and owning of sailing ships at Whitby is followed by an analysis of the rise of steamshipping at the port. The nature of investment in shipping at Whitby is compared with features of shipowning at other English ports. An introductory survey of the employment of Whitby-owned vessels, both sail and steam, precedes a study of Whitby ships in the coal trade, illustrated with examples of voyage accounts of Whitby colliers. The Northern Whale Fishery offered further opportunities for profit, and may be contrasted with the inshore and off-shore fishery from Whitby itself. A quantification of the importance of Whitby shipping in the Baltic is followed by a study of Whitby ships carrying emigrants to Canada and convicts to Australia. The impact of war, especially in the late eighteenth century, brought unprecedented prosperity to the port, where the continued significance of the local shipping industry was always at odds with its small population and landward isolation.

## CONTENTS

Acknowledgements.....page	4
Abbreviations.....	5
List of Tables, Appendices and Maps.....	6
INTRODUCTION.....	14
<u>SECTION ONE: SHIPPING</u>	
CHAPTER ONE: SHIPBUILDING IN WHITBY 1700-c.1815.....	22
CHAPTER TWO: SHIPOWNING IN WHITBY 1700-c.1815.....	60
CHAPTER THREE: WHITBY SAILING SHIPS c.1815-1914.....	99
CHAPTER FOUR: STEAMSHIPPING AT WHITBY c.1865-1914 .....	154
<u>SECTION TWO: TRADES</u>	
CHAPTER FIVE: THE EMPLOYMENT OF WHITBY SHIPPING 1700-1914	
SECTION ONE: INTRODUCTION.....	196
SECTION TWO: THE COAL TRADE.....	244
SECTION THREE: WHALING.....	278
SECTION FOUR: OTHER TRADES	
1. Fishing.....	309
2. The Baltic.....	338
3. The Emigrant Trade.....	357
SECTION FIVE: WARTIME.....	374
<u>SECTION THREE: THE PORT</u>	
CHAPTER SIX: THE PORT AND HARBOUR OF WHITBY 1700-1914.....	407
CHAPTER SEVEN: THE MARITIME COMMUNITY OF WHITBY 1700-1914...	436
CONCLUSION.....	471
APPENDIX ONE: BANKING AND THE WHITBY SHIPPING INDUSTRY.....	478
APPENDIX TWO: MARINE INSURANCE AND THE WHITBY SHIPPING INDUSTRY	487
BIBLIOGRAPHY.....	494
Inside Back Cover: Offprints from the <u>Mariner's Mirror</u> and <u>Cymru</u> <u>a'r Môr/Maritime Wales</u>	

#### ACKNOWLEDGEMENTS

Thanks are due to the staff of the libraries, museums and archives which I have visited in the course of my research, of which the Collection of the Whitby Literary and Philosophical Society at Whitby Museum deserves particular mention. I am also grateful for financial support from the Social Science Research Council. Above all, I wish to acknowledge the advice and help of my supervisor, Mr. Robin Craig, of University College London.



## ABBREVIATIONS

P.P.	Parliamentary Papers
P.R.O.	Public Record Office
N.M.M.	National Maritime Museum
B.L.	British Library
Wh. Lit. & Phil.	Whitby Literary and Philosophical Society, Whitby Museum
Wh. Gaz.	Whitby Gazette
Reg. Ship.	Registers of Shipping, Custom House, Whitby

## LIST OF TABLES, APPENDICES AND MAPS

## CHAPTER ONE

- Table 1: Ports supplying vessels for the Newcastle Coal Trade, 1702-4 p43
- Table 2a: Year of build of Whitby-built vessels registered at Whitby, 1786-1815 p44
- Table 2b: As above, analysed by tonnage categories p45
- Table 2c: Place of build of vessels registered at Whitby, 1786-1815 p46
- Table 2d: Output of Whitby shipbuilders, 1790-1815 p47
- Table 3a: Vessels built at Whitby compared with tonnage of those built at Liverpool, Bristol and Hull, 1787-1808 p52
- Table 3b: Whitby annual shipbuilding returns as percentage of national output, 1787-1808 p53
- Table 4a: Number and tonnage of ships built at Whitby, 1790-1, 1804-5 p53
- Table 4b: As above, compared with other selected ports p54
- Appendix 1: The proportion of Whitby-registered tonnage that was built at Whitby, compared with other ports, in the eighteenth century p55
- Appendix 2: Whitby-built ships on the Liverpool 'Other Ports' Register p56
- Appendix 3: Lloyd's Classification of Shipping, as quoted in the Whitby Board to Collector Books p59

## CHAPTER TWO

- Table 1: Shipping belonging to the outports in 1701 p82
- Table 2: Shipping owned at Whitby and other principal ports, 1701-2 p83
- Table 3: Tonnage owned at Whitby 1709, 1716, 1730, 1737, 1744, 1751-82 p83
- Table 4: Tonnage owned at Whitby 1772-85, 1789-1808, compared with England p84
- Table 5: Tonnage registered at Whitby, 1786-1815 p85
- Table 6: Ownership of Whitby-registered vessels, 1786-1815: number of owners p86
- Table 7: As above, average number of owners per vessel p88
- Table 8: Number of owners per vessel: Whitby compared with other ports p89
- Table 9: Relationship between size of vessels and number of owners, 1786, 1798-9 p90
- Table 10: Age structure of shipping registered, Whitby and other ports, 1786 p91

- Table 11a: Occupations of Whitby shipowners in the eighteenth century **p91**  
 Table 11b: Whitby shipowners' occupational groups, 1786 compared with 1797-9 **p93**  
 Table 11c: Whitby shipowners who changed their occupations in the eighteenth century **p93**  
 Table 12: Occupations of Whitby shipowners compared with those of other ports, eighteenth century **p94**  
 Table 13a: Geographical distribution of the ownership of Whitby ships **p95**  
 Table 13b: As above, compared with other ports **p95**  
 Table 14: Vessels owned by James Atty of Whitby, 1786 to 1799 **p96**

## CHAPTER THREE

- Table 1: Shipping registered at Whitby, 1815-1914 **p124**  
 Table 2: Net gains and losses to the Whitby register, 1815-1914 **p126**  
 Table 3: Index of average price per ton of Whitby-built vessels, 1815-1838 **p128**  
 Table 4a: Vessels built and registered at Whitby as a proportion of the total new built tonnage on the Whitby register, 1815-1914 **p129**  
 Table 4b: Vessels built at Whitby, 1815-1832, 1871-1914 **p131**  
 Table 5: Output of Whitby shipbuilders in the nineteenth century **p132**  
 Table 6: Number and tonnage of Whitby-built and Whitby-registered sailing ships, by decade, 1820-1900 **p132a**  
 Table 7: Number of owners per vessel in registration at Whitby, 1815-1914 **p133**  
 Table 8a: Place of residence of owners of Whitby-registered vessels, 1815-1914 **p135**  
 Table 8b: As above, including register transactions, 1876, 1882, 1892 **p137**  
 Table 8c: Places of residence other than Whitby of investors in Whitby ships **p137**  
 Table 9a: Occupations of owners of Whitby-registered vessels, by shares **p139**  
 Table 9b: As above, by individuals **ptt1**  
 Table 10a: Number of owners per vessel at Whitby compared with other ports **p141**  
 Table 10b: Place of residence of owners compared with other ports **p143**  
 Table 10c: Occupations of Whitby shipowners compared with other ports **p144**  
 Table 11: Sailing ships registered at Whitby compared with U.K., 1815-1914 **p144**  
 Appendix 1 Reports of surveyors of Lloyd's Register on their visit to Whitby **p147**  
 Graph 1: Tonnage registered at Whitby, 1815-1914, sail and steam **p148**  
 Map One: Shipbuilding yards of Whitby, 1700-1914 **p149**  
 Map Two: Settlements within twenty miles' radius of Whitby. See Table 8c **p153**

## CHAPTER FOUR

- Table 1: Steamship building at Whitby compared with the output of the North East ports and national totals, 1870-1914 p180
- Table 2: Steamships built by Thomas Turnbull & Son, 1871-1902 p181
- Table 3: Steamships registered at Whitby, 1849-1914. List of ships p182
- Table 4: Steamships registered at Whitby with annual net increases and decreases, 1865-1914 p186
- Table 5: Capital formation in Whitby-registered steam shipping, 1865-1914 p187
- Table 6: Dividends declared by Whitby steamship owners in selected years between 1887 and 1914 p188
- Table 7a: Whitby steamship owners and companies p189
- Table 7b: Whitby steamship owners and managers in 1914 p190
- Table 8: Place of residence of Whitby steamship owners, 1849-1914 p190
- Table 9: Number of owners of Whitby-registered steamships, 1849-1914 p191
- Table 10: Occupations of Whitby steamship owners, 1849-1914 p192
- Table 11: Profits of the Everilda, Gwendoline, Eric and Bernard, 1882-1906
- Table 12: Bunkering costs of the Everilda, Gwendoline, Eric and Bernard, 1882-1906 p194  
p195

## CHAPTER FIVE, SECTION ONE

- Table 1a: Number and tonnage of Whitby-owned vessels entering London, 1725-1830 p213
- Table 1b: The port of departure of Whitby-owned vessels entering London, 1725-1830 p214
- Table 2a: Whitby-owned vessels engaged in the foreign trade, 1772-1786 p215
- Table 2b: Whitby-owned vessels engaged in the coasting trade, 1772-1786 p216
- Table 3: Areas of employment of vessels licenced at Whitby, 1808-1838 p216
- Table 4: Whitby-owned vessels entering London, Liverpool, Bristol and Hull, 1839, 1842, 1847 p217
- Table 5: Destined voyages of Whitby-owned vessels surveyed by Lloyd's, 1834-1856 p217
- Table 6a: Intended voyages of Whitby ships, 1780, 1814, 1850, 1870 p218
- Table 6b: Detailed breakdown of intended voyages of Whitby-registered sailing vessels, 1850 p219
- Table 7: The voyages of 208 masters born at Whitby, 1868-1873 p219
- Table 8: The voyages of a sample of eighty-two sailing ships, 1863-1914 p220
- Table 9a: The voyages of Whitby steamships: usual port of departure on outward voyages, 1870-1914 p220

- Table 9b: The voyages of Whitby steamships: first port of call after departure, arrivals on outward voyage, 1870-1914 p220
- Table 9c: The voyages of Whitby steamships: last port of call before arrival at port of discharge, 1870-1914 p221
- Table 10a: Shipments of cargoes to and from Whitby, ports of origin and destination, 1790 p221
- Table 10b: Vessels and their number of voyages each year exporting and importing goods in Whitby's coastwise trade, 1790 p222
- Table 10c: Analysis of coastwise imports into Whitby in 1790 p226
- Table 10d: Analysis of coastwise exports from Whitby in 1790 p229
- Table 11a: Number and tonnage of vessels entered and cleared to and from Whitby coastwise, 1841-1913 p230
- Table 11b: Number and tonnage of vessels entered and cleared to and from Whitby in the foreign and colonial trades, 1841-1913 p232
- Appendix 1: Voyages of two Whitby-registered steamships, 1900 p234
- Appendix 2: Entrances and clearances at the port of Whitby, 1776, 1787, 1799, 1817, 1826 p235
- Appendix 3: Commodities imported into Whitby, 1790-3, 1800-2 p236
- Appendix 4: Articles imported into Whitby, 1873, 1887-9, 1893, 1899 p237
- Graph 1: Tonnage of sailing ships in Whitby's coasting trade, 1841-1913 p239
- Graph 2: Tonnage of steamships inwards in Whitby's coasting trade, 1841-1913 p240
- Graph 3: Tonnage of steamships outwards in Whitby's coasting trade, 1841-1913 p241
- Graph 4: Tonnage of sailing vessels and steamers clearing from Whitby in the foreign and colonial trades, 1841-1913 p242
- Graph 5: Tonnage of sailing vessels and steamers entering Whitby in the foreign and colonial trades, 1841-1913 p243

#### CHAPTER FIVE, SECTION TWO

- Table 1: The Hannah: analysis of the price of coal at the Tyne compared with the price at London, 1715-8 p267
- Table 2a: The Hannah: wages in the coal trade, compared with profits and losses, 1715-8 p268
- Table 2b: The Hannah: wages paid to each crew member, 1715-8 p269
- Table 3: The Hannah: victualling expenses in the coal trade, 1715-8 p269
- Table 4: The Hannah: ballasting expenses in the coal trade, 1715-8 p270
- Table 5: The Hannah: custom house charges at the north east ports, 1715-8 p271

- Table 6: The Hannah: the bill of the coal undertaker at London, 1715-8 *p272*
- Table 7a: The Hannah: seasonal fluctuations in profits in the London coal trade, 1715-8 *p273*
- Table 7b: The Hannah: seasonal fluctuations in prices at the London coal market, 1715-8 *p273*
- Graph 1: Profits and losses of the Hannah, 1715-8 *p274*
- Graph 2: Price of coal per chaldron at London from the Hannah accounts, 1715-8 *p274*
- Table 8: The voyages of the Morton House, 1726-8 *p275*
- Table 9: The profits of the Matthew & Thomas, 1781-2 *p276*
- Table 10: Coal consumed and exported by steamships owned by the International Line of Whitby, 1895-8, 1912-4 *p276*
- Table 11: Coal imported into Whitby, 1702-3, 1709, 1790, 1827-8, 1863-4, 1867-8 *p277*

## CHAPTER FIVE, SECTION THREE

- Table 1: Whitby and the whaling trade, 1753-1837: number and tons of Whitby-owned vessels voyaging each year to Greenland and the Davis Straits *p300*
- Table 2: Whitby and the whaling trade, 1753-1837: details of catch *p302*
- Table 3: Bounties paid to British ships in the Northern Whale Fishery, 1733-1785 *p304*
- Table 4: Prices of whale oil and whalefins from Greenland, 1766-1785, 1805-17 *p305*
- Table 5a: Prices of ships fitted out as whalers, 1777-1818 *p306*
- Table 5b: Wages in the whaling trade, the Baffin, 1820 *p307*
- Table 6: Accounts of the whaler Henrietta of Whitby, 1777-1820 *p307*
- Table 7: Exports of whale products from Whitby coastwise, 1790 *p308*

## CHAPTER FIVE, SECTION FOUR, 1

- Table 1: Whitby-owned fishing vessels, 1772-1786 *p329*
- Table 2: Fishing boats owned at Whitby, 1870-1913 *p329*
- Table 3: Men employed manning Whitby-owned fishing vessels, 1772-86, 1874-1913 *p333*
- Table 4: Dues paid on fishing boats and fish landed at Whitby harbour, 1883-1906 *p336*
- Table 5: Exports of fish from Whitby coastwise and overseas, 1702, 1708, 1709, 1710, 1790 *p337*

## CHAPTER FIVE, SECTION FOUR, 2

- Table 1: Ships commanded by Whitby-based masters passing through the Sound with cargoes, 1700-1783 p351
- Table 2a: Shipping through the Sound: passages per year of Whitby-based masters, 1784, 1787-93 p352
- Table 2b: Shipping through the Sound: number of masters making one to five passages per year, 1784, 1787-93 p353
- Table 2c: Shipping through the Sound: ranking of Whitby compared with other ports, 1784, 1787-93 p353
- Table 2d: Shipping through the Sound: Whitby as a port of departure and port of destination, 1784, 1787-93 p354
- Table 2e: Shipping through the Sound: passages of Whitby masters compared with other ports, 1784, 1787-93 p354
- Table 2f: Shipping through the Sound: number of masters, Whitby compared with other ports, 1784, 1787-93 p354
- Table 2g: Shipping through the Sound: Whitby as a port of departure compared with other ports, 1784, 1787-93 p355
- Table 2h: Shipping through the Sound: Whitby as a port of destination compared with other ports, 1784, 1787-93 p355
- Map Three: Whitby and the Baltic, 1795 p356

## CHAPTER FIVE, SECTION FOUR, 3

- Table 1: Emigrants embarking from Whitby for British North America, arriving at Quebec or Montreal, 1830-1837 p371
- Table 2: Vessels leaving Whitby with emigrants, 1828-1837 p371
- Table 3: Owners of Whitby ships in the emigrant trade, 1828-1837 p372
- Table 4: Vessels built and owned by Henry Barrick in the emigrant trade, 1830-1836 p372
- Table 5: Whitby-built and Whitby-owned ships carrying convicts to New South Wales, 1801-1849 p373

## CHAPTER FIVE, SECTION FIVE

- Table 1: National totals of vessels hired as transports as a proportion of total vessels registered in England, 1803-1815 p395
- Table 2: Whitby-registered vessels employed as transports in years of war, 1748-1814 p395
- Table 3: Whitby-built vessels employed as transports in years of war, 1742-1815 p396

- Table 4: Whitby-registered vessels hired as transports compared with total transports hired, 1803-1815 *p397*
- Table 5: Whitby-built vessels hired as transports compared with total transports hired, 1803-1815 *p398*
- Table 6: Number and tonnage of Whitby-registered vessels acting as transports as a proportion of the total tonnage standing on the register at Whitby, 1786-1815 *p398*
- Table 7: Place of build of transports listed in the Underwriters' 'Green Book' of 1807 *p399*
- Table 8a: Rates of pay paid to the owners of transports, 1756-1773, 1795-1812 *p400*
- Table 8b: Service of Whitby-built and/or owned transports, 1756-1773 *p401*
- Table 8c: Service of Whitby-built and/or owned transports, 1795-1810 *p402*
- Table 9a: Whitby-registered vessels captured or lost during the Napoleonic Wars, 1793-1815 *p403*
- Table 9b: Whitby-registered vessels lost during peace-time, 1786-1792 *p404*
- Table 9c: Whitby-registered vessels lost during peace-time, 1816-1823 *p404*
- Table 10: Whitby-built vessels serving as transports compared with number and tons of vessels built at Whitby, 1787-1807 *p405*
- Table 11: Total number of seamen that manned Whitby-registered vessels, 1789-1825 *p405*

## CHAPTER SIX

- Appendix 1: Acts of Parliament relating to Whitby harbour, 1701-1905 *p432*
- Appendix 2: The trustees of Whitby harbour, 1702-1905 *p433*
- Map Four: Whitby piers and harbour, 1740-1908 *p434*
- Map Five: Whitby quays and warehouses, 1849 *p435*

## CHAPTER SEVEN

- Table 1: Proportion of the principal inhabitants of Whitby with maritime occupations, 1784-1913 *p461*
- Table 2: Other occupations of principal inhabitants, 1784-1834 *p461*
- Table 3: Occupational structure of the population of Whitby, 1841, 1851, 1861, 1871 *p462*
- Table 4: Occupations of the inhabitants of Whitby in 1841 compared with 1871 *p462*
- Table 5: Population of the township of Whitby, 1801-1911 *p467*
- Table 6a: Analysis of man/ton ratios of Whitby-registered vessels, 1863-1913 *p468*



- Table 6b: Number of crew of selected Whitby steamships, 1875-1901 p469
- Table 7: Analysis of the place of origin of the masters and crews of  
Whitby-registered vessels, 1863-1913 p469
- Appendix 1: The Wills of Prominent Whitby Shipowners, 1867-1943:  
value of personal effects at time of death p470

## INTRODUCTION

'I have, I believe, overlooked only one group of manuscript sources of the first importance - the local records of the seaports. The next advance in the history of the merchant marine may well come from the writing of substantial histories of the ports; there are none now in print'.<sup>1</sup> In his pioneering study of 1962, Ralph Davis drew attention to a particularly neglected area of British Maritime History, in itself a subject offering many opportunities for exploration and discovery.

Ports may be seen as an essential element in the infrastructure of the shipping industry, and in the context of a port all maritime activities may be seen in microcosm: shipbuilding, investment in shipping, the growth of merchant and trading partnerships, the employment of vessels in a variety of trades, and the seamen who served on board them. Work on the histories of British ports continued with Davis' own study of Hull<sup>2</sup> and Jarvis' guides to sources for the study of maritime history and ports,<sup>3</sup> and his remarkable studies of the Ship Registers of London,<sup>4</sup> Whitehaven<sup>5</sup> and Liverpool.<sup>6</sup> Our knowledge of the Statutory Registers of Shipping, one of the most vital raw materials in any port study, has also been expanded through the work of Craig on Chester,<sup>7</sup> the ports of South Wales,<sup>8</sup> and with Jarvis on Liverpool.<sup>9</sup> In the twenty years since Davis' seminal work, the port of Liverpool has received a good deal of attention, not only from Craig and Jarvis but from Hyde,<sup>10</sup> a series of articles edited by Harris including a summary of Neal's study of the Liverpool Registers,<sup>11</sup> and Cottrell's recent analysis of Liverpool steamships.<sup>12</sup> Jackson has contributed further work on the port of Hull.<sup>13</sup> The port of London, forbidding in its complexity and in the quantity of its records, has been considered, for the period 1815-1849, by Palmer.<sup>14</sup> Farr's work on West Country ports, and his transcription of the registers

of Chepstow and Bristol has been a further major contribution in the study of British ports from the eighteenth century to the present day.<sup>15</sup>

A feature of Davis' work on the building and ownership of British vessels in the eighteenth century was the attention he gave to the rise and growing predominance of the ports of the North East coast. For example, he considered that 'when the registration of ships began in 1787, the north east coast from Newcastle down to Hull was by far the largest seat of the shipbuilding industry, and had obviously been so for a very long time'.<sup>16</sup> In the period of steamship building, the output from this region exceeded that of other parts of Britain. Yet comparatively few studies of this area, especially of the ports of the counties of Northumberland, Durham and Yorkshire, have appeared.<sup>17</sup>

In selecting the port of Whitby, the significance of the North East ports has been recognised. Whitby was chosen as it incorporates the features of the larger North East ports, but on a smaller scale. This has made possible an attempt at a more complete study of the development of the port, from the beginnings of shipbuilding and shipowning in the early eighteenth century, to the eventual decline and demise of these activities with the advent of the First World War. The shipping records of the port of Whitby in the eighteenth, nineteenth and early twentieth centuries are of a smaller quantity than those of Newcastle or Sunderland, for example, where in most years there was a larger output of shipping tonnage built, where more ships were registered and where the maritime communities were much larger. Yet many of their characteristics, in the building and owning of wooden colliers and then steamships, in the carrying trade of coal to London and timber and grain from the Baltic, and in their capacity as 'nurseries' of seamen, were features of Whitby as well as its larger neighbours. The port of Whitby is of interest not only as a smaller edition of the larger North East ports: it will be seen how

Whitby was particularly notable for the unique importance of the ships built there for employment as transports, and the significance of Whitby ships in the whaling trade.

Other attractive features in the selection of the port of Whitby include the survival of its Statutory Registry of Shipping from 1786 to the present,<sup>18</sup> the preservation by the Whitby Literary and Philosophical Society of many detailed records of Whitby shipbuilders, shipowners, merchants, seamen and accounts of the voyages of Whitby ships,<sup>19</sup> and an informative local newspaper from 1857.<sup>20</sup> In the following chapters, these have been used, together with Customs, Admiralty and Parliamentary material, in an attempt to consider the maritime enterprise of the inhabitants of Whitby.

Few studies of the port of Whitby have been attempted. Charlton's work of 1779 includes narrative passages which appear suspiciously speculative, and he exaggerates Whitby's shipbuilding output and local alum production.<sup>21</sup> It is presented as a moral tale, showing the benefits of 'a spirit of industry and temperance'. Young's study of 1817 stands out among early nineteenth century local histories with its 'census' of the inhabitants and detailed survey of the local shipping industry at that time, although the main purpose of the book was to give a picture of medieval Whitby, the famous abbey and other ecclesiastic and religious aspects of the town.<sup>22</sup> Subsequent histories of Whitby, by Weatherill (1908) and Gaskin (1909) draw heavily upon Young's findings and observations. Weatherill's work centres around three lists of Whitby sailing vessels, in which he identifies vessels as whalers, transports, etc., without reference to the source material used, except in describing it as the oral evidence of 'gentlemen of seafaring experience, and captains, both of wooden sailing ships and of the modern steamers'.<sup>23</sup> Gaskin's work is more anecdotal and descriptive, yet it is in this study

that the only published reference to the Chapman Papers of Whitby Museum occurs.<sup>24</sup> Few other studies besides the short pieces by Dora Walker on Whitby Shipping and Whitby Fishing have appeared in recent times.<sup>25</sup>

The jurisdiction of the port of Whitby extends from Paasholm Beck, within a mile of Scarborough Castle, to Huntcliffe Foot, contiguous to the Tees, covering a distance of forty miles.<sup>26</sup> It thus includes Saltburn, Boulby, Staithes, Hinderwell, Runswick Bay, Kettleness, Sandsend and Robin Hood's Bay. The port of Whitby is situated at Latitude North  $54^{\circ} 30'$  and Longitude East  $0^{\circ} 37'$ . This study opens at the beginning of the eighteenth century with an Act of 1702, when a petition from the inhabitants of Whitby for the improvement of their piers and harbour was accepted by the House of Commons, and a levy of a farthing per chaldron was imposed upon all vessels loading coal at Newcastle in the North East coast to London coal trade, to be described as the 'passing toll'. It ends with the collapse of steamship building at the Whitehall Shipyard of Thomas Turnbull & Son of Whitby in 1902, and the steady decline of steamship tonnage registered, which suffered heavy losses as a result of the extensive submarine warfare during the First World War.

Aspects of the shipping industry of the port of Whitby fall into three broad categories: the ships of Whitby, built there and owned there; the trades in which these vessels were employed; and the port itself, its harbour facilities and maritime community. The origins of Whitby shipbuilding are seen in the context of the rise of the ports of the North East coast, and the establishment of shipbuilders at Whitby, and the output of tonnage from their yards is considered in relation to the supply of shipbuilding materials and the demand for the finished product. The registration of vessels began only in 1786, and an attempt is made to quantify the shipping owned at Whitby before this date, followed by an analysis of the nature of shipowning at the port in the late eighteenth

and early nineteenth centuries, which may be compared with studies of the registers of other ports for the same period. A consideration of the decline in the building and owning of sailing ships at Whitby by the late nineteenth century includes further study of the investors in Whitby-registered shipping. This leads to a survey of the implications of the transition from sail to steam, the output of steam tonnage from Whitby's steamship yard, and a quantification of steamships owned at Whitby. The manner of investment in Whitby-registered steamships compared with that of other ports is considered, with examples of the nature of the deployment of steam tonnage, its costs and earnings.

An introductory survey of the employment of Whitby-owned vessels, sail and steam, has then been attempted, comparing this with the traffic of the port of Whitby itself. The origins of the activity of Whitby ships in the shipment of coal, and the importance of this staple trade to the development of the shipping industry of Whitby is then considered, illustrated with examples of the voyage accounts of Whitby colliers. The pursuit of whales in Greenland and the Davis Straits was carried on spasmodically rather than continuously, and the reasons for the employment of Whitby ships in this activity and their ultimate withdrawal are examined, together with the profits earned and the contribution of the port of Whitby to the British whaling trade as a whole. In contrast with the Northern Whale Fishery was inshore and offshore fishing from Whitby which, unlike the popular image of the port, may be seen to be a relatively insignificant aspect of the Whitby shipping industry. The publication recently of data from the Sound Toll Accounts has made possible an analysis of the comparative importance of Whitby ships in the Baltic Trades. This is followed by a consideration of the employment of Whitby shipping in the carriage of emigrants to Canada, associated with the timber trade, and the hiring of Whitby ships for the shipment

of convicts to Australia. A final aspect of the deployment of Whitby-owned tonnage, which was among the most remarkable of the features of this study, was their service as transports, in the American War of Independence and the Napoleonic Wars.

The physical location of the Whitby shipping industry was in considerable contrast with its scale and diversity. The manner of the employment of the majority of Whitby-owned vessels meant that they seldom returned to their home port, and this was particularly true of Whitby steamships. The resultant neglect of Whitby harbour and piers by their trustees, who were generally the most prominent members of the shipping interest of the port, further highlights this dichotomy. Finally, the importance of shipping to the economy of the town and port of Whitby, in relation to the occupations of its inhabitants, and the development of landward communications, is considered, with an appraisal of its seafaring population. Two appendices, briefly outlining the relationship between local banking houses and marine insurance offices with Whitby shipping, conclude this attempt to shed light on the maritime history of a British port.

## REFERENCES: INTRODUCTION

1. Ralph Davis, The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries, (London, 1962), p.408
2. Ralph Davis, The Trade and Shipping of Hull, 1500-1700, (East Yorkshire Local History Society, 1964)
3. R.C. Jarvis, 'Sources for the History of Ports', and 'Sources for the History of Ships and Shipping', Journal of Transport History, III (1957-8)
4. R.C. Jarvis, 'Eighteenth Century London Shipping', eds. A.E.J. Hollaender and William Kellaway, Studies in London History presented to Philip Edmund Jones, (London, 1969)
5. R.C. Jarvis, 'Cumberland Shipping in the Eighteenth Century', Transactions of the Cumberland and Westmoreland Antiquarian Society, LIV (1955)
6. R.C. Jarvis, 'Liverpool Statutory Register of British Merchant Ships', Transactions of the Historic Society of Lancashire and Cheshire, 105 (1953). See also, R.C. Jarvis, 'Eighteenth Century Dorset Shipping', Proceedings of the Dorset Natural History and Archaeological Society, XCII (1971)
7. R.S. Craig, 'Shipping and Shipbuilding in the Port of Chester in the Eighteenth and Early Nineteenth Centuries', Transactions of the Historic Society of Lancashire and Cheshire, 116 (1964), and 'Some Aspects of the Trade and Shipping of the River Dee in the Eighteenth Century', Transactions of the Historic Society of Lancashire and Cheshire, 114 (1962)
8. R.S. Craig, 'The Ports and Shipping, c. 1750-1914', eds. Arthur John and G. Williams, Glamorgan County History V: Industrial Glamorgan 1700-1970, (Cardiff, 1980)
9. R. Craig and R. Jarvis, Liverpool Registry of Merchant Ships, (Manchester, 1967)
10. F.E. Hyde, Liverpool and the Mersey: an economic history of a port, 1700-1970, (Newton Abbot, 1971)
11. F. Neal, 'Liverpool Shipping in the early Nineteenth Century', ed. J.R. Harris, Liverpool and Merseyside: essays in the economic and social history of the port and its hinterland, (London, 1969) and unpublished Liverpool M.A. thesis, (1962)
12. P.L. Cottrell, 'The Steamship on the Mersey, 1815-1880: investment and ownership', eds. P.L. Cottrell and D.H. Aldcroft, Shipping, Trade and Commerce: essays in memory of Ralph Davis, (Leicester, 1981)
13. Gordon Jackson, Hull in the Eighteenth Century: a study in economic and social history, (Oxford, 1972)
14. S.R. Palmer, 'Investors in London Shipping, 1820-1850', Maritime History, II (1972) and unpublished London Ph.D. thesis, (1979)
15. G. Farr, Chepstow Ships, (Chepstow, 1954) and Records of Bristol Ships, 1800-1830, (Bristol, 1950)
16. Davis, English Shipping Industry, p.62
17. Except W.R. Sullivan, Blyth in the Eighteenth Century, (Newcastle, 1971) M. Le Guillou, A History of the River Tees, (Cleveland County



Libraries, 1978), Robert Craig, 'William Gray & Company: a West Hartlepool Shipbuilding Enterprise', eds. Cottrell and Aldcroft (see note 12)

18. Custom House, Whitby
19. In the keeping of the Whitby Literary and Philosophical Society, Whitby Museum
20. Whitby Gazette, 1857 to present
21. Lionel Charlton, The History of Whitby and of Whitby Abbey. Collected from the original records of the Abbey, never before made public, etc. . ., (York, 1779)
22. Rev. George Young, A History of Whitby and Streoneshalh Abbey: with a statistical survey of the vicinity, (Whitby, 1817)
23. Richard Weatherill, The Ancient Port of Whitby and its shipping, (Whitby, 1908)
24. Robert Tate Gaskin, The Old Seaport of Whitby: Being chapters from the life of its bygone people, (Whitby, 1909)
25. Published by the Wh. Lit. & Phil., 1960 and 1973
26. T. Whellan, History of Whitby, (York, 1976), a short summary reprinted from History and Topography of the City of York and the North Riding of Yorkshire, (Beverley, 1859), p.293

## CHAPTER ONE: SHIPBUILDING IN WHITBY 1700-c.1815

'At the entrance of a little nameless River, scarce indeed worth a Name, stands Whitby, which, however, is an excellent Harbour, and where they build very good ships for the Coal Trade, and many of them too, which makes the Town rich'.<sup>1</sup> Defoe's comments of 1724 point to the dichotomy of Whitby as a port: its isolated site on the edge of the North York Moors without resources or access into the interior, and lacking a developed hinterland, yet its successful and sustained enterprise in shipbuilding, particularly of colliers. By the end of the eighteenth century the aggregate tonnage of merchant vessels built at Whitby each year rivalled the great ports of London and Newcastle, and contributed over ten per cent of the total tonnage built in England and Wales by the early 1790's.

The emergence and development of the Whitby shipbuilding industry must be seen in the context of the changes in the geographical distribution of the most important areas of shipbuilding activity in the early eighteenth century. With the background of the rise of the ports of the North East coast in the output of merchant tonnage, the establishment of shipyards and their associated industries at the port of Whitby may be considered, especially in regard to the enterprise of individual shipbuilders. The output of shipping at Whitby was subject to variations in demand and supply: the former influenced by changing needs for colliers, ships for the Baltic, Mediterranean and whaling trades, and for transports in time of war, and the latter due to the availability of timber, plank and other shipbuilding materials and labour. Whitby-built ships were highly regarded by shipowners and merchants from Whitby and other ports, especially in their suitability for a variety of trades, including the employment of Whitby-built colliers by Captain Cook in his voyages of exploration.

Defoe considered that in 1668 Ipswich had been 'the greatest Town in England for large Colliers or Coal-Ships, employed between New Castle and London. . . also they built the biggest Ships and the best, for the said fetching of coals of any that were employ'd in that Trade. . .'. Captured Dutch vessels after the wars with Holland, which were 'bought cheap' and 'carried great Burthens',<sup>2</sup> contributed to the decline of Ipswich shipbuilding. By the 1720's these Dutch 'flyboats' were disappearing and the construction of merchant ships in the ports of the North East became significant.<sup>3</sup> In 'an abstract of Shippes using the Coale Trade to Newcastle, anno 1705',<sup>4</sup> according to ports - although it is unclear if this is a reference to ships built or owned at these ports - the North East was clearly important. Of the ports supplying ten vessels or more, Newcastle, Scarborough, Stockton, Sunderland and Whitby provided ships which, measured in chaldrons, represented more than a quarter of the tonnage in this trade, as summarised in Table 1. East Anglian ports such as Ipswich, Colchester, Lynn and Yarmouth supplied more than thirty-five per cent of colliers. By the time of the statutory registration of merchant shipping with Lord Liverpool's Act of 1786 the North East coast shipbuilding industry, according to Davis, was of considerable importance,<sup>5</sup> and was to gain in significance throughout the period of this study.

The importance of the alum industry in stimulating local shipbuilding activity, which is discussed further in Section Two of Chapter Five, was recognised by contemporary historians of Whitby. The extraction of alum required large quantities of coal.<sup>6</sup> Although the alum industry had declined considerably by the early nineteenth century, it supplied the necessary impetus for the building of colliers, to be followed by Baltic and foreign-going vessels and general coastwise traders. A levy of a farthing per chaldron on coals loaded at Newcastle and its member ports,

exacted to finance the rebuilding and repair of Whitby's piers, further aided the development of shipbuilding at Whitby.<sup>7</sup> The importance of harbour improvements in the growth of Whitby shipbuilding is seen in a petition of the late 1740's of the 'Burgesses, Principal Inhabitants, Masters and Owners of Whitby', asking for the House of Commons to grant them aid additional to the levy, as it 'has encouraged the Inhabitants of Whitby, to build in the Harbour much larger Ships than were formerly used there'.<sup>8</sup>

The earliest reference to vessels built at Whitby describes the granting of certificates in 1626-7 for the Margaret of Queensferry of 110 tons, the 170-ton Pelican of Newcastle and the Love's Increase, owned at Lynn, of 110 tons, all Whitby-built ships.<sup>9</sup> Shipbuilding on a large scale began only in the mid-eighteenth century, when a pioneering local ship and boat-builder, Jarvis Coates, established the first Whitby shipyard, and its success influenced other local craftsmen and merchants to do likewise. Coates' name appears in a Whitby rate book of 1697, but probably the first ship to be built by him for which details survive was the William & Jane, of 237 tons, a three masted vessel built in 1717,<sup>10</sup> which was still afloat when the shipping of the port was registered in 1786. It is possible that Coates built ships at Whitby before this date, which may have been sold to another port or lost at sea before compulsory registration was introduced. Young, a prominent local historian, writing in 1817, dates the establishment of 'regular shipyards' at Whitby from c. 1730, made possible by harbour improvements, and the activities of Jarvis Coates in shipbuilding as from c. 1740.<sup>11</sup> It is not possible to assess the output of Coates' yard, as the name of the shipbuilder was included in certificates of registry at Whitby only in the case of new vessels registered after 1790. Coates died in 1739, to be succeeded by his second son, Benjamin Coates, who continued work in

the same shipyard until his death in 1756. Coates' first son, also named Jarvis, whose name first appears in a Whitby rate book of 1717,<sup>12</sup> established a second shipyard at Whitby 'just before 1750'.<sup>13</sup> The location of these shipyards, ascertained from contemporary descriptions and plans, is shown on Map One. Coates jnr. became bankrupt in 1759,<sup>14</sup> but the establishment of these two shipyards was vital to future shipbuilding at the port, because they were later to be taken over by three great Whitby shipbuilding families: the Barricks, Fishburns and Barrys.

The first yard on the east bank of the Esk was established jointly - by William Barker, John Holt, John Reynolds and John Watson - referring to themselves as the Dock Company.<sup>15</sup> In 1734 Whitby's oldest dry dock was built, on a site previously used as a coal yard, for the supply of coal to the nearby alum works at Saltwick.<sup>16</sup> There is no evidence of vessels built by the Dock Company under that title, but many ships were constructed in this yard by the individual shareholders who, by the early nineteenth century, included the firm of Holt and Richardson, George and Nathaniel Langborne and Robert Campion.

The fourth and final major shipyard site established at Whitby was first occupied by William Coulson, who had settled in Whitby from Scarborough. No records of the output of this builder survive, but by 1790, Ingram Eskdale had taken over this yard, to be followed by Eskdale, Smales & Cato, and by Chapman & Campion.<sup>17</sup> Map One further illustrates the establishment and occupation of areas of shipbuilding activity at the port of Whitby. These were not confined, however, to the sites described above. At least eight other places were the scenes of shipbuilding activity, above and below Whitby bridge. Even a small area of mud, such as behind the old Custom House, was used for the construction of small vessels, which were launched along the sand.<sup>18</sup> The building of a dock on the east side of the Esk along Church Street in c. 1755 by Richard Simpson had to be abandoned as the ground was too wet,<sup>19</sup> but it would appear

from this study of the shipbuilding sites of Whitby that almost any area of land with access to water could be successfully utilised in this activity.

The output of Whitby shipbuilders may be analysed from the statutory registers of shipping of Whitby,<sup>20</sup> and is summarised in Tables 2a to 2d. Table 2a shows an analysis of the Whitby-built vessels registered at the port in the years 1786 to 1815, arranged according to year of build, beginning with the William & Jane of 1717, probably built by Jarvis Coates. No complete picture of the shipbuilding output of the port is given, as this table includes only those Whitby-built ships that were registered at the port, and does not show vessels sold or lost before 1786. But it is clear that Whitby shipbuilding gathered momentum by the mid eighteenth century and was especially encouraged by the war with America in 1775-1783, which was followed by an annual output which was rarely less than a thousand tons and often exceeded 4,000 tons. Table 2b shows the above data arranged in tonnage categories. The majority of Whitby-built vessels - over 70% - were over 250 tons register, and over half exceeded 300 tons. The fourth column of Table 2a shows that the building of large vessels was popular in Whitby throughout the eighteenth century. This was considerably higher than the national average: in 1795, for example, 540 vessels were built and first registered at British ports, with an aggregate tonnage of 63,200, representing an average tonnage of 117 tons.<sup>21</sup> In this same year, the output of vessels built by Whitby shipbuilders, twelve ships of 3477 tons, averaged 290 tons.<sup>22</sup>

Of all the vessels registered at Whitby in the period 1786-1815, the majority were built locally, as summarised in Table 2c. Of a total of 161,445 aggregate tons of prime registrations at the port, 129,931, or over 80%, were built at Whitby. The building of vessels at Whitby was such that the demand for ships built at other ports was relatively slight. Appendix 1 shows a comparison of this proportion with other ports for

which data is available. Although the registers of few ports have been examined in detail, it is clear that an exceptionally high proportion of locally-owned tonnage at Whitby was also locally built.

Many Whitby-built vessels would have been sold to other ports straight from the shipyard, without undergoing registration at Whitby itself. Although details of these vessels cannot be obtained from the registers, it is possible to consider those vessels sold from Whitby owners to other ports after a period of registration at their home ports. 169 vessels of 34,152 aggregate tons were sold from the Whitby register in the eighteenth century, within two to seven years from their year of build. Over 75% of these vessels were sold to shipowners of the ports of London, Sunderland and Newcastle. Whitby-built ships were thus in considerable demand as colliers, and the increase in sales of Whitby-built vessels to London after 1793 indicates that they were popular in the transport service.

Table 2d shows the output of tonnage of Whitby shipbuilders. This information was included on registers only after 1790, and only on the registers of newly-built vessels, with the only exceptions of the August built and registered in 1788 by G. & N. Langborne, and the Middleton, built in 1789 by Thomas Fishburn and registered the following year. Although this table inevitably excludes Whitby-built vessels which were never registered at the port, it provides a picture of the range of shipbuilders active in this period. From only five shipbuilders building vessels in 1790, thirteen builders were based at Whitby by 1802, and a total of forty-five different individuals and partnerships built vessels at Whitby that were also registered at the port between 1790 and 1815. The partnership of Thomas Fishburn and Thomas Brodrick was responsible for the output of more shipping than any other Whitby ship-building enterprise in this period, totalling 88 vessels of 23,535 aggregate tons. The majority of Whitby-built vessels in this period were ships,

sloops and brigantines. Of a sample of 440 Whitby-built ships of the eighteenth century, 40% were three-masted square-rigged vessels, ships proper, 25% were sloops and 24% brigantines, vessels which combined fore and aft and square rigs. A further 10% of Whitby-built vessels in this sample were barque-rigged, and the remainder included snows, pinks, luggers, various fishing boats and 'cat' rigged craft. Preferences for certain rigs varied between builders, with Fishburn and Brodrick favouring ships, Eskdale brigantines and Barry producing vessels of these two rigs in equal proportions. Robert Marshall, William Webster, James Waite, James Wake, Thomas Gale, Thomas Nesbitt and Marshall and Copley specialised in the building of small coastal craft and fishing vessels.

Other sources for the names of Whitby shipbuilders of the eighteenth and early nineteenth century include local directories and a Return of Shipwrights of April 1804.<sup>23</sup> A directory of 1784 lists Whitby's shipbuilders as Henry Barrick, Robert Barry, John Fishburn Junior, Holt & Barker, and boat builders as James Boyes, Henry Rowland and Thomas Storey.<sup>24</sup> Map One also shows the location of activities associated with shipbuilding, such as rope-making and sailmaking, which are also listed in a 1784 directory. Isaac Allanson worked as a mast-maker, and John Brignall as an anchor-smith, and John Huntrodes as a block and mast maker.<sup>25</sup> Whitby sailmakers of that year were James Atty, Christopher Cressick, Holt & Akelye, Robert Hunter and Jonathan Sanders & Sons.<sup>26</sup> Thomas Boulby and Jonathan Lacey were the local ropemakers, the latter of whom became a shipbuilder. Nathaniel Langborne became established as a shipbuilder at Whitby by the early 1790's, but in 1784 he is recorded as a ship chandler. Members of the Barker, Campion and Chapman families, later to become shipbuilders, were merchants in 1784. A 1798 directory lists five Whitby shipbuilding firms, which corresponds with the information given in the registers, a statement also true in the case of an 1811 listing, in



which Charles and Isaac Gale and Robert Marshall are mentioned as local boat-builders.<sup>27</sup> The 1804 Return of Shipwrights, designed for the information of the Admiralty, lists eight shipbuilders at the port.<sup>28</sup> All these names are readily found in the registers except a William Race, who employed four shipyard workers. He may have built only small vessels which did not require registration, or the output from this yard may have been sold to other ports. This name does not appear in any contemporary secondary sources except in an 1811 directory as a lighterman. A total of 265 persons were employed in Whitby shipyards in 1804. In Great Britain in this year, 9,161 shipwrights and caulkers worked in merchant yards, nearly 3% of whom were based at Whitby. Ports where a larger number of shipyard workers were employed were Greenock, with 309, Hull with 334, Leith with 362, Liverpool 487, London 1283, Shields 1301 and Sunderland with 658 employees engaged in shipbuilding. This does not include those working in the associated industries, in the infrastructure of the shipbuilding enterprises of British ports, yet shows that a large proportion of the working population, especially of ports based in comparatively small settlements like Whitby, were engaged in this activity, a point discussed more fully in Chapter Seven.

A further analysis of the output of Whitby shipyards is made possible through national shipbuilding returns, which consider the number and tonnage of ships built each year, without reference to individual shipbuilders. The trade and navigation ledgers classed as Customs 17 provide comprehensive shipbuilding data for British ports from 1787 to 1808.<sup>29</sup> The tonnage listed is referred to as 'built and registered' at a particular port. This may refer to vessels built and registered at the same port in a certain year, or to vessels built at the port but not registered there, and new registrations not necessarily built locally. A comparison with Table 2a and the totals of Table 2d shows that the Customs 17 returns

indicate a higher output from the Whitby yards than that suggested by an analysis of the registers. Thus it is possible that Table 3a includes Whitby-built vessels sold to other ports. Whitby shipbuilding output may easily be compared with that of other British ports by use of these returns: Table 3a also shows the output of the port of Liverpool, Bristol and Hull. In 1787, the number of vessels built at Whitby is exceeded by the other three ports in question, and in tonnage by two. By 1789, a higher aggregate tonnage was launched from the Whitby yards than any of these three ports, which was also true in 1790-3, 1795, 1798 and 1808. The pattern of shipbuilding at Whitby was of a high output in the years immediately before the Napoleonic Wars, followed by a sharp decline, perhaps reflecting the employment of newly-built Whitby ships as transports, which do not appear in returns of merchant shipping. But this does not explain the large shipbuilding output from the Whitby yards in the early 1800's, which must have included many vessels serving as transports. Yet the overall pattern in Whitby shipbuilding in this period is one of growth, whereas Liverpool shipbuilding decayed considerably by the end of the eighteenth century. It was partly sustained by contracts for the building of naval ships, a feature of the port for which there is no evidence at Whitby, but the purchase of prizes and cheap plantation-built vessels influenced the decline of shipbuilding at Liverpool.<sup>30</sup> The falling off of tonnage built at Bristol is even more dramatic, at a time when registrations were also declining at this port.<sup>31</sup> Shipbuilding at Hull, however, enjoyed considerable expansion, due to the growth of its coasting trade for the supply of its large hinterland, rather than through service as transports.<sup>32</sup>

In regard to shipbuilding output per year, between 1789 and 1791, Whitby ranked third behind London and Newcastle. In 1792 and 1793,

Whitby shipbuilding reached its peak: 5,957 and 5,828 aggregate tons were launched from the Whitby yards in these years respectively. In 1792 it was exceeded only by the Metropolis with 11,003 tons and in 1793 only by Newcastle with 8,783 tons.<sup>33</sup> At no other point in the eighteenth and nineteenth centuries could Whitby shipbuilders boast that the combined output from their yards was second of all English ports. In the last three years of these returns, the output of the port of London fell behind Whitby and many other ports, and the largest North East coast ports, such as Newcastle, Sunderland, Stockton and Hull assumed a prominent place in the construction of British vessels which they retained into the twentieth century. The shipbuilding totals achieved by the port of Whitby are particularly remarkable in comparison with these other ports, which all exceeded Whitby in population and size of hinterland. It is also clear from these returns that larger than average vessels were built at Whitby. In 1792, for example, the tonnage built at Whitby was exceeded only by London, but in number of ships built, the most prominent ports were Hull, Yarmouth and Dover.

An early parliamentary return gives a further insight into the shipbuilding output of British ports, in this case for the years 1790, 1791, 1804 and 1805.<sup>34</sup> Table 4a summarises the figures for Whitby. They are significantly higher than the statutory registers suggest, yet also differ from the data in Table 3, but only in the eighteenth century figures. For 1791, this parliamentary return lists 28 vessels of an aggregate tonnage of 7,159. This would place Whitby above any port in this year according to the Custom 17 returns. In comparing Whitby with other ports from this source, as shown in Table 4b, it would appear that the totals for each port differ from other sources. Unless every ship ever built at Whitby could be traced which, with the absence of detailed shipbuilders'

records and yard books,<sup>35</sup> and the many vessels built there which never appeared on the register at Whitby, makes such a task almost impossible. It is difficult to establish the accuracy of these different sources. Appendix 2 provides an insight into the ownership of Whitby-built ships at other ports: arising from a misinterpretation of the 1786 Act, Liverpool Customs officials produced a register of vessels entering their port besides those owned there. Kept until 1803, it includes 135 Whitby-built ships. Fifty-six were registered at Whitby, so that nearly 60% of the Whitby-built ships in this instance had been sold to other ports. Liverpool was a relatively infrequent port of call for Whitby-owned vessels, so that it may not be assumed that this proportion of Whitby-built vessels were owned outside the port, but the data given in Tables 3 and 4 suggest that tonnage additional to that appearing on the register at Whitby was built there.

Despite the variations between different sources showing the shipbuilding output of Whitby in the eighteenth and early nineteenth century, it is clear that the tonnage launched at Whitby was by no means consistent each year. The impetus for the building of vessels at Whitby was influenced by the nature of the demand for shipping, and the supply of the necessary raw materials. The demand for merchant ships in this period was affected by the expansion or diminution of particular trades, and the frequent incidence of warfare, which produced a series of long-term or short-term fluctuations in shipbuilding. The coal trade was particularly important in producing a constant demand for the sturdy and capacious Whitby collier. In 1796 the Select Committee on the Improvement of the Port of London heard how 'the colliers, by their repeated Voyages, exceed, in Number of Ships and Tonnage, those employed in the Foreign Trade. The Importations of coals, on an Average of Seven years, preceding 1732, was 474,717

chaldrons, it now amounts to about 900,000 chaldrons per annum, and will probably increase. . .<sup>36</sup> It was not until 1843 that tonnage employed in foreign-going voyages exceeded vessels in the coal trade.<sup>37</sup> The high proportion of Whitby-built ships serving as transports, discussed in Chapter Five, indicates a further area of demand for these vessels. Over 65% of Whitby vessels sold to London in this period were sold in years of war. The whaling trade from Whitby, which began in 1753, also served to stimulate local shipbuilding: as well as the building, fitting out and repair of Whitby whalers, six of the Hull whalers were built at the port, all of them over three hundred tons.<sup>38</sup> The importance of Whitby shipping in the Baltic Trades is shown in an analysis of the Sound Toll Accounts,<sup>39</sup> and small local traders and coasters, carrying the products of Whitby's alum and fishing industries, as seen in the Port Books,<sup>40</sup> were another source of demand for Whitby-built vessels.

The origins of capital investment in shipbuilding and the growth of shipowning at Whitby is the subject of Chapter Two, which shows the importance of Whitby's shipbuilding families in the ownership, management and operation of many of the vessels which they built. Labour for shipbuilding at Whitby was readily available, as there were few other opportunities in the town for employment besides seafaring and fishing. A contemporary local historian was of the opinion that shipbuilding labour was obtained more cheaply at Whitby than elsewhere,<sup>41</sup> possibly because of the lack of other opportunities, such as coal mining and work in early industrial enterprises that was offered in other ports of the North East and beyond. Places for the building of ships were no problem to the Whitby shipbuilders, with the Esk estuary where slipways could be easily constructed, as seen in Map One. The principal requirement of the shipbuilder, which was the most important factor in determining the price of the vessel when launched, was timber. The increase in the demand for

timber throughout the eighteenth century, with the building of naval vessels and East India Company ships as well as the expansion of the mercantile marine occurred whilst more land was coming under cultivation for crops which could be more profitable in the short term than woodland. A typical English oak tree took a hundred years to reach full size and suitability for shipbuilding. The second survey of the Royal Forests in 1783 showed only 80,000 loads of oak compared with 500,000 loads in 1608.<sup>42</sup> English oak was generally preferred as a shipbuilding timber above Baltic and American oak,<sup>43</sup> and a Commons' inquiry of March 1756 discovered that oak timber was particularly exhausted near the coasts. A Liverpool shipwright, Roger Fisher, brought attention to the problem of the rapidly decreasing supplies of timber, pointing out that national forest legislation was insufficient to prevent a further decrease. He was mainly concerned with the areas that supplied vessels for the navy, but referred to the considerable demand for timber for the building of colliers for the Newcastle to London coal trade. He remarked that 'the numerous ports of North Yarmouth, Hull, Scarborough, Stockton, Whitby, Sunderland, Newcastle and the North Coast of Scotland, are supplied chiefly, as I am informed, from the Humber and Trent'. However, an old Hull shipwright, questioned in Fisher's survey, considered that three-quarters of all the full-grown timber on the North East coast had been cut down in the period 1720 to 1770, with little attention paid to replanting, and a Hull timber merchant added that half the timber in the area around that port had been cut down for the building of naval vessels and merchantmen during the Seven Years' War.<sup>44</sup>

The use of timbers other than oak, and the import of shipbuilding materials from abroad, took on a new significance by the mid eighteenth century. The need for timber was a principal concern in the Baltic policy of British diplomats, and influenced the colonisation of British North

America.<sup>45</sup> Foreign timber was generally regarded as not so durable as English woods, especially fir, at first regarded as a possible alternative to oak.<sup>46</sup> But by the early nineteenth century, when the demand for timber reached an unprecedented scale, elm, beech, ash and pine were used. In the 1760's, imports of foreign timber were mainly from the East Indies, Denmark and Norway. In 1763 timber was brought into Britain from Russia and New England, and in 1764 from Germany, Holland and Ireland, with the beginning of large shipments from British North America. Between 1761 and 1770, imports of timber rose from 145 loads to 7,540.<sup>47</sup> It has been suggested that half the cost of a completed naval vessel was for timber,<sup>48</sup> and a similar proportion may be estimated for merchant ships. The cost of timber was thus a crucial factor in the price of a new vessel. Oak timber, per load, varied relatively little in price from the 1730's to the 1750's, from £3 to £4 7s; elm per load ranged from £2 10s to £3 7s, beech from £2 6s to £2 18s and ash from £2 14s to £3 10s. A load equalled approximately fifty cubic feet. The price of timber varied according to its size, type of wood, and shape, plank being generally more costly per load than uncut timber. 1½ inch oak plank varied in price in the 1730's to 1750's from £3 10s to £4 5s, and 4½ inch between £6 and £7. Elm plank, three and four inches thick, cost between £4 and £5 10s, and beech plank from £3 10s to £4 10s.<sup>49</sup> By the late 1790's and in the first few years of the nineteenth century, the cost of English oak timber per load had risen from £3 and £4 to £7, and by the end of the Napoleonic Wars, from £9 to £13.<sup>50</sup> The English timber remaining by this period was principally in the Midlands, requiring additional costs of carriage to the shipbuilding ports.<sup>51</sup> Baltic timber, with the cost of shipment, equalled English woods in price, and American and African oak was considerably cheaper. Fir and pine were 25% cheaper than oak. The most expensive imported timber was from Prussia, followed

by that from Norway and America.<sup>52</sup>

The overall cost per ton of merchant vessels, as with the cost of building naval ships, rose with the increasing costs of raw materials. Albion has estimated that the cost of a third rate man of war built in a merchant yard, comparable with the largest and most expensively-outfitted merchant ship, increased in price from £11 to £13 at the beginning of the eighteenth century to £16 and £17 during the Seven Years' War. By the early 1780's, in the war with America, the price per ton reached £20, in 1793-1802 £21, and between 1805 and 1815, from £33 to £36. In the early eighteenth century, a 500 ton vessel required 500 loads of timber, costing approximately £4,500. This price had trebled by the end of the Napoleonic Wars.<sup>53</sup>

This increase in the price of tonnage in the course of the eighteenth century is also apparent in Whitby-built shipping. By the early nineteenth century, Whitby shipbuilders were seeking supplies of timber beyond Britain. Chapter Five discusses Whitby shipping in the Baltic trades in more detail, including evidence from the letter books of John Barry of his voyages to Dantzic and Norwegian ports from 1801 to 1808.<sup>54</sup> He bought plank at Hull, and imported his own timber direct from the Baltic, despite the problems of sailing in convoy and enemy privateers. In one voyage of the Curlew, Captain John Dixon, to Dantzic in 1807, Barry imported three and four inch oak plank, two and three inch fir deals, and a large number of spars and topmasts, also of fir.<sup>55</sup> In 1807, Barry was quoted, for Baltic oak plank, £10 per load for three inch, £11 per load for four inch and £12 per load for five and six inch plank.<sup>56</sup> Besides timber, a considerable amount of iron and copper was used in shipbuilding: in a 'large ship' in 1801, over £77 was spent on bolts alone, and an extra £20 for copper bolts, and in a brig of the same year, £81 for 'iron work'. These items were brought to Whitby from



other North East ports, Hull and Yarmouth.<sup>57</sup> Detailed information of the origins and types of timber used in Whitby-built vessels begins only with Lloyd's Survey Reports which, for Whitby, are confined to the period 1830 to the 1850's, but it is clear from the Barry letter books that Whitby shipbuilders, as for those of other ports, imported timber from abroad and used woods other than oak. Long series of prices of Whitby-built vessels are available only for the period after 1815, and are discussed in Chapter Three. It has been calculated that the Hannah, a collier brig of 1715,<sup>58</sup> cost just over £8 per ton, and there is evidence to suggest that this price remained relatively consistent until the early 1790's. Eight guineas per ton was suggested as an approximate valuation of English merchant shipping as a whole in 1792.<sup>59</sup> Chapter Five considers the price of whalers in the early nineteenth century which, at £26 per ton in 1803 shows that, for specialised vessels which were costly in fitting out, the price of Whitby-built vessels more than doubled by the early 1800's.<sup>60</sup> The John Barry, a ship of 520 tons, cost when newly-built in 1814, £14,000, or £26 18s 6d per ton register. Smaller vessels, such as coasting brigs and barquentines did not experience such a dramatic rise in price as large, foreign going vessels and whalers: four vessels built by Robert Barry in 1815, the London, Concord, Mackerel and Holderness, of between 136 and 384 tons, varied between £12 and £14 per ton. £12 per ton for a vessel between 100 and 250 tons in this case was for the hull only; completed for sea would cost an additional £2 to £4 per ton.<sup>61</sup> Difficulties in the supply of timber and its increased price did not deter Whitby shipbuilders, as the highest annual output occurred in the period 1799 to 1804, and it would seem that a decline in demand for shipping was more likely to reduce output than a high price for timber.

Whitby-built vessels were undoubtedly prized above the ships of many

other ports. A local historian, writing in 1817, maintained that 'the skill of our shipbuilders and carpenters has long been generally acknowledged, and has brought much business to the town, and produced a great influx of property; especially during the first American War, and the last French War. No ships are better adapted for transports, or more serviceable for general purposes, than those built at Whitby. In strength, beauty, and symmetry, our vessels are equalled by none'.<sup>62</sup>

This local patriotism was shared by Captain Cook, who had been apprenticed to a Whitby merchant and shipowner.<sup>63</sup> Lloyd's tended to allow a longer time on the first letter for Thames-built ships, thirteen years as opposed to only eight for North East coast ships (as shown in Appendix 3),<sup>64</sup> and thus considerable hostility greeted the choice of Whitby-built colliers for Cook's voyages of exploration. Cook wrote that 'I have two good ships, well provided and well manned; you must have heard the clamour raised against the Resolution before I left England. I can assure you I never set foot on a finer ship'.<sup>65</sup> The Admiralty regarded Whitby-built vessels as particularly suitable for hiring as transports. The phrase 'is roomly and has good accommodations' accompanies reports of surveys of many Whitby-built vessels which joined the service at Deptford, for example. The Three Brothers built at Whitby and surveyed in 1777, was 'tendered to serve as an armed ship, to carry twenty six-pounders and eight swivels, and we find her to all appearances a proper ship for that service'. The average age of Whitby ships serving as transports in the American war was eleven years, and there is evidence of their durability in surviving repeated engagements.<sup>66</sup> Whitby-built ships were remarkable for their longevity: the Volunteer, built at Whitby in 1756, made fifty voyages to Greenland and was sold to Hull in 1829.<sup>67</sup>

The typical Whitby built ship of the eighteenth century and the first half of the nineteenth century was the collier, between 200 and 550

tons, without the figureheads and embellishments of East India Company ships and many foreign-going vessels. William Hutchinson described two distinct types of vessels when he wrote: 'flat floors for storage and carrying great burthens, or sharp floors for sailing fast',<sup>68</sup> and most Whitby-built ships fell into the first of these categories. A plan of the draught of H.M. Bark Endeavour, built as the Earl of Pembroke at Whitby in 1764, a large collier of 566 tons, with a length of keel of 81 feet and an extreme breadth of twenty-nine feet two inches, shows that, in profile, these vessels closely resembled boxes, designed for the carriage of bulk cargoes, with their bluff bows and tumble-home.<sup>69</sup>

Thus the shipbuilding industry of Whitby emerged and developed throughout the eighteenth century, from the establishment of a small shipyard by Jarvis Coates in the late 1710's or 1720's, to thirteen separate shipbuilding enterprises at the port by the early nineteenth century. Shipbuilding output grew from only a few vessels each year to over thirty in 1802 and 1803, and reached its peak during the Napoleonic wars, when its ranking with other ports and contribution to British tonnage built each year reached its height.

The success of the Whitby shipbuilding industry was due to the quality of its product. Whitby-built vessels were suitable for regular employment in the bulk trades of coal, grain and timber, but could be sent to Greenland and the Davis Straits on whaling voyages, and could carry troops, horses and equipment to foreign battlefields as transports. The large profits that could be earned in many of these activities ensured a steady demand for these sturdy and capacious vessels, which aided the development of Whitby as a seaport despite its obscure location 'at the entrance of a little nameless River'.

## REFERENCES: CHAPTER ONE

1. Daniel Defoe, A Tour thro' the whole island of Great Britain, divided into circuits or journies, etc..., (London, 1778), II p.656
2. Defoe, A Tour, pp.40-43
3. Ralph Davis, The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries, (London, 1962), p.61
4. J. Brand, The History and Antiquities of the Town and County of the Town of Newcastle on Tyne, (Newcastle, 1789), II p.677
5. Davis, English Shipping Industry, p.62
6. Lionel Charlton, The History of Whitby, etc..., (York, 1779), p.307
7. See Chapter Six, 1701-2, 1 Anne c. xix
8. House of Commons' Journals, XXV, 4 December 1749
9. Robert Tate Gaskin, The Old Seaport of Whitby: Being chapters from the life of its bygone people, (Whitby, 1909), p.231
10. Richard Weatherill, The Ancient Port of Whitby and its shipping, (Whitby, 1908), p.26
11. Rev. George Young, A History of Whitby, etc..., (Whitby, 1817), p.548
12. Weatherill, Whitby, p.27
13. Young, Whitby, p.549
14. Young, p.549
15. Weatherill, p.28
16. Young, p.548
17. Weatherill, p.29
18. Weatherill, p.30
19. Young, p.551
20. Registers of Shipping, Custom House, Whitby
21. P.R.O. CUST 17 / 17. According to Charlton, the largest ships built at Whitby were of 550 and 600 tons in 1776, (p.359); Young refers to a vessel of 629 tons, built 1781, (p.552)
22. See Table 2a
23. An Account, shewing the number of shipwrights, and also of apprentices, employed in the Merchant Yards of Great Britain; according to the returns made to the Admiralty, Parliamentary Papers, 1805, VIII, (193.), p.485
24. Bailey's British Directory; or, Merchants' and Traders' Useful Companion, etc..., (London, 1784), III p.729
25. Thomas Smales (1670-1744), Thomas Smales jnr. (1713-1787) and Gideon Smales (1766-1817) were also block and mast makers; their 'Masting Book', listing eighty-five ships for which they built the masts in the period before 1815, is in the keeping of the Wh. Lit. & Phil. See Chapter Three

26. Between 1796 and 1805, 10,000 bolts of canvas sailcloth, each of 38½ yards, were produced annually. Young, p.559
27. Universal British Directory, (London, 1798), IV pp.742-3, and Holden's Directory, (London, 1811), III
28. See note 23
29. P.R.O. CUST 17 / 12-30. See the discussion and interpretation of this source in R.S. Craig, 'Shipping and Shipbuilding in the Port of Chester in the Eighteenth and early Nineteenth Centuries', Transactions of the Historic Society of Lancashire and Cheshire, 116 (1964), p.57
30. R. Stewart-Brown, Liverpool Ships in the Eighteenth Century, including the King's Ships built there with notes on the principal shipwrights, (Liverpool, 1932), pp.vi, 19, 71. Thirty-six naval ships were built at Liverpool in the period 1741-1811
31. See G. Farr, Records of Bristol Ships, 1800-1830, (Bristol, 1950)
32. Stewart-Brown, Liverpool Ships, p.19. Hull builders specialised in the construction of smaller vessels than was the practice at Whitby, (see Table 3a), and many of the larger vessels owned at Hull were built at Whitby. Gordon Jackson, Hull in the Eighteenth Century: a study in economic and social history, (Oxford, 1972), p.144
33. P.R.O. CUST 17 / 14, 15
34. An Account, presented to the House of Commons, of ships and vessels built in Great Britain, from 1790 to 1806, P.P., 1806, XIII, (243.), pp.739-757
35. Except the letter books of Robert Barry, and the Smales' masting book
36. Report from the Committee appointed to enquire into the best mode of providing sufficient accommodation for the increased trade and shipping of the Port of London, House of Commons Sessional Papers, 1796, (4646.)
37. A.D. Gayer, W.W. Rostow and A.J. Schwartz, The Growth and Fluctuations of the British Economy, 1790-1850, (Oxford, 1953), p.801
38. Basil Lubbock, The Arctic Whalers, (Glasgow, 1937), Appendices E and F
39. N.E. Bang and K. Korst, Tabeller over Skibsfart og Varetransport Gennem Øresund, 1661-1783, (Copenhagen, 1930)
40. P.R.O. E 190 / 209/9 to 290/3, 1701-1790
41. Material costs in shipbuilding were higher than labour costs. For example, the Hannah, built in 1715, cost £1,678. The hull cost £650, cordage £418 and sails £116, whilst labour and provisions amounted to £337. See Young, p.552
42. Sir Westcott Abell, The Shipwright's Trade, (London, 1948), p.95
43. R.G. Albion, Forests and Sea Power: The Timber Problem of the Royal Navy, 1652-1862, (Harvard, 1926), Chapter 1
44. Roger Fisher, Heart of Oak, the British Bulwark, (London, 1771), pp.vii, 31-41, 69
45. Albion, Forests and Sea Power, p.x
46. Stewart-Brown, Liverpool Ships, Chapter VIII

47. Navy, relating to the supply of timber, House of Commons Sessional Papers, 1771, (3114.), p.83, Appendix XVII
48. Albion, p.93
49. Navy, timber, H. of C., 1771, (3114.), p.64, Appendix IX
50. Albion, pp.90-92
51. Navy, timber, H. of C., 1771, (3114.), p.13
52. Albion, p.92
53. Albion, p.93
54. Letter Books of John and Robert Barry, Wh. Lit. & Phil.
55. John Barry to Captain John Dixon of the Curlew, 17 February 1807
56. John Barry to Captain John Snowden, 20 September 1807
57. John Barry Letter Book, 1801-1807
58. See Chapter Five, Section 2
59. Stewart-Brown, Liverpool Ships, p.42
60. See Chapter Five, Section Three, Table 5a
61. Robert Barry Letter Book, 1815-1843
62. Young, pp.551-2
63. To John Walker, for three years. Young, p.851
64. P.R.O. CUST 90 / 74, Proceedings of the Committee of Whitby Shipowners for the regulation of the coal trade, 1787-1800. A meeting discussing opposition to Lloyd's classification at Whitby was held on 3 April 1798. A subscription was begun 'for preserving a correct and impartial register of shipping', but it does not appear that an alternative register was ever established at Whitby
65. Captain Cook to John Walker, 20 November 1772. Young, p.856
66. P.R.O. ADM 106 / 3318, fo. 122, 1777. See also David Syrett, Shipping and the American War, 1775-1783, (London, 1970), p.114
67. Lubbock, Arctic Whalers, Appendices E and K
68. William Hutchinson, A Treatise on Naval Architecture, (London, 1794), p.19
69. Many models and plans of the Endeavour survive. See the reproduction of plans from the Science Museum, London, in Roger Finch, Coals from Newcastle, (Lavenham, 1973), p.102

TABLE 1:

SOURCE OF VESSELS EMPLOYED IN THE COAL TRADE AT NEWCASTLE 1702-4 -  
PORTS SUPPLYING TEN VESSELS OR OVER

<u>Port</u>	<u>No. vessels</u>	<u>Chaldrons</u>
Aldbrough	11	849
Blakeney	11	260
Bridlington	48	1374
Brighton	56	1527
Broadstairs	12	241
Burnham	12	278
Colchester	25	1227
Hastings	38	1112
Hull	28	987
Ipswich	40	5774
London	168	11230
Lynn	74	3397
Margate	24	1001
Newcastle	71	5567
Portsmouth	18	680
Poole	16	650
Ramsgate	42	2147
Rochester	21	808
Sandwich	17	554
Scarborough	54	2613
Stockton	27	780
Sunderland	32	1855
Wells	34	820
Weymouth	16	442
Whitby	98	6385
Yarmouth	211	13272
Total	1204	65830
Total (of all vessels in this trade)	1277	68219

---

Source: MS quarto: 'An Abstract of shippes using the coale Trade  
to Newcastle, anno 1705', Archives, Trinity House,  
Newcastle

quoted by  
John Brand, The History and Antiquities of the Town  
and County of the Town of Newcastle on Tyne, London  
1789 p.677

TABLE 2a:

## YEAR OF BUILD OF WHITBY-BUILT VESSELS REGISTERED AT WHITBY, 1786-1815

<u>Year of build</u>	<u>No.</u>	<u>Reg. Tons</u>	<u>Av. Tons</u>
1717	1	237	237
1724	2	432	216
1729	1	246	246
1737	1	280	280
1739	1	324	324
1740	1	355	355
1741	1	248	248
1746	2	385	193
1748	3	1081	360
1749	1	334	334
1750	2	605	303
1751	1	315	315
1752	1	249	249
1754	1	108	108
1756	1	305	305
1757	1	91	91
1758	1	64	64
1760	5	1136	227
1761	2	556	278
1762	7	2035	291
1763	3	896	299
1764	8	1381	173
1765	9	1702	189
1766	6	1269	212
1767	3	601	200
1768	7	577	82
1769	6	1708	285
1770	4	806	202
1771	-	-	-
1772	5	663	133
1773	2	92	46
1774	6	1447	241
1775	4	895	224
1776	9	2701	300
1777	4	1138	285
1778	3	976	325
1779	8	2272	284
1780	4	1091	273
1781	10	3159	316
1782	11	2168	197
1783	18	3099	172
1784	12	1318	110
1785	17	2960	174
1786	15	3103	207
1787	24	4140	173
1788	23	3855	168
1789	9	2204	245
1790	21	4265	203
1791	17	4625	272
1792	23	6140	267
1793	19	4814	253
1794	9	2526	281



TABLE 2a: (contd.)

<u>Year of build</u>	<u>No.</u>	<u>Req. Tons</u>	<u>Av. Tons</u>
1795	12	3477	290
1796	8	1839	230
1797	6	1336	223
1798	9	1611	179
1799	17	4169	245
1800	24	4880	203
1801	13	2658	204
1802	27	3013	112
1803	23	3246	141
1804	21	4365	208
1805	11	2144	195
1806	8	1188	149
1807	9	2236	248
1808	9	2274	253
1809	6	1251	209
1810	5	1499	300
1811	10	2991	299
1812	11	3469	315
1813	13	3896	300
1814	10	3415	342
1815	9	2208	245
<b>Total</b>	<b>617</b>	<b>135299</b>	<b>219</b>

Note: only prime registrations are included.

Source: Calculated from the statutory registers of shipping,  
Custom House, Whitby.

TABLE 2b:

WHITBY BUILT VESSELS REGISTERED AT WHITBY, 1786-1815, ANALYSED BY  
TONNAGE CATEGORIES

<u>Tonnage category</u>	<u>No.</u>	<u>Tons</u>	<u>Ton %</u>
0 - 50	21	1189	0.8
51 - 100	135	9041	6.7
101 - 150	68	8387	6.2
151 - 200	47	8293	6.1
201 - 250	56	12685	9.4
251 - 300	76	22232	16.4
301 - 350	94	30521	22.6
351 - 400	74	27142	20.1
401 - 450	24	10017	7.4
451 - 500	8	3773	2.8
501 - 550	4	2019	1.5

Source: Calculated from the statutory registers of shipping,  
Custom House, Whitby.

TABLE 2c:

PLACE OF BUILD OF VESSELS REGISTERED AT WHITBY, 1786-1815  
PRIME REGISTRATIONS, EXCLUDING PRIZES

<u>Place</u>	<u>No.</u>	<u>Agg. Reg. Tons</u>	<u>Av. Tons</u>
Whitby	595	129931	218
Scarborough	58	6393	110
Staithes	22	1137	52
Sunderland	22	1788	80
Stockton	27	1523	56
Newcastle	5	1269	254
S. Shields	9	552	61
N. Shields	5	779	156
Selby	4	725	181
Hartlepool	2	103	52
Gateshead	1	125	125
Thorne	7	680	97
Monkwearmouth	2	336	168
Knottingley	1	69	69
Rawcliffe	3	311	104
Fishlake	5	392	78
Blythnook	3	475	158
Berwick	2	178	89
Blyth	1	352	352
Hull	18	2847	158
Yarmouth	14	1968	141
Ipswich	2	275	138
Shoreham	3	332	111
Wells	1	69	69
Suffolk	1	96	96
Boston	1	84	84
Southwold	1	91	91
Sutton	2	230	115
Thames	6	733	122
Maldon	1	64	64
Lynn	1	64	64
Wisbech	2	102	51
Southampton	1	52	52
Bristol	2	313	156
Topsham	1	134	134
Isle of Wight	1	83	83
Lymington	1	58	58
Dartmouth	1	54	54
Skinningrove	1	13	13
Howden Pans	3	967	322
Howden Dike	1	32	32
Durham	1	97	97
Wemyss	1	194	194
Portrack	2	234	117
Bucklers' Hard	1	69	69
Liverpool	1	391	391
Chester	2	225	113
Workington	1	257	257
Burnt Island	1	51	51
Brucehaven	1	50	50
Alloa	1	48	48

TABLE 2c: (contd.)

<u>Place</u>	<u>No.</u>	<u>Agg. Reg. Tons</u>	<u>Av. Tons</u>
Dundee	1	95	95
Aberdeen	1	70	70
Leith	1	35	35
Montrose	1	62	62
Leeds	1	46	46
Kidwelly	1	86	86
Conway	1	149	149
Swansea	1	147	147
Chepstow	1	151	151
Cork	1	148	148
Canada	4	596	149
New England	4	762	191
Jamaica	1	380	380
Sweden	1	209	209
Unknown	10	1114	111
<b>Totals</b>	<b>881</b>	<b>161445</b>	<b>183</b>

Source: Calculated from Statutory Registers of Shipping,  
Custom House, Whitby

TABLE 2d:

## OUTPUT OF WHITBY SHIPBUILDERS 1790-1815

<u>Shipbuilders</u>	<u>1790</u>	<u>1791</u>	<u>1792</u>	<u>1793</u>	<u>1794</u>	<u>1795</u>	<u>1796</u>
	<u>No. &amp; tons</u>						
Thomas Fishburn	7 1954	6 1882	7 2075	6 2035	1 430	2 467	-
Wm. & Thos. Fishburn	-	-	1 236	-	-	-	-
Fishburn & Brodrick	-	-	-	-	-	2 448	4 842
Jn. & Francis Barry	2 346	1 326	-	-	-	-	-
John Barry	-	-	2 466	2 515	1 280	1 211	1 160
Nat. Langborne	-	1 341	-	1 313	-	1 419	-
Geo. & Nat. Langborne	-	-	3 863	1 148	-	1 219	1 367
Kitchen & Gale	-	1 51	1 61	1 56	-	-	-
Reynolds & Co.	1 292	1 320	-	-	-	-	-
Wm. Reynolds & Wm. Holt	-	-	1 119	-	-	-	1 103
Robert Marshall	-	-	-	1 54	-	-	-



TABLE 2d:(contd.)

<u>Shipbuilders</u>	<u>1797</u>	<u>1798</u>	<u>1799</u>	<u>1800</u>	<u>1801</u>	<u>1802</u>	<u>1803</u>
	<u>No. &amp; tons</u>						
Thos. Gale	-	-	-	-	-	-	1 57
Thos. Nesbitt	-	-	-	-	-	-	1 72
Totals	5 1158	8 1471	9 2984	24 4930	13 2933	21 2861	20 2907
	<u>1804</u>	<u>1805</u>	<u>1806</u>	<u>1807</u>	<u>1808</u>	<u>1809</u>	
Wm. Jackson	1 92	-	-	-	-	-	
Rich. Wake	2 259	-	-	-	-	-	
Jon. Lacey	1 68	-	-	-	-	-	
Fishburn & Brodrick	4 1362	3 671	1 137	3 1005	3 247	-	
Thomas Barrick	1 101	-	-	1 414	1 438	-	
Holt & Richardson	4 944	2 478	1 120	2 478	3 759	1 364	
Marshall & Copley	1 58	-	-	-	-	-	
Thomas Coates	1 70	-	1 78	-	-	-	
Eskdale, Cato & Co.	3 766	1 77	3 521	-	-	-	
Valentine Pinkney	1 61	-	-	-	-	-	
John Barry	2 386	1 127	1 81	2 476	-	1 167	
Matthew Dring	1 81	-	-	-	-	-	
James Wake	-	3 722	1 80	-	-	-	
Geo. & Nat. Langborne	-	1 218	-	-	-	-	
Smales & Co.	-	-	-	1 98	-	1 488	
Robt. Marshall	-	-	-	1 63	-	-	
Smales & Cato	-	-	-	-	2 366	-	
Gideon Smales	-	-	-	-	-	2 170	
Totals	22 4248	11 2293	8 1017	10 2534	9 1810	5 1189	

TABLE 2d: (contd.)

<u>Shipbuilders</u>	<u>1810</u>	<u>1811</u>	<u>1812</u>	<u>1813</u>	<u>1814</u>	<u>1815</u>
	<u>No. &amp; tons</u>					
	1	2	1	1	2	
Holt & Richardson	309	750	409	360	583	-
John Barry	2 587	-	2 679	3 717	1 521	-
Fishburn & Brodrick	1 114	2 733	2 883	4 1024	3 884	2 511
Smales & Cato	1 489	-	1 336	-	-	-
Marshall & Copley	-	1 49	-	-	-	-
Smales & Co.	-	2 528	1 118	-	-	-
Thos. Barrick	-	1 215	1 502	1 140	1 356	-
Jn. Langborne	-	1 411	-	-	-	-
Whitby builders	-	1 253	-	6 1802	1 437	1 352
Holt & Co.	-	-	1 138	-	-	-
John Holt	-	-	-	1 394	-	-
W.L. Chapman & Co.-	-	-	-	1 403	-	-
Thos. Chapman & Co-	-	-	-	-	1 399	-
Robt. Campion	-	-	-	-	1 367	-
Chris. Gales	-	-	-	-	-	1 50
Robert Barry	-	-	-	-	-	3 751
W.S.Chapman & Co. -	-	-	-	-	-	2 544
Totals	5 1499	10 2939	9 2765	17 4840	10 3547	9 2208

---

Source: Statutory Registers of Shipping,  
Custom House, Whitby

TABLE 2d: (contd.)

## SUMMARY OF ANNUAL OUTPUT OF WHITBY SHIPBUILDERS, 1790-1815

<u>Year</u>	<u>No. of vessels</u>	<u>Reg. tons</u>
1790	15	3495
1791	13	3766
1792	19	4925
1793	17	4362
1794	6	1758
1795	10	2797
1796	7	1472
1797	5	1158
1798	8	1471
1799	9	2984
1800	24	4930
1801	13	2933
1802	21	2861
1803	20	2907
1804	22	4248
1805	11	2293
1806	8	1017
1807	10	2534
1808	9	1810
1809	5	1189
1810	5	1499
1811	10	2939
1812	9	2765
1813	17	4840
1814	10	3547
1815	9	2208

---

Source: Statutory Registers of Shipping,  
Custom House, Whitby

TABLE 3a:

AN ACCOUNT OF THE NUMBER AND TONNAGE OF NEW VESSELS BUILT AT WHITBY  
WITH COMPARATIVE DATA FOR LIVERPOOL, BRISTOL AND HULL, 1787 - 1808

<u>Year</u>	<u>Whitby</u>	<u>Liverpool</u>	<u>Bristol</u>	<u>Hull</u>
1787	26-3836	44-5731	35-3571	39-5471
1788	16-2469	40-5139	19-2037	47-5714
1789	17-4432	26-3166	14-2392	32-3717
1790	23-4999	27-4737	12-1677	20-1894
1791	22-5665	18-2393	18-2278	36-4668
1792	23-5957	30-3509	13-1364	27-3844
1793	22-5828	18-2137	6-677	45-5193
1794	15-4607	18-2635	12-2435	39-4809
1795	20-5295	12-1463	4-327	42-4564
1796	8-1587	34-5175	9-1068	29-4729
1797	7-1385	20-4749	10-951	31-4156
1798	21-5372	11-2201	6-984	33-4170
1799	14-4285	24-5708	12-1617	38-4818
1800	28-6464	23-4430	6-1266	59-8301
1801	24-5723	27-4584	8-1744	77-9922
1802	31-4587	18-2761	11-709	69-9314
1803	33-5807	19-3122	10-1360	57-8037
1804	25-5079	10-2165	3-627	37-5790
1805	18-4871	25-1989	5-996	45-5141
1806	21-4647	9-1787	8-1577	40-5487
1807	17-3717	7-771	6-1789	34-4928
1808	18-4189	9-610	11-961	31-3406
Totals (tons)	100,801	70,962	32,407	118,073

---

Source: PRO CUST 17/12-30



TABLE 3b:

PERCENTAGE OF WHITBY ANNUAL SHIPBUILDING RETURNS OF NATIONAL TONNAGE  
OUTPUT PER YEAR, 1787-1808

<u>Year</u>	<u>Tons. Eng. &amp; Wales</u>	<u>Tons. Whitby</u>	<u>% Tons. Whitby</u>
1787	77996	3836	4.9 Eng.&Wales
1788	60594	2469	4.1
1789	49108	4432	9.0
1790	49470	4999	10.1
1791	48741	5665	11.6
1792	56044	5957	10.6
1793	55839	5828	10.4
1794	47353	4607	9.7
1795	56946	5295	9.3
1796	75270	1587	2.1
1797	69425	1385	2.0
1798	67955	5372	7.9
1799	72713	4285	5.9
1800	71776	6464	9.0
1801	92000	5723	6.2
1802	90605	4587	5.1
1803	95129	5807	6.1
1804	67119	5079	7.6
1805	61137	4871	8.0
1806	50429	4647	9.2
1807	49283	3717	7.5
1808	57100	4189	7.3
<b>Total</b>	<b>1422032</b>	<b>100801</b>	<b>av. 7.1%</b>

Source: PRO CUST 17/12-30

TABLE 4a:

NUMBER AND TONNAGE OF SHIPS BUILT AT WHITBY, 1790, 1791, 1804 and 1805

Table removed due to third party copyright

Source: Account, presented to the House of Commons, of Ships and Vessels Built in Great Britain, from 1790 to 1806, Parl. Papers, 1806, XIII, (243.), pp.739-757

## TABLE 4b:

NUMBER AND TONNAGE OF SHIPS BUILT AT WHITBY COMPARED WITH SELECTED  
OTHER PORTS, 1790-1 and 1804-5

Table removed due to third party copyright

Source: Account, presented to the House of Commons, of Ships and Vessels  
built in Great Britain, from 1790 to 1806, Parl. Papers, 1806,  
XIII, (243.), pp.739-757

## APPENDIX 1

## THE PROPORTION OF WHITBY-REGISTERED TONNAGE BUILT AT WHITBY COMPARED WITH OTHER PORTS IN THE EIGHTEENTH CENTURY

<u>Port</u>	<u>% tonnage reg. bt. at the port</u>
Whitby	80.5 <sup>1</sup>
Chepstow	57.0 <sup>2</sup>
Whitehaven	55.0 <sup>3</sup>
Liverpool	34.0 <sup>4</sup>
London HT	30.0 <sup>3</sup>
London FT	20.0 <sup>3</sup>
Exeter	14.5 <sup>4</sup>

1. Whitby registers 1786-1815 (see Table 2c)
2. G.E. Farr, Chepstow Ships (Chepstow, 1954) taken from an analysis of the first one hundred registrations of the eighteenth century.
3. R.C. Jarvis, 'Eighteenth Century London Shipping' in Studies in London History presented to Philip Edmund Jones, edited by A.E.J. Hollaender and William Kellaway, (London, 1969)
4. R.C. Jarvis, 'Liverpool Statutory Registers of British Merchant Ships', Transactions of the Historical Society of Lancashire and Cheshire, 105 (1953), p.117. No indication is given of the size and the sample of registrations from which these figures are derived.

## APPENDIX 2

WHITBY-BUILT VESSELS REGISTERED AT OTHER PORTS  
THE LIVERPOOL 'OTHER PORTS' REGISTER

Name	When built at Whitby	Tons	Where regd.	When entered L'pool
Acabus	1790	142	London	1793
Admiral Packenham	1788	207	Cork	1800
Adroit*	1797	299	Whitby/Lpool	1798
Adventure*	1786	466	Whitby	1799
Advice	1785	310	Scarboro'	1791
Aid	1797	161	Lancaster/ Lpool	1798
Albion	1784	185	Lancaster/ Lpool	1793
Albion	1791	164	Newhaven	1798
Albion	1793	146	Waterford	1802
Amalthea*	1798	145	Whitby/London	1799, 1802
Amphitrite*	1790	287	Whitby	1790
Anatolia	1789	180	London	1790
Ann*	1799	359	Whitby/London	1790, 1800
Ann	1797	221	Lancaster	1798
Ann & Elizabeth*	1776	323	Whitby	1790
Antelope	1757	296	Newcastle	1799
Apollo*	1774	327	Whitby	1799
Aquilon	1786	175	Newcastle	1794
Arcade	1796	313	Sunderland	1798
Advent*	1797	172	Whitby/London Lpool	1798
Ark*	1792	311	Whitby	1803
Atty*	1791	380	Whitby	1792
Barzillai*	1790	281	Whitby/London	1793
Battalion*	1795	211	Whitby/Lpool	1796
Benson*	1795	330	Whitby	1803
Betsey	1783	94	Montrose	1799
Betsey	1756	69	Sund.	1792
Betsey	1766	280	London/ Newcastle	1798
Betsey	1778	276	London/Ipswich	1798
Betty	1780	118	Portsmouth	1794
Brenthall	1773	390	London	1789
Bridget	1785	256	London	1799, 1803
Britannia*	1781	364	Whitby	1788
British Queen*	1785	293	Whitby	1799
Briton*	1794	323	Whitby	1802
Brothers	1751	352	Yarmouth/ Lpool	1788
Brothers	1754	262	Newcastle	1791
Brothers	1796	280	Lancaster	1796
Cadiz Packet	1783	145	Hull	1799
Centurion*	1749	334	Whitby	1802
Ceres	1790	288	Newcastle	1780
Cholmley*	1788	225	Whitby	1790
Cochrane	1720	269	Greenock/ Lpool	1788
Columbus	1798	353	Greenock	1798
Constantine*	1784	57	Whitby	1794

## APPENDIX 2 (contd.)

Name	When built at Whitby	Tons	Where regd.	When entered L'pool
Contents Increase	1750	300	Newcastle	1799
Cumberland	1784	226	London/Lpool	1795
Cygnets*	1796	103	Whitby	1799
Daedalus	1791	310	London	1817
Desire*	1795	350	Whitby	1802
Doris*	1789	142	Whitby	1790
Eagle*	1788	310	Whitby/London	1799
Edward*	1790	165	Whitby	1798
Eliza*	1782	377	Whitby	1792
Eliza	1795	153	London	1800
Eliza	1798	349	Lpool/London	1800
Elizabeth	1761	335	Hull	1792
Elizabeth*	1793	313	Whitby	1803
Elizabeth and Ann	1783	290	Newcastle	1802
Ellen	1785	158	Lancaster	1788
Favourite	1767	91	Greenock	1803
Friendship	1783	155	London	1790
George	1787	161	Dublin	1796
Lidden Grove	1780	333	Newcastle/ Lpool	1798
Good Intent	?	70	London	1790
Harpooner*	1769	346	Whitby	1799
Henry*	1776	290	Whitby	1790
Henry and Elizabeth	1788	147	London	1802
Herald*	1799	339	Whitby	1802
Hope	1765	59	Poole	1788
Hope	1784	101	Bridlington	1789
Hope	1787	319	Newcastle	1802
Herta	1790	188	London/ Whitehaven	1801
Ibbetson	1786	164	Scarboro'	1791
James	1794	244	Lancaster/ Lpool	1795
Jane	1784	125	Ayr	1799
Jane	1797	278	Whitehaven	1797
John and Mary	1787	303	Scarboro'	1798
Jolly Batchelor	1767	114	Aberdeen	1794
Joseph and Hannah*	1760	248	Whitby	1803
Keppell	1743	340	Newcastle	1788
Langton	1796	203	Lancaster	1798
Lively*	1786	58	Whitby	1799
London Packet	1780	78	Exeter/ Plymouth	1801
Martha*	1774	316	Whitby	1798
Mary*	1780	275	Whitby	1788
Mary*	1798	117	Whitby	1798, 1799
May	1792	110	Ipswich	1801
Melantho*	1791	263	Whitby	1792
Meliora	1773	370	Liverpool	1801
Mermaid	1785	67	Lond./Newhaven	1788, 1792
Middleton*	1789	352	Whitby	1802
Nancy	1768	291	Newcastle	1791
Neptune	1779	144	London	1789

## APPENDIX 2 (contd.)

Name	When built at Whitby	Tons	Where regd.	When entered L'pool
Ocean*	1764	226	Whitby	1790
Otterington*	1781	350	Whitby	1793
Palladium	1792	152	Waterford	1798
Peggy*	1777	237	Whitby	1798
Perseverance	1782	312	London/Lpool	1802
Phoenix*	1782	121	Whitby	1788
Rachel*	1783	303	Whitby	1788
Ranger*	1788	307	Whitby	1792
Renewal	1795	330	London	1800
Robert	1799	315	Lancaster	1799
Robert and Susanna	1765	88	Dover	1790
St. Mary's Planter	1784	339	London	1802
Samuel and Jane*	1782	407	Whitby	1788
Sarah*	1748	346	Whitby	1792
Scarboro'	1776	82	Yarmouth	1790
Scipio	1786	191	Sunderland/ London	1794
Selby	1791	363	London	1792
Slade	1797	228	Rye	1802
Speedwell	1772	181	London	1793
Shanger*	1799	181	Whitby	1799
Summer	1785	89	London/Cork	1792
Swift*	1796	79	Whitby	1798
Thalia*	1793	248	Whitby	1799
Thomas and Alice*	1782	316	Whitby	1799
Three Brothers*	1776	355	Whitby	1789
Tom	1798	279	Lancaster/ London	1800
Traveller*	1792	393	Whitby	1793
Trio	1783	?	London/Lpool/ Newcastle	1791, 1794
Tweed	1765	75	Liverpool	1800
Union*	1779	287	Whitby	1799
Unity*	1739	324	Whitby	1792
Vigilant	1788	200	London	1789
Waltham	1767	214	London	1788
Whitby*	1748	377	Whitby	1790
Will	1797	260	Lancaster/ Lpool/Hull	1797
William	1784	256	Bridlington	1792
William and Ann*	1781	370	Whitby	1799
William and Mary*	1762	401	Whitby	1799
Young John*	1776	337	Whitby	1790
Young William	1779	431	Hull	1802
Zephyr	1781	378	Hull/London	1792

\* Whitby-owned vessels

Source: Liverpool 'Other Ports' Register,  
Custom House, Liverpool

## APPENDIX 3

LLOYDS' CLASSIFICATION AS QUOTED IN THE WHITBY PORT LETTER BOOKS,  
PRO CUST 90/74, 1798

<u>Where built</u>	<u>Years</u> <u>1st class</u>	<u>Years</u> <u>2nd class</u>
River	13	7
India	13	7
Southampton, Shoreham, Plymouth and Cowes	12	6
Teignmouth, Poole, Bridport, Bristol, Chester, Liverpool, Lancaster, Irish and Ipswich	10	5
Quebec	10	5
Hull, Whitby, Sunderland, Shields, Newcastle, Howden Pans, Whitehaven, Workington, Yarmouth and Scotland	8	6
French	8	4
Newfoundland	4	6
Nova Scotia - Black Birch	0	4
Nova Scotia - Oak	5	5

## CHAPTER TWO: SHIPOWNING IN WHITBY 1700-c.1815

After a consideration of the origins and nature of shipbuilding at Whitby in the eighteenth and early nineteenth centuries, with an introductory examination of the demand for Whitby-built vessels, it is now appropriate to assess the ownership of vessels at the port. The Whitby shipbuilding industry stimulated investment in tonnage, and the first section of this chapter is an attempt to determine the scale of Whitby shipowning. Then an analysis of the shipowners of Whitby, with a comparison with other ports, is included in considering the nature of this activity and its significance in the development of the port.

The problem of quantifying the tonnage owned at Whitby in the early and mid-eighteenth century, before statutory registration, needs to be dealt with before examining the longer, more complete series of data which begin only with the last two decades of the eighteenth century. A series of the number and tonnage of vessels owned at the ports of England and Wales for 1701 has been constructed from the letters of the Customs Commissioners to the Admiralty, and is shown in Table 1.<sup>1</sup> Whitby is ascribed 109 vessels of 6819 aggregate tons, manned by 650 men. Accurate information of the distribution of seamen and vessels was required by the Admiralty with the approach of war and the concomitant need for crews and merchant transports. This series represents Whitby as a relatively minor port in relation to the tonnage owned there, less than Bristol, Exeter, Hull, Ipswich, Liverpool, Newcastle, Scarborough, Whitehaven and Yarmouth. A similar number of vessels, 98, is given for Whitby in 1702-4, of ports supplying vessels for the coal trade, as shown in Table 1 of Chapter One.<sup>2</sup> The significance of Whitby among the North East ports is already apparent by the beginning of the eighteenth century, but this was before this



region predominated. Tonnage owned at Whitby represented only 3.7% in 1701, of all tonnage belonging to the outports, and would be even smaller if London were included. This series, shown in Table 1, includes only coastwise and foreign-going vessels, which could be utilised in wartime, and makes no mention of fishing craft.

Another version of this series of the number and tonnage of vessels owned at English ports is quoted by Capper in his work on the Port of London.<sup>3</sup> From Table 2 it may be seen that the two series are identical, except for the addition of a figure for London and differing totals for Whitby. Capper's figures were derived from a circular letter to the ports from the Commissioners of Customs, a year earlier than that shown in Table 1, yet why only Whitby reported a higher tonnage of shipping in this case is unknown. This latter source suggests that Whitby, according to the number of vessels belonging to the ports, ranked fifth behind London, Bristol, Yarmouth and Liverpool, but was exceeded in tonnage by Newcastle and Ipswich. The average tonnage of vessels owned at Whitby was much smaller in the early eighteenth century than by the end of the century: between 63 and 75 tons, but this was larger than the majority of ports. The average tonnage of Whitby ships according to Brand is slightly larger,<sup>4</sup> suggesting that these may be vessels built at the port for the coal trade rather than vessels owned by the inhabitants of Whitby, many of which may have been small coasting vessels which would have reduced the overall average. Only with the beginning of the Seamen's Sixpence Accounts in 1725 can an attempt be made at an analysis of the proportion of colliers among Whitby-owned tonnage as a whole, and as this source includes only vessels entering London, it inevitably excludes the many small, local traders that the series shown in Tables 1 and 2 would suggest were owned at Whitby in the opening years of the eighteenth century.<sup>5</sup>

This conclusion is supported by an early nineteenth century historian

of Whitby, when Young refers to 113 sail owned at the port in 1700, of which only two or three were above twenty keels in tonnage.<sup>6</sup> Weatherill mentioned 130 vessels at this period, and estimated that twenty keels was equivalent to 400 tons.<sup>7</sup> The increase in the average tonnage of Whitby-owned vessels over the century is pointed to by Young, when he considered that all the vessels owned in Whitby in 1700 would not equal in tonnage thirty vessels of 1817. No precise conclusions of the exact tonnage of Whitby ships in this period, comparable with later figures, is possible, with the differing modes of tonnage measurement, but it is possible to suggest that they were small.

The slow growth in Whitby-owned tonnage is shown by another contemporary writer, Charlton, in 1779. 'In the year 1734, it appears there were near 130 vessels of 80 tons burden and upwards belonging to Whitby', he wrote, and there could have been others of a smaller tonnage which he does not include. By 1755 he refers to 195 vessels, and in 1779, 281.<sup>8</sup>

The earliest long series of tonnage statistics for English ports in the eighteenth century was derived from the Board of Customs' minutes. The originals do not survive, but a digest was prepared, probably from them, for Sir William Musgrave, a commissioner from 1763 to 1785. The Musgrave MSS record the tonnage of vessels of each port every seven years from 1709 to 1751 and then annually until 1782.<sup>9</sup> The uniformity of the figures seems suspicious, and the 1782 figure is similar to that of 1709, but there are distinct fluctuations in the total tonnage registered between these dates. The rise in tonnage owned in 1737, followed by a decline in 1744, which especially affected shipping in the foreign trade may have been associated with the outbreak of hostilities between England and Spain, which continued until 1748, but by 1751 the shipping of

the port had again flourished, having doubled in the coasting trade. The aggregate tonnage of shipping owned at Whitby before 1782 reached its highest point in 1759 with 21,030 tons. In this year, when Quebec was captured and the Seven Years' War was at its height, when ships and men were in great demand, tonnage employed in the foreign and coasting trades owned at Whitby increased dramatically.<sup>10</sup> By the Peace of Paris Whitby shipping had again declined, but enjoyed considerable prosperity during the War of American Independence, reaching 16,351 tons in 1777, when many Whitby ships were employed as transports.<sup>11</sup>

The Musgrave MSS gives tonnage only, so that an analysis of the average tonnage of Whitby vessels in this period is not possible, but a comparison may be made with other ports. Of coastwise shipping belonging to ports, in 1709, only Scarborough owned more tonnage, possibly excepting London which is excluded from these accounts. The same is true for 1716, but by 1723 Whitby's coastwise tonnage was only half its previous level, perhaps due to a decline in alum production,<sup>12</sup> and was overtaken by Hull, Lynn, Newcastle, Sunderland and Yarmouth. Whitby then continued as the fourth, fifth or sixth port in the ownership of vessels in the coasting trade of the outports. Whitby owned tonnage in foreign trades remained limited; at least twice as many Whitby ships made coastwise voyages.

Lord Liverpool's Act of 1786 gave rise to an entirely new body of shipping records, because it constituted the first national statutory registry.<sup>13</sup> It was from this official registration of every British vessel that the 'state of navigation' accounts were derived, which cover the period 1772 to 1808.<sup>14</sup> Shown in Table 4, they repeat the Musgrave MSS figures until 1782. It is remarkable that, with the beginning of registration, the tonnage of shipping owned at Whitby more than trebles in volume, whereas the national rise in tonnage was comparatively slight.

Perhaps many vessels had previously escaped being accounted in previous returns: the 1786 Act, in the period 1786-8, ensured that all vessels were recorded at the Custom House for the first time. Tonnage owned at Whitby, according to this source, reached a peak in 1793 and by the beginning of the nineteenth century varied between 35,000 and 40,000 tons, undoubtedly reflecting the stimulus that the port received from the Napoleonic Wars. Also in 1793, Whitby shipping reached 4.4% of all tonnage owned at English ports. Whitby was then the sixth largest shipowning port, after London, Newcastle, Liverpool, Hull and Sunderland.

The manner in which the certificates of registry, which recorded the physical details of each vessel and her owners, were used in the compilation of the statistics shown in Table 4 is unclear. Table 5 shows the stock of shipping on the register of the port as calculated from the registers.<sup>15</sup> Firstly, the total tonnage of all vessels registered each year is shown, then the net registrations, of newly-built vessels and ships purchased from other ports, excluding vessels previously registered at Whitby for which a new register was issued, marking a change in ownership or dimensions, generally referred to as registrations de novo. Then tonnage lost at sea, broken up, or sold to other ports in each year has been deducted, to produce a final figure representing net accretions or deductions from the register, to be added or subtracted from the total of vessels registered at that port in each year. Minus values occur when more vessels were being lost from the register than were being added to it, which happens in 1795 and 1796, and in 1815, associated with wartime losses and sales to the Admiralty or London shipowners eager for vessels for transports. These latter figures, the final column of Table 5, vary considerably from those of Table 4: they continue to increase, whilst the Customs 17 data is comparatively stable, especially after 1799.

When compulsory registration was undertaken for the first time, the information was not always collected in a uniform fashion: details such as when and where vessels were sold are often missing, and registers were sometimes kept open for several years after the vessels to which they referred had been lost, broken up or sold. Customs officials were supposed to keep 'running balances' of ships remaining on the register of each port at 30 September each year, and it seems they often failed to do so. In the case of the port of Liverpool, this factor altered the picture of shipping at the port considerably: of the vessels registered at Liverpool from 1786 to 1805 only, more than 20,000 tons of shipping was eliminated as a consequence of a general inspection and reappraisal of the registrations in 1826 and 1827.<sup>16</sup> But if the registers were not kept up to date, it is difficult to determine how the Customs 17 data were collected. Perhaps the Whitby customs officials kept yearly balances for the annual returns, but failed to record these on each certificate. Yet this does not explain why in 1795 and 1796, despite the possibility of an exaggeration of the tonnage registered, a tonnage deficit occurred. No written accounts of the methods adopted in aggregating shipping statistics of this period remains.

However, existing data may be augmented by further reference to official and secondary sources. A Board of Trade return based on the certificates of registry for 1786 to 1789 includes the number of crew and whether or not each vessel in question was absent on a foreign voyage or trading to or from other British ports when the account was compiled. Only 87 vessels are recorded for 1786 when 116 appear in the registers, a deficit not explained by excluding registrations de novo.<sup>17</sup> Another source, the Liverpool Papers, records the tonnage of vessels registered on 30 September 1787 and 1789, showing only slight variation from the

Customs 17 data.<sup>18</sup> A further return based on the latter covers the period 6 January 1799 to 5 January 1800.<sup>19</sup>

In considering the extent of tonnage owned at Whitby it may appear that ship-owning at the port was of secondary importance compared with its role as a shipbuilding centre. Yet, according to the Customs 17 data shown in Table 4, there were never more than seven other English ports more important than Whitby in relation to tonnage owned in the eighteenth century. The disadvantages that Whitby suffered in its shipbuilding, as outlined in Chapter One, including its isolated position and small commercial hinterland, also acted as a deterrent to the development of a prosperous shipowning community, yet Whitby shipowners continued to invest in tonnage, even if it was operated far from Whitby itself.

An analysis of the certificates of registry makes possible a more detailed assessment of the patterns of shipowning at Whitby, because they include details of the names of each owner, their place of residence and occupation, with transactions of subsequent changes in ownership. When a complete change of ownership occurred, a new register was made out, but this rule was not strictly adhered to. This information may be considered in three main ways: through the number of owners per vessel, the occupational structure of the shipowners, and the nature of the geographical distribution of investment in shipping. Other studies of the registers of English ports have been consulted to consider this material in context.

Tables 6 and 7 summarise the numbers of individual owners at each registration. This analysis can show if the majority of vessels of a port were owned largely by a single person, or by a small group of owners, or if investment in shipping was widely spread among a number of persons. In the former case, it may be determined if these owners were actively engaged in the operation of the vessel, such as masters or merchants, and

in the latter case, if this represents passive investment in shipowning by persons not directly involved in the shipping industry. It would appear from Tables 6 and 7 that Whitby falls in the first of these categories. From 1786 to 1815, the majority of registrations included the names of only four persons or less: only once does the percentage fall below 70%. In most cases, two owners or less was the most common way of investment in shipping, and this aspect becomes even more pronounced into the early nineteenth century. If considered as an annual average, as shown in Table 7, of thirty years, on only eight occasions is the average above two owners per vessel. This considers the owners only when the vessel was first registered, or re-registered, rather than including all subsequent transactions. With so many vessels owned at Whitby, the task of considering the number of owners of each vessel throughout the period of their registration at Whitby, at every change in ownership including mortgages, would make this analysis unduly protracted. Of 1,276 registrations, 440 show one owner, and 347 two owners.

This feature of shipowning at Whitby was not necessarily a characteristic of other ports. For example, of vessels registered at Whitehaven in the eighteenth century, only 7% of vessels were owned by one person, 10% by one or two owners and only 13% by four owners or less. 65% of Whitehaven vessels were owned by eight or more persons and 58% by thirteen or more. 25% of Whitehaven registrations show over seventeen owners per vessel and as many as twenty nine are recorded in one instance.<sup>20</sup> Similarly, 60% of Lancaster vessels were owned by four or more persons. Liverpool shipowning in this period was similar to Whitby rather than to Whitehaven in this respect. A quarter of Liverpool registrations show only one owner and the proportion of vessels owned by large groupings was negligible.<sup>21</sup> In 1786, 85% of Liverpool tonnage was owned by four persons or less.<sup>22</sup> A

random sample of eighteenth century Liverpool vessels shows that two-thirds of the ships were owned by three persons or less.<sup>23</sup> Of eighteenth century London-owned tonnage, taking a random three hundred vessels in the foreign trade, 25% had one owner, 18% two owners, 15% three owners and 10% four owners. 68% of all London vessels in the foreign trade had four owners or less, 78% five or less and 90% eight owners or less.<sup>24</sup> Bideford Shipping was also concentrated in the hands of a few owners, as a random sample of one hundred Bideford vessels showed only 370 registered owners.<sup>25</sup> An analysis based on a transcription of the first two hundred Chepstow registers shows 45% of vessels with one owner, 18% with two, 17.5% with three and only 1.5% with more than twelve owners.<sup>26</sup> The preceding analysis is summarised in Table 8.

The factors influencing the number of investors in each vessel include the state of the freight market: at a time of high freights and good prospects of profit, a wider spread of people might be attracted to shipowning, and a large number of owners might also be common in times of low freights, and to reduce the individual risk in the event of loss or capture. But both circumstances could result in ownership by small numbers of persons. In the case of Whitby, as seen in Tables 6 and 7, there is no clear suggestion that changing economic conditions influenced a concentration or diffusion in the number of owners per vessel. The years of the most extensive shipbuilding at Whitby showed a higher percentage of registrations with four shareholders or less rather than the reverse, so prosperity in shipowning did not necessarily result in attracting more investors to the purchase of a ship. The concentration of owners in ports of small population like Whitby, Bideford and Chepstow reflects the lack of a large number of investors to spread the capital outlay when a vessel was newly registered, but this does not necessarily explain why Whitehaven had so many owners of each vessel and



London and Liverpool, with such large merchant and commercial populations did not exhibit a larger proportion of owners per vessel. Ralph Davis considers, from his study of the High Court of Admiralty records, that most eighteenth century vessels were owned by a large group of people. In writing of vessels with under four owners, he considers that 'but few ships of more than a hundred tons had such small owning groups', and regarded a ship with a single owner as most uncommon.<sup>27</sup> This analysis of Whitby shipowning in the eighteenth century together with the review of existing work on the registers of other English ports in this period suggests a different conclusion: that eighteenth century vessels, at least when first registered, were primarily owned by a single person or a partnership of two or three investors.

A further factor which may have a bearing on the number of owners per vessel was the tonnage of the ship in question. Table 9 shows that over 90% of vessels under 200 tons registered at Whitby in 1786 had three owners or less when first registered and that vessels between 200 and 400 tons were owned by more than three persons in nearly 72% of cases. Vessels between 200 and 300 tons show a relatively even spread of numbers of owners. A similar pattern is shown by the Whitby registers of 1798-9. It may be tentatively suggested here that larger vessels, requiring a heavier outlay of capital to purchase and operate, tended to attract a larger number of investors to reduce individual expenditure and risk. Yet no clear pattern of a relationship between the number of owners and the tonnage of a vessel emerges in an analysis of the Liverpool registers for the same period. The Liverpool registers show that vessels with four owners or less were on average between 51 and 100 tons and vessels with five owners tended to be above 100 tons; but most ships with six or seven owners were also in the 51 to 100 ton bracket. Vessels with eight owners at Liverpool tended to fall into the 201 to 300 ton category, but those

with twenty-one or more owners were nearly all under fifty tons.<sup>28</sup>

On the London register in this period, the average tonnage of vessels with one owner was 251 tons, with two owners 245, with three 208 and with four owners, 245.<sup>29</sup> Of two vessels pointed out by Jarvis which were both owned by seventeen persons, one was a 20-gun frigate and the other a brig of only 130 tons. A 778 ton ship had twenty owners, but a brig of 115 tons had 22 owners.<sup>30</sup>

The age of a vessel when registered might also influence the number of owners. Of Whitby ships, only 16% of vessels registered in 1787 were built in the 1780's, and a quarter were built in the 1760's. 16% of Whitby registered vessels were about forty years old at the beginning of registration.<sup>31</sup> Whitehaven owned vessels were considerably older: 30% were built in the 1780's and as many as 20% in the 1750's, or thirty years old at registration. The London register shows a more even spread, with 40% from the 1780's and only 10% in the 1750's.<sup>32</sup> Chepstow had a younger than average fleet.<sup>33</sup> This summary is tabulated in Table 10. The considerable average age of Whitehaven registered tonnage might partly explain the high average number of owners per vessel: a twenty or thirty year old vessel would have seen the death or at least retirement of many of the original investors with a possible fragmentation of shares among many relatives and partners. In the case of Chepstow, with its relatively young fleet, of 200 registrations in the eighteenth century, 45% had only one owner. This reflects the activity of Chepstow as a shipbuilding rather than a shipowning port, with many vessels being sold after completion, with only a short period of registration at the port.

An analysis of the occupational structure of each port also lends insight into the nature of shipowning in the eighteenth and early nineteenth centuries. On the Whitby register in the eighteenth century, the

maritime group of occupations owned as much as 39% of tonnage, and 45% in the years 1797-9 (see Tables 11a and 11b). 'Gentlemen', defined as those of independent means, made up 32% of total occupations in 1786 but this was reduced to 18% in 1797-9. The merchant grouping was of relatively little importance in Whitby, only 17% in 1786 although increasing to 22.8% in 1797-9. Altogether nearly fifty different occupations are represented in the Whitby registers of the eighteenth century. Investment in Whitby shipping was thus mainly from within the industry itself, and from local inhabitants who declined to give an occupational description to the registrar of the port, who were probably living off property or inherited wealth. To the latter, shipowning would have been a convenient form of investment, in an area without coal mines or large industrial enterprises, with few other opportunities for the employment of surplus capital. The Whitby merchants who invested in shipping in this period rarely described the commodities they dealt in: many must have been concerned with timber, or wines and spirits, and a large number acted as coal factors, usually at the North East ports or London. A large number of married ladies and spinsters played a part in the ownership of vessels at Whitby; it was a feature of many of the Quaker families common at the port in this period that women held shares in ships and owned property equally with their menfolk. Persons providing local services, many of whom would be concerned with shipbuilding, such as the joiners, coopers and whitesmiths, invested in local tonnage, as did those from the professions of the port. The registers of the nineteenth century include more precise descriptions of occupations, but it is clear that the bulk of investment in Whitby shipping came from maritime occupations and from those of private means, with relatively little capital from agriculture. The lack of any nearby industries prevented investment from any other source besides that within the

shipping industry itself, supplemented by capital of those of independent wealth in the locality.

Table 11c shows how many local shipowners changed their occupations over time, especially after having made their fortunes. James Atty, one of the most prominent Whitby shipowners of the eighteenth century, first held shares in shipping as a master mariner, then became a merchant before establishing his own sail-making business, which was later taken over by his son who gained sufficient wealth to call himself 'Gentleman'. John Ridley of Stow Brow, near Whitby, invested in local tonnage firstly as a mariner, then as a merchant, and then as a Gentleman. Another mariner who regarded himself as a gentleman by the end of his career was Benjamin Gowland of Whitby. The transition from merchant to gentleman was common: William Weatherill of Staithes, George Dodds of Boulby, John Chapman of Whitby, John Pudsey Daniel of Kettleness, Wakefield Simpson of Whitby and George Baker of Elimore Hall, all fall into this category. William Ripley of Staithes began as a master mariner before acting as a merchant, and Henry Simpson of Whitby first invested in shipping as a merchant before becoming a local banker. The development of banking at Whitby with a discussion of local banking families and partnerships is included in Appendix One at the end of this study. The importance of shipbuilding at the port is seen in the persons involved in the Whitby shipbuilding industry who were sufficiently successful to achieve the status of Gentleman, and who owned a considerable share in Whitby shipping. Henry Barrick of Whitby, with William Holt and William Reynolds, were all local shipbuilders turned gentlemen, whilst John Coulson, Henry Clarke, John Walker and Ingram Chapman were ropemakers in Whitby and Israel Hunter was a sail-maker who were later to regard themselves as of private means. Not all of the investors classified in Tables 11a and 11b as women were without an occupation: Ann Coalpitt of Newcastle was a Fitter, Mary Hodgson of

Lyth was a Farmer, Ann Jarvis of North Shields acted as a coal undertaker as did Mary Swales of Wapping, and Elizabeth Kemp of Southwark was a coal factor.

The pattern of shipowning occupations differs at other ports. To take Whitehaven again, 15% of the occupational groupings owning Whitehaven registered vessels were merchants, 40% were of a maritime background, tradesmen accounted for 15% and the share held by gentlemen was 30%.<sup>34</sup> Liverpool's registers have been analysed comparing 1786 with 1804-5, and it is these registers which show such a profound difference between those of Whitby and Whitehaven. In the Liverpool figures, in each case only 13.5% of owners could be classed as maritime, but 80.7% were merchants.<sup>35</sup> Similarly, over 80% of Lancaster shipowners were from the commercial category. The entrepreneurial origin of ship-owning capital in London from a continuous sample of a thousand vessels in the eighteenth century was 50% merchant, a quarter maritime, a tenth tradespeople and 15% gentlemen.<sup>36</sup> There is some problem with different writers adopting different occupational categories but the three broad headings, 'Merchants and Commercial', 'Maritime' and 'Professional/Social' were common to all and have been used in Table 12 as the most convenient.

An important group within the 'Maritime' sector of investors in Whitby shipping referred to themselves as 'shipowner' from the beginning of statutory registration. Although all persons appearing on the registers were to some degree 'shipowners', this activity was generally subsidiary to other occupations. Ralph Davis writes that this term does not appear in the London directories until 1815,<sup>37</sup> only two individuals under this title were found in the Liverpool registers of 1804-5<sup>38</sup> and 'shipowners' account 4.5% of Chepstow registrations.<sup>39</sup> Yet in Hull, 114 'shipowners' have been traced in the period 1766 to 1800, most of whom were originally master mariners; previously, successful masters had

become merchants, but by the latter half of the eighteenth century at Hull, they put their savings into shipping shares and left the sea as shipowners. This occurred especially in whalers which, with a generous bounty, were an excellent opportunity for investment. The eighteenth century registers for the port of Hull have not survived, but it has been suggested that they would show a variety of investors from diverse backgrounds, unlike the merchant-dominated shipowning community of Liverpool.<sup>40</sup> The large proportion of 'gentlemen' owning vessels at Whitby may be seen as a similar phenomenon as the situation at Hull: Table 11c shows a number of mariners, merchants, and those engaged in shipbuilding and its allied trades eventually becoming 'gentlemen', who continued and enlarged their investments in Whitby shipping. The specialist shipowner at Whitby also flourished. Besides shipowners owning shares in thirty-one Whitby ships on the register in the eighteenth century, a directory of 1784 records eight shipowners at Whitby,<sup>41</sup> another of 1791 refers to fifty-five<sup>42</sup> and a further directory of the principal inhabitants of Whitby in 1798 lists fifty-six.<sup>43</sup>

The lack of other opportunities for investment in the Whitby locality has been mentioned, but this should not detract from the advantages of shipowning as an investment. A single owner among others in the ownership of a vessel could sell his share independently of the other owners as no owner could dispose of another's share,<sup>44</sup> and the system of registration set out a clear list of the 'tenants in common'. The frequent registrations de novo at Whitby show how speedily and easily vessels changed hands. The motives influencing a decision to invest in shipping varied between the occupational groupings. In the case of master mariners, owning shares in ships was often expected in an appointment to command a vessel, and masters in the coal trade often played a significant part in the operation and management of their vessel,

as in the case of the Hannah, discussed in Chapter Five. Shipbuilders who were unable to find a ready purchaser for vessels built on speculation, often registered her in their names and operated her themselves, or at least retained a number of shares. The popularity of Whitby-built ships at other ports suggests that the majority of Whitby shipbuilders investing in tonnage did so from choice and not from an inability to sell their vessels. Whitby shipbuilders of the eighteenth century owned 130 vessels, particularly the Chapmans, Holt & Reynolds, the Campions, Henry Barrick and George and Nathaniel Langborne. Fishburn and Brodrick, the most important Whitby shipbuilders of this period, owned shares in only two vessels, and obviously preferred to concentrate on their shipbuilding activities.<sup>45</sup> Shipowning could be a new venture for an individual, but in many cases shares became an hereditary investment, passed down through a family. The large number of executors of wills who held shares in trust shows the importance of this tradition. Shipping shares which belonged to Hannah Chapman, a prominent Quaker of the port, who died well before the introduction of statutory registration, were still owned in her name in the early nineteenth century.

The geographical spread of ownership of Whitby vessels may also be determined from the registers. Whitby's isolated location helps to explain the predominantly local nature of investment in Whitby shipping. Shipowners from the Whitby area form over 83% of the whole. Besides the other North East ports, another significant area providing investment in Whitby-registered vessels was London (7.3%), showing the importance of these ports in the London coal trade. A list of vessels entering the port of London in 1728 shows that although only forty-four vessels from Whitby entered London, Newcastle was the port of departure of 1,525 vessels, several times the number from any other port,<sup>46</sup> and probably many of these

colliers were owned at Whitby. By the end of the eighteenth century, a number of members of the leading shipbuilding and shipowning families had moved to London in order to further their shipowning interests. Thomas Galilee moved from Whitby to Rotherhithe, and his brother Samuel to Wapping, where they were both mariners. Abel, William, John and Jonathan Chapman all left Whitby for London, where they worked as merchants. William Chapman subsequently moved to Newcastle, referring to himself as 'gentleman' when he invested in Whitby shipping. Other Whitby merchants/shipowners who set up business in London were Rowland Richardson, Francis Easterby and Robert Middleton Atty, another son of James Atty. William Moorsom, a Whitby sailmaker, moved his activities to Wapping, whilst his son Richard settled in London as a gentleman, and was to stand for Parliament for Whitby in 1832 and was narrowly beaten by Aaron Chapman,<sup>47</sup> another Whitby shipowner who had moved to London.

The geographical spread of ownership in Liverpool is comparable with the above in so far that 71.8% of owners resided in Liverpool and 7.9% from elsewhere in Lancashire, with only 2.7% living in London. 4.6% of investment in Liverpool shipping came from the West Indies, reflecting the importance of Liverpool shipping in the foreign trade. 22.7% of investment in Liverpool shipping was derived from outside Merseyside and the rest of Lancashire,<sup>48</sup> but only 12.4% of Whitby shipping came from outside the Whitby area, Tyneside and Teeside. The spatial distribution of investment in Whitby-owned tonnage is analysed in Table 13a and this is compared with other ports in Table 13b.

The patterns of shipowning in the preceding analysis can be used to determine the nature of the maritime economy of particular ports. In a port of small population, limited hinterland and few alternative possibilities for investment, it could be expected that the majority of the vessels were owned by one or two persons, generally from the maritime



group of occupations, and living locally. The indicators of a large, prosperous port were a spread of ownership among many persons, a large proportion of merchants among the investors, with a number of shipowners from outside the immediate port and even from abroad.

Also from a study of the statutory registers, it is possible to analyse the shipping shares owned by an individual over time, and Table 14 shows the vessels in which James Atty invested in the period 1786 to 1799. It is also possible to identify the principal shipowning families of Whitby from the registers. Prominent Whitby mariners who owned shares in Whitby ships were the Pressicks, Porritts, Chiltons, Medds and Calverts. The Verrills, Coles, Theakers and Unthanks of Staithes held shares in Whitby ships, as did the Storms, Bedlingtons, Grangers and Robinsons of Robin Hood's Bay. Settlements in the locality of Whitby are shown in Map Two. The Chapman family invested in Whitby shipping as mariners, merchants, shipbuilders and gentlemen. Other Whitby merchant/shipowning families were the Weatherills, Piersons, Barkers, Jacksons, Simpsons, Yeomans and Marwoods. Shipbuilders investing in tonnage included the Barricks, Hunters, Langbornes, Campions and Holts, and prominent shipowning shopkeepers were the Atkinsons, Peacocks, Andersons and Meads. Gentlemen investing in Whitby shipping were mainly from families engaged in other activities at the port, as mariners, merchants and shipbuilders, as were those who called themselves 'shipowners'. Only the details of name, residence and occupation of Whitby shipowners is given on the registers. Local directories provide only outline listings of the 'principal inhabitants' in certain years, without any details of the background of these people. Much is known of early Liverpool shipbuilders, from Registers of Freemen, details of the organisations of shipwrights, plentiful contemporary secondary material and from newspapers from 1800,<sup>49</sup> which are not available for Whitby.

The earliest historian of Whitby, Charlton, adds relatively little to this picture of the shipowning community of Whitby. He lists the trustees of the harbour, shown in Chapter Six, and describes the founding of shipyards, discussed in Chapter One and summarised in Map One.<sup>50</sup> The biographical appendix included in Young's work of 1817 refers mainly to local aristocrats and to the career of Captain Cook, but mentions the Chapman family, who resided in Whitby from 1400. William Chapman (1713-1793), who has been already referred to as a Whitby shipowner who moved to London and then Newcastle, left detailed papers.<sup>51</sup> The importance of the family unit in the Whitby shipping industry is seen in William Chapman's account of his uncle Ingram Chapman, eldest son of the first William Chapman, who went to sea when aged fourteen on board the Providence, which belonged to his father and was commanded by his half-brother, Robert. James Atty, who invested in shipping as a master mariner, merchant and sail-maker, and whose holdings are shown in Table 14, has proved elusive. Local directories list him as a sailmaker in 1784, 1791 and 1798, but his name is missing from an 1811 listing.<sup>52</sup> Our knowledge of the personalities of the Whitby shipowning community in the eighteenth and early nineteenth centuries is thus mainly dependent on the registers.

In conclusion, shipowning at Whitby developed with the success of its shipbuilding industry, but the former activity did not achieve the prominence among English ports that was enjoyed by the latter. The tonnage of shipping owned at Whitby grew from nearly 7,000 tons at the beginning of the eighteenth century to a peak of 53,001 in 1793, and the average tonnage from sixty to over 300 tons. The typical Whitby shipowner was a mariner, or working in the town's shipyards in a senior capacity, having worked his way up and with savings to invest. Rather than seeing Whitby shipowning as part of a merchant community, investing in vessels to carry exports from, and imports

to, the home port, the purchase of ships by the inhabitants of Whitby was largely an adjunct to its shipbuilding industry, and shipowners looked elsewhere for the employment of their vessels.

## REFERENCES: CHAPTER TWO

1. P.R.O. ADM 1 / 3863, quoted by J.H. Andrews, 'English Merchant Shipping in 1701', Mariner's Mirror, 41 (1955), pp.232-5
2. J. Brand, The History and Antiquities of the Town and County of the Town of Newcastle on Tyne, (London, 1789), II p.677
3. C. Capper, The Port and Trade of London, (London, 1862), p.109
4. The burthen of the vessels given in Brand's table is given in chaldrons rather than tons. See discussion of the tonnage of the Hannah in Chapter Five, Section Two
5. P.R.O. ADM 68 / 194-215
6. Rev. George Young, A History of Whitby, etc..., (Whitby, 1817), pp.545-6
7. Richard Weatherill, The Ancient Port of Whitby and its shipping, (Whitby, 1908), p.18
8. Lionel Charlton, The History of Whitby, etc..., (York, 1779), pp.336-9, 359
9. British Library, Add. MSS 11255-6. Also quoted in T.S. Willan, The English Coasting Trade, 1600-1750, (Manchester, 1938), pp. 220-2, Appendix 7. See Table 3
10. See, for example, the large increase in wages of merchant seamen during the Seven Years' War discussed in A.F. Humble, 'An Old Whitby Collier', Mariner's Mirror, 61 (1975), pp.51-60
11. See Chapter Five, Section Five
12. See Chapter Five, Section Two
13. 26 Geo. III c. 1x
14. P.R.O. CUST 17 / 1-30
15. Reg. Ship.
16. R. Craig, chapter on capital formation in shipping in eds. J.P.P. Higgins and Sidney Pollard, Aspects of Capital Investment in Great Britain, 1750-1850, (London, 1971), p.131
17. P.R.O. BT 6 / 191
18. B.L. Add. MSS 384.29/30
19. P.R.O. CUST 36 / 4
20. R.C. Jarvis, 'Eighteenth Century London Shipping', eds. A.E.J. Hollaender and William Kellaway, Studies in London History presented to Philip Edmund Jones, (London, 1969), p.417. See also R.C. Jarvis, 'Cumberland Shipping in the Eighteenth Century', Transactions of the Cumberland and Westmoreland Antiquarian and Archaeological Society, LIV (1955)
21. Jarvis, 'Eighteenth Century London Shipping', p.417
22. R. Craig and R. Jarvis, Liverpool Registry of Merchant Ships, (Manchester, 1967), Introduction, p.xxxviii, and Table 24, p.199

23. R.C. Jarvis, 'Fractional Shareholding in British Merchant Ships, with special reference to the Sixty-Fourth', Mariner's Mirror, 45 (1959), p.311
24. Jarvis, 'Eighteenth Century London Shipping', p.414
25. Jarvis, 'Fractional Shareholding', p.311
26. G. Farr, Chepstow Ships, (Chepstow, 1954). Based on Farr's transcriptions of the Chepstow certificates of registry, pp.31-106
27. Ralph Davis, The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries, (London, 1962), p.83
28. Craig and Jarvis, Liverpool Registry, p.199
29. Jarvis, 'Eighteenth Century London Shipping', p.411
30. Certificates of Registry of vessels registered at London, foreign trade: 85/1787, 140/1787, 20/1787, 109/1787. Custom House, London
31. Jarvis, 'Eighteenth Century London Shipping', p.411, and R.C. Jarvis, 'Liverpool Statutory Register of British Merchant Ships', Transactions of the Historic Society of Lancashire and Cheshire, 105 (1953), p.117
32. Jarvis, 'Eighteenth Century London Shipping', pp.411-2
33. Craig, 'Capital Formation', p.140
34. Jarvis, 'Eighteenth Century London Shipping', pp.416-7
35. Craig and Jarvis, Liverpool Registry, p.201
36. Jarvis, 'Eighteenth Century London Shipping', p.415
37. Davis, English Shipping Industry, p.81
38. Craig and Jarvis, Liverpool Registry, p.201
39. Farr, Chepstow Ships, pp.31-106
40. Gordon Jackson, Hull in the Eighteenth Century: a study in economic and social history, (Oxford, 1972), pp.142-3
41. Bailey's British Directory, (London, 1784), p.729
42. British Directory of Trade, etc..., (London, 1791), pp.738-744
43. Universal British Directory, (London, 1798), pp.738-744
44. G. Atkinson, The Shipping Laws of the British Empire, (London, 1854), p.122
45. Reg. Ship.
46. William Maitland, The History and Survey of London, etc..., (London, 1756), p.1263
47. Robert Tate Gaskin, 'Chronological List of Events connected with Whitby and its Neighbourhood', The Whitby Illustrated Almanack and Diary (Whitby, 1914)
48. Craig and Jarvis, Liverpool Registry, p.196
49. As discussed in R. Stewart-Brown, Liverpool Ships in the Eighteenth Century, etc..., (Liverpool, 1932), pp.31-40
50. Charlton, Whitby, pp.327, 332-6
51. Young, Whitby, pp.846-8
52. See notes 41, 42 and 43 and Holden's Directory, (London, 1811)

TABLE 1:

SHIPPING BELONGING TO THE OUTPORTS IN 1701: PORTS OWNING OVER 1000 TONS

<u>Port</u>	<u>No.</u>	<u>Tons</u>	<u>Men</u>	<u>Boys</u>	<u>Average tons per vessel</u>
Aldeburgh	22	1761	76	21	80
Bristol	165	17338	2359	-	105
Bideford	84	6299	977	-	74.9
Bridgwater	33	1287	171	-	39
Brighton	77	4185	308	-	54.3
Bridlington	41	2470	212	-	60.2
Barnstaple	78	3489	360	-	44.7
Colchester	34	3675	344	-	108
Chester	25	1925	196	-	77
Dartmouth	28	1554	232	-	55.5
Exeter	121	7107	978	-	59
Gloucester	48	1289	168	-	26.8
Guernsey	32	1260	180	-	39.3
Hull	115	7564	187	-	66
Hastings	35	1161	78	50	33.1
Ipswich	39	11170	576	-	286
Jersey	40	2039	296	-	50.9
Lynn	86	5702	526	-	66.3
Liverpool	102	8619	1101	-	84
Margate	37	2909	138	-	78.6
Minehead	30	1094	137	-	36.4
Newcastle	63	11000	580	-	174
Portsmouth	81	3651	243	-	45
Plymouth	58	2969	422	-	51.1
Poole	75	2095	327	-	27.9
Porchester	22	1054	70	-	47.9
Ramsgate	45	4100	388	-	91
Sunderland	48	3896	193	-	81.1
Sandwich	21	1146	104	-	54.5
Stockton	38	1278	142	-	33.6
Swansea	37	1468	164	-	39.6
Scarboro'	100	6860	606	-	69
Southampton	91	3814	291	-	41.9
Wells	47	1970	224	-	41.9
Whitehaven	90	7205	725	-	80
Weymouth	34	2270	206	-	66.7
Whitby	109	6819	650	-	63
Yarmouth	143	9914	668	-	69
Total of all ports	2944	182562	17758	176	62

Source: PRO ADM 1 / 3863 29 Jan. 1702 'An abstract of the number of vessels, total of their tonnage and the complement of mariners belonging to them in the several outports according to the accounts received from the respective ports the last year'.

Quoted in J.H. Andrews, 'English Merchant Shipping in 1701', Mariner's Mirror, 41 (1955), pp.232-5

TABLE 2:

## SHIPPING REGISTERED AT WHITBY AND OTHER PRINCIPAL PORTS, 1701-2

<u>Port</u>	<u>No.</u>	<u>Tons</u>	<u>Men</u>	<u>Average tonnage</u>
London	560	84882	10065	151.6
Bristol	165	17338	2359	105.1
Yarmouth	143	9914	668	69.3
Liverpool	102	8619	1101	84.5
Whitby	110	8292	571	75.4
Hull	115	7564	187	65.8
Exeter	121	7107	978	58.7
Scarborough	100	6860	606	68.6

Note: No other port had over 100 vessels - but Newcastle 63: 11,000 tons and Ipswich 39: 11,170.

Source: C. Capper, The Port and Trade of London, (London, 1802), p.109.

.....

TABLE 3:

TONNAGE REGISTERED AT WHITBY 1709, 1716, 1723, 1730, 1737, 1744, 1751-1782  
DIVIDED INTO FOREIGN, COASTAL AND FISHING TRADES, ACCOUNTING EACH VESSEL ONCE

<u>Year</u>	<u>Foreign</u>	<u>Coastal</u>	<u>Fishing</u>	<u>Total</u>
1709	810	9140	620	10570
1716	3070	8160	700	11930
1723	1909	4270	760	6939
1730	4650	6020	1000	11670
1737	3480	9230	960	13670
1744	2200	5720	1020	8940
1751	2780	10470	1020	14270
1752	3950	7330	1040	12320
1753	4780	10630	1040	16450
1754	5692	11850	1060	18602
1755	5156	7260	1060	13476
1756	3628	11640	1020	16288
1757	4416	11240	1020	16676
1758	4216	9840	1120	15176
1759	5300	14840	890	21030
1760	3470	10740	800	15010
1761	2240	7465	460	10165
1762	920	4600	680	6200
1763	1765	6078	680	8523
1764	2155	8394	700	11249
1765	1460	8696	700	10856
1766	2742	7486	700	10928
1767	3704	5468	1200	10372
1768	3814	7689	1200	12703
1769	5090	6603	1200	12898
1770	3500	5578	1200	10278
1771	2527	6530	1200	10257
1772	2965	7499	1200	11664
1773	3735	8379	1230	13344
1774	4146	9163	1020	14329
1775	5879	7000	1080	13959

TABLE 3: (contd.)

<u>Year</u>	<u>Foreign</u>	<u>Coastal</u>	<u>Fishing</u>	<u>Total</u>
1776	6120	6155	1080	13355
1777	7406	7925	1020	16351
1778	5876	5690	990	12556
1779	4473	5870	990	11333
1780	3549	7420	990	11959
1781	3313	6380	990	10683
1782	2891	6783	990	10664

Source: Musgrave MSS  
BL. Add. MSS 11255-6

TABLE 4:

NUMBER AND TONNAGE OF VESSELS REGISTERED AT WHITBY 1772-1785 AND  
1789-1808 COMPARED WITH TONNAGE REGISTERED IN ENGLAND IN THOSE YEARS

<u>Year</u>	<u>Whitby</u> <u>No.-Tons</u>	<u>England</u> <u>No.-Tons</u>	<u>Whitby/England</u> <u>%-Tons</u>
1772	122-11664	7635-582563	2.0
1773	134-13344	9146-673522	2.0
1774	133-14329	9154-680180	2.1
1775	132-13959	9108-697304	2.0
1776	125-13355	9424-695537	1.9
1777	142-16357	9120-698930	2.3
1778	124-12556	8985-701065	1.8
1779	123-11333	8476-662941	1.7
1780	125-11959	8182-618853	1.9
1781	122-10683	8056-626446	1.7
1782	124-10664	7936-615281	1.7
1783	132-12198	8342-669202	1.8
1784	138-17270	9111-793147	2.2
1785	140-14833	9753-859606	1.7
1789	255-48190	9560-1078363	4.5
1790	254-48102	9603-1134406	4.2
1791	250-49327	9624-1168478	4.2
1792	262-50790	10633-1186611	4.3
1793	268-53001	10779-1204750	4.4
1794	262-52559	10956-1220580	4.3
1795	253-50355	10827-1207299	4.2
1796	239-44911	10961-1240830	3.6
1797	233-40972	11044-1252545	3.3
1798	239-41696	11274-1287339	3.2
1799	227-37174	11499-1336542	2.8
1800	227-36868	12206-1466592	2.5
1801	236-37696	12759-1542790	2.4
1802	241-37902	13464-1643030	2.3
1803	247-38007	14029-1709590	2.2
1804	248-39411	14604-1784085	2.2
1805	244-39388	14790-1799210	2.2
1806	243-38464	14877-1786692	2.1
1807	216-35448	15087-1797135	2.0
1808	214-36116	15327-1833971	2.0

Source: P.R.O. CUST 17/1-30



TABLE 5:

TONNAGE REGISTERED AT WHITBY, 1786-1815, SHOWING TOTAL TONNAGE OF ALL VESSELS REGISTERED, DEDUCTION OF REGISTRATIONS DE NOVO, AND TONNAGE ADDED TO THE REGISTER EACH YEAR

<u>Year</u>	<u>Total tons all vessels registered</u>	<u>Net reg. (excluding RDNs)</u>	<u>Net gains or losses to Reg. (vessels lost or sold deducted)</u>	<u>Stock of shippin</u>
1786	15526	15270		
1787	35333	34903		
1788	3768	3168		51402*
1789	5001	2994	+2296	53698
1790	5583	4162	+2117	55815
1791	5738	5384	+4564	60379
1792	4315	3482	+1126	61505
1793	7939	7230	+4403	65908
1794	4515	3580	+994	66902
1795	6399	5102	-273	66629
1796	3534	2562	-4208	62421
1797	6420	5048	+1612	64033
1798	4356	3129	+504	64537
1799	7475	6100	+619	65156
1800	8326	5708	+2588	67744
1801	5380	3914	+1919	69663
1802	8018	3580	+1441	71104
1803	9197	7123	+5648	76752
1804	6759	6051	+5773	82525
1805	6806	4182	+3775	86300
1806	2226	1454	+746	87046
1807	6567	4309	+2111	89157
1808	4154	3524	+2282	91439
1809	5766	2605	+818	92257
1810	6259	4176	+2376	94633
1811	7649	5951	+3296	97929
1812	5235	3315	+1463	99392
1813	8269	6268	+4027	103419
1814	6457	5113	+1880	105299
1815	5266	3412	-519	104780

\* The registration of shipping at the port was only completed by the end of 1788, so that only after that date is it possible to determine the 'stock' of shipping at the port.

Source: Certificates of Registry,  
Custom House, Whitby.

TABLE 6:

OWNERSHIP OF WHITBY-REGISTERED VESSELS, 1786-1815: NUMBER OF OWNERS PER VESSEL ON DAY OF REGISTRATION, EXCLUDING DE NOVO REGISTRATIONS FOR CHANGES IN RIG OR DIMENSION

No. owners	Year							
	1786	1787	1788	1789	1790	1791	1792	
1	35	47	9	11	12	7	11	
2	27	22	12	2	12	12	7	
3	19	19	1	3	3	3	3	
4	8	23	-	2	2	2	1	
5	3	12	3	2	2	3	-	
6	7	8	1	2	1	2	-	
7	4	13	-	2	-	-	1	
8	3	4	-	1	-	-	-	
9	1	5	-	-	-	-	-	
10	2	3	-	-	-	1	-	
10+	7	4	-	-	-	-	-	
Total registrations	116	160	26	25	32	30	23	
% 4 owners or less	76.7%	69.4%	84.6%	72%	90.6%	80%	95.7%	
	1793	1794	1795	1796	1797	1798	1799	
1	11	6	10	8	12	8	16	
2	17	6	8	8	13	10	7	
3	5	4	5	2	3	5	8	
4	-	10	2	4	2	2	4	
5	3	1	3	1	4	-	2	
6	-	-	-	-	-	1	1	
7	-	-	-	1	-	1	-	
8	-	-	-	1	2	-	-	
9	1	-	1	-	1	1	1	
10	1	-	-	-	-	-	-	
10+	-	1	1	2	-	-	2	
Total reg.	38	28	30	27	37	28	41	
% 4 owners or less	86.8%	92.9%	83.3%	81.5%	81.1%	89.3%	85.4%	

TABLE 6 (contd.)

No. owners	Year								
	1800	1801	1802	1803	1804	1805	1806	1807	
1	20	12	20	22	16	19	15	16	
2	17	10	13	15	6	18	5	11	
3	8	11	11	9	8	5	5	3	
4	6	2	4	5	5	2	-	4	
5	1	1	5	3	1	-	1	1	
6	1	2	-	3	1	-	-	2	
7	-	-	-	-	-	-	-	2	
8	1	-	-	1	1	1	-	-	
9	-	1	-	-	-	-	-	-	
10	1	-	-	-	-	1	-	-	
10+	2	-	-	-	-	-	-	-	
Total	57	39	53	58	38	46	26	39	
% 4 owners or less	89%	90%	91%	88%	92%	96%	96%	87%	
	<u>1808</u>	<u>1809</u>	<u>1810</u>	<u>1811</u>	<u>1812</u>	<u>1813</u>	<u>1814</u>	<u>1815</u>	
1	6	8	17	17	14	12	9	14	
2	16	11	14	11	9	9	9	10	
3	4	5	2	7	1	7	7	6	
4	-	5	3	5	2	5	3	2	
5	-	1	2	2	4	1	1	2	
6	1	1	1	-	2	2	1	1	
7	-	1	-	-	-	1	-	-	
8	-	-	-	-	-	-	-	-	
9	-	-	-	-	-	-	-	-	
10	-	1	-	-	-	1	-	-	
10+	-	1	-	-	-	1	1	-	
Total	27	34	39	42	32	39	31	35	
% 4 owners or less	96%	85%	92%	95%	81%	85%	90%	91%	

---

Source: Registers of Shipping,  
Custom House, Whitby

TABLE 7:

OWNERSHIP OF WHITBY-REGISTERED VESSELS, IN THE EIGHTEENTH CENTURY:  
AVERAGE NUMBER OF OWNERS PER VESSEL ON DAY OF REGISTRATION

<u>Year</u>	<u>No. owners</u>	<u>No. vessels</u>	<u>Average</u>
1786	383	116	3.3
1787	596	160	3.7
1788	57	26	2.2
1789	76	25	3.0
1790	69	32	2.2
1791	93	30	3.1
1792	45	23	2.0
1793	94	38	2.5
1794	86	28	3.1
1795	86	30	2.9
1796	96	27	3.6
1797	100	37	2.7
1798	72	28	2.6
1799	120	41	2.9
	<hr/>	<hr/>	<hr/>
	1773	641	av. 2.8
1800	162	57	2.8
1801	99	39	2.5
1802	120	53	2.3
1803	140	58	2.4
1804	91	38	2.4
1805	96	46	2.1
1806	45	26	1.7
1807	94	39	2.4
1808	56	27	2.1
1809	104	34	3.1
1810	79	39	2.0
1811	90	42	2.1
1812	75	32	2.3
1813	119	39	3.1
1814	86	31	2.8
1815	76	35	2.2
	<hr/>	<hr/>	<hr/>
	1532	635	av. 2.4

Note: The number of vessels refers to those registered each year excluding de novo registrations for changes in rig or dimension.

Source: Registers of Shipping,  
Custom House, Whitby.

TABLE 8:

NUMBER OF SHIPOWNERS PER VESSEL WHEN REGISTERED: A COMPARISON BETWEEN PORTS.  
 % OF VESSELS REGISTERED ACCORDING TO NUMBER OF OWNERS

Port	Number of owners														
	1	2	3	4	5	6	7	8	9	10	10-15	15-20	20-25	25+	
Whitby <sup>1</sup>	30.2	23.3	16.4	6.9	2.6	6	3.4	2.6	0.9	1.7	6	-	-	-	
Liverpool <sup>2</sup>	25	24.5	20.5	12.5	3	2.5	5.5	2.5	1	2	-	0.5	0.5	-	
Chepstow <sup>3</sup>	45	18	17.5	4.5	4	3.5	1.5	0.5	1	1.5	3	-	-	-	
Whitehaven <sup>4</sup>	7	3	3			22		65							
London <sup>5</sup>	25	18	25			22		10							
Lancaster <sup>6</sup>	20	5	15	35	10	-	5	5	-	-	5				

Sources:

1. Registers of Shipping of Whitby, 1786.
2. Craig and Jarvis, Table 24. 200 registers of 1786.
3. G. Farr. First 200 registers, pp.31-106.
4. Jarvis, 'Eighteenth Century London'. 1,000 vessels, Eighteenth Century, p.417.
5. Jarvis, 'Eighteenth Century London'. 1,000 vessels, Eighteenth Century, p.417.
6. Registers of Shipping of Lancaster, transcribed by M. Schofield, 20 reg., 1786-1826.

TABLE 9:

OWNERSHIP OF WHITBY-REGISTERED VESSELS: ANALYSIS OF THE RELATIONSHIP BETWEEN SIZE OF VESSELS AND THE NUMBER OF OWNERS AND PART-OWNERS, 1786 AND 1798-9

1786

No.owners	Size of vessels (tons)						Total	%
	0-50	51-100	101-200	201-300	301-400	400+		
1	8	17	5	5	-	-	35	30.2
2	10	12	1	3	1	-	27	23.3
3	4	12	1	2	-	-	19	16.4
4	-	5	-	3	-	-	8	6.9
5	-	1	-	2	-	-	3	2.6
6	1	-	-	6	-	-	7	6.0
7	-	-	-	3	1	-	4	3.4
8	-	-	-	1	2	-	3	2.6
9	-	-	-	-	1	-	1	0.9
10	-	-	-	1	1	-	2	1.7
10+	-	-	-	2	5	-	7	6.0
Total	23	47	7	28	11	-	<u>116</u>	
%	19.9	40.5	6.0	24.1	9.5			

1798-9

1	4	12	6	1	1	-	24	34.8
2	1	6	7	1	2	-	17	24.6
3	-	4	5	-	2	2	13	18.8
4	-	-	1	4	1	-	6	8.7
5	-	-	-	-	2	-	2	2.9
6	-	-	1	1	-	-	2	2.9
7	-	-	-	-	1	-	1	1.4
8	-	-	-	-	-	-	-	-
9	-	-	-	-	2	-	2	2.9
10	-	-	-	-	-	-	-	-
10+	-	-	-	-	2	-	2	2.9
Total	5	22	20	7	13	2	<u>169</u>	
%	7.2	31.9	30	10.1	18.8	2.9		

Source: Registers of Shipping,  
Custom House, Whitby

TABLE 10:

AGE STRUCTURE OF SHIPPING REGISTERED: PORTS COMPARED %, AT THE BEGINNING OF REGISTRATION IN 1786-7

<u>Ports</u>	<u>1780s</u>	<u>Years vessels built</u>		<u>1750s</u>
		<u>1770s</u>	<u>1760s</u>	
London	40	33	17	10
Sunderland	38	27	15	20
Whitby	36	23	25	16
Whitehaven	30	21	28	20
Liverpool	60	19	17	4

Source: Adapted from  
R.C. Jarvis, 'Eighteenth Century London Shipping' in  
Studies in London History presented to Philip Edmund Jones,  
(London, 1969), pp.411-2

TABLE 11a:

ANALYSIS OF THE OCCUPATIONAL STRUCTURE OF WHITBY-REGISTERED SHIPPING IN THE EIGHTEENTH CENTURY. NUMBER OF SHARES IN VESSELS OWNED, BY EACH OCCUPATIONAL GROUP

<u>Occupation</u>	<u>No. of shares in vessels</u>
<u>Maritime</u>	
Master Mariners	248
Mariners	61
Shipbuilders	85
Ropemakers	147
Sailmakers	97
Shipwrights	3
Mastmakers	15
Anchorsmiths	1
Fishermen	6
Lightermen	6
Shipbrokers	2
Shipowners	31
	<u>702</u>
<u>Gentlemen</u>	556
<u>Merchants</u>	
Merchants	235
Coal Factors	34
Shopkeepers	45
	<u>314</u>
<u>Women</u>	113
<u>Services</u>	
Carriers	4
Blacksmiths	1
Cordwainers	3
Leather cutters	1
Tanners	1
Masons	6
Millers	3

TABLE 11a(contd.)

92

<u>Services (contd.)</u>	<u>No. of shares in vessels</u>	
Silversmiths	6	
Joiners	1	
House carpenters	6	
Plumbers	1	
Tinners	3	
Coopers	2	
Whitesmiths	1	
Stone cutters	1	
Hardware manufacturers	1	
Alum workers	5	
Labourers	1	
	<hr/>	
	47	
<u>Farmers</u>	33	
<u>Professional</u>		
Attorneys	5	
Government clerks	1	
Bankers	11	
Brokers	8	
Schoolmasters	2	
Surveyors	1	
Pastors	3	
	<hr/>	
	31	
<u>Nobility</u>	4	
<u>Summary</u>		
<u>Occupation</u>	<u>No. vessels</u>	<u>%</u>
Maritime	702	39.0
Gentlemen	556	30.9
Merchants	314	17.4
Women	113	6.3
Services	47	2.6
Farmers	33	1.8
Professional	31	1.7
Nobility	4	0.3
	<hr/>	
	1800	100.0

Source: Registers of Shipping,  
Custom House, Whitby. Counting each share, rather than individuals



TABLE 11b:

A COMPARISON BETWEEN OCCUPATIONAL GROUPS OF 1786 AND 1797-9

<u>Occupation</u>	<u>1786</u>	<u>%</u>	<u>1797-9</u>	<u>%</u>
Maritime	143	35.4	126	45.0
Gentlemen	129	32.0	51	18.2
Merchants	69	17.0	64	22.8
Women	38	9.4	10	3.6
Services	16	4.0	8	2.9
Farmers	1	0.2	10	3.6
Professional	4	1.0	11	3.9
Nobility	4	1.0	-	-
	404	100.0	280	100.0

Source: Registers of Shipping,  
Custom House, Whitby.

.....

TABLE 11c:

ANALYSIS OF THE OCCUPATIONAL STRUCTURE OF WHITBY-REGISTERED SHIPPING OWNERS, IN THE EIGHTEENTH CENTURY. OVERLAPPING OCCUPATIONS: OWNERS WITH CHANGING STATEMENTS OF OCCUPATION. NUMBER OF VESSELS OWNED OR PART-OWNED IN BRACKETS.

1. James Atty of Whitby  
Master Mariner (7), Merchant (33), Sailmaker (39)
2. John Ridley of Stow Brow  
Mariner (1), Merchant (7), Gentleman (2)
3. William Weatherill of Staithes  
Merchant (4), Gentleman (3)
4. George Dodds of Boulby  
Merchant (4), Gentleman (1)
5. John Chapman of Whitby  
Merchant (16), Gentleman (25)
6. Henry Simpson of Whitby  
Merchant (2), Banker (2)
7. Henry Barrick of Whitby  
Shipbuilder (14), Gentleman (1)
8. Israel Hunter of Whitby  
Sailmaker (3), Gentleman (3)
9. James Atty jnr of Whitby  
Sailmaker (3), Gentleman (6)
10. John Pudsey Daniel of Kettleness  
Merchant (1), Gentleman (9)
11. Benjamin Gowland of Whitby  
Master Mariner (1), Gentleman (9)
12. John Coulson of Whitby  
Ropemaker (1), Gentleman (1)
13. Henry Clark(e) of Whitby  
Ropemaker (17), Gentleman (2)

TABLE 11c:(contd.)

14. Wakefield Simpson of Whitby  
Merchant (4), Gentleman (4)
15. John Walker of North Shields  
Ropemaker (32), Gentleman (2)
16. George Baker of Elimore Hall  
Merchant (2), Gentleman (1)
17. Ingram Chapman of Whitby  
Ropemaker (5), Gentleman (2)
18. William Holt of Whitby  
Shipbuilder (2), Gentleman (1)
19. William Reynolds of Whitby  
Shipbuilder (8), Gentleman (1)
20. William Ripley of Staithes  
Master Mariner (1), Mariner (1), Merchant (1)

The following are classified as women in the tables:

21. Ann Coalpitt of Newcastle, Fitteress (1)
22. Mary Hodgson of Lyth, Farmer (1)
23. Ann Jarvis of North Shields, Coal Undertaker (1)
24. Mary Swales of Wapping, Coal Undertaker (1)
25. Elizabeth Kemp of Southwark, Coal Factor (2)

---

Source: Registers of Shipping,  
Custom House, Whitby  
.....

TABLE 12:

A COMPARISON BETWEEN THE PORTS: ANALYSIS OF OCCUPATIONAL STRUCTURE  
OF SHIPOWNING, %

<u>Ports</u>	<u>Maritime</u>	<u>Occupations Commercial</u>	<u>Social</u>
Whitby <sup>1</sup>	39.0	20.0	30.9
Liverpool <sup>2</sup>	13	80	3
London <sup>2</sup>	25	50	15
Exeter <sup>2</sup>	35	25	20
Whitehaven <sup>2</sup>	40	15	30
Chepstow <sup>3</sup>	18.9	63.0	5.4
Lancaster <sup>4</sup>	7.7	84.6	7.7

---

Sources: 1. Registers of Shipping, Custom House, Whitby  
2. Jarvis, 'Eighteenth Century London', pp.416-7  
3. Farr, pp.31-106

Note: 4. Registers of Shipping of Lancaster, 20 regs, 1786-1826.  
Whitby figures for 1786-99. Jarvis also includes 'tradesmen':  
London 10%, Liverpool 3%, Exeter 20%, Whitehaven 15%.  
These headings are highly simplified, due to differing  
terminology and classification used by writers.

TABLE 13a:

GEOGRAPHICAL DISTRIBUTION OF OWNERSHIP OF WHITBY-REGISTERED VESSELS,  
EIGHTEENTH CENTURY. PLACE OF RESIDENCE OF EACH OWNER OR PART-OWNER

<u>Place of residence</u>	<u>No. owners</u>	<u>%</u>
Whitby	507	57.9
Whitby area (20 miles radius)	221	25.2
London	64	7.3
Tyneside and Teeside	39	4.5
Others	<u>45</u>	<u>5.1</u>
	876	100.0

Source: Registers of Shipping,  
Custom House, Whitby

TABLE 13b:

A COMPARISON BETWEEN THE PORTS: GEOGRAPHICAL DISTRIBUTION OF OWNERSHIP

<u>Port</u>	<u>Port</u>	<u>Locality</u>	<u>London</u>	<u>GB</u>	<u>Foreign</u>
Whitby <sup>1</sup>	57.9	25.2	7.3	9.6	-
Liverpool <sup>2</sup>	71.8	7.9	2.7	15.4	4.6
Chepstow <sup>3</sup>	58.9	33.4	0.2	7.5	-
Lancaster <sup>4</sup>	43.6	51.2	2.6	2.6	2.6

Sources: 1. Registers of Shipping, Custom House, Whitby  
2. Craig and Jarvis, Table 21  
3. Farr, pp.31-106  
4. Registers transcribed by M. Schofield, 20 regs. 1786-1826

TABLE 14:

## JAMES ATTY OF WHITBY - SHIPS INVESTED IN, 1786-1799

<u>Year</u>	<u>Req.</u>	<u>Name</u>	<u>Aqu'd</u>	<u>Sold</u>	<u>Tons</u>	<u>Fate</u>	<u>No.other owners</u>
1786	38	Autumn	1786	?	59 <sup>75</sup> /94	Reg. Boston	1
"	54	Summer	"	?	89 <sup>36</sup> /94	Sold	-
"	68	Hannah	"	?	279 <sup>55</sup> /94	RDN 37/1802	1
"	89	3 Sisters	"	?	250 <sup>63</sup> /94	Lost	3
"	97	Commerce	1786	1787	57 <sup>33</sup> /94	RDN 20/1796	1
1787	13	Triton	1787	?	115 <sup>70</sup> /94	Sold	-
"	26	Lively	1787	1802	251 <sup>72</sup> /94	RDN 13/1803	4
"	31	Friendship	1787	?	399 <sup>13</sup> /94	Lost 1790	13
"	34	Welcome Mess- enger	1787	?	206	Lost 1790	4
"	37	Ariel	1787	?	331 <sup>64</sup> /94	Sold to Sund. 1796	6
"	48	John ?	1787	?	373 <sup>79</sup> /94	Sold to Newc. 1795	3
"	51	Achilles ?	1787	?	325 <sup>54</sup> /94	RDN 9/1797	6
"	55	Midsummer	1787	?	384	Lond. 1799	3
"	56	James	1787	?	362	Lond. 1800	3
"	62	Seaflower	1787	?	354 <sup>64</sup> /94	Lost 1797	8
"	64	Dart	1787	?	51 <sup>54</sup> /94	RDN 14/1801	3
"	66	Brothers	1787	?	355	Lost 1792	7
"	69	Christopher	1787	?	282	Lond. 1801	7
"	72	Contents In- crease	1787	?	288	RDN. 6/1792	8
"	75	Chance	1787	?	326 <sup>6</sup> /94	Lost 1788	10
"	100	Syra ?	1787	?	359	RDN 22/1796	6
"	107	Whitby	1787	?	376 <sup>79</sup> /94	Lost 1793	6
"	110	Content	1787	?	332 <sup>85</sup> /94	Cap. 1797	3
"	130	Mercury	1787	1787	93 <sup>39</sup> /94	Lost 1795	1
"	150	Charlotte	1787	?	199	RDN 1789	-
"	153	Vine	1787	?	64 <sup>33</sup> /94	Sold	-
1788	14	Hebe	1788	?	261 <sup>15</sup> /94	Lond. 1788	1
"	27	Notus	1788	?	133 <sup>80</sup> /94	Sold	4
1789	11	Hebe	1789	?	129 <sup>43</sup> /94	Lond. 1794	2
"	20	Doris	1789	?	141 <sup>52</sup> /94	Sold	-
1790	5	Swift	1790	?	133 <sup>13</sup> /94	Lond. 1792	-
"	17	Amphitrite	1790	?	286 <sup>62</sup> /94	Guernsey 1791	-
"	22	Edward	1790	?	165 <sup>32</sup> /94	RDN 1798	5

TABLE 14 (contd.)

<u>Year</u>	<u>Req.</u>	<u>Name</u>	<u>Aqu'd</u>	<u>Sold</u>	<u>Tons</u>	<u>Fate</u>	<u>No.oth owners</u>
1790	25	Adeona	1790	?	283 <sup>61</sup> /94	Cancelled 1792	-
"	33	Tyro	1790	?	193 <sup>5</sup> /94	Newc.1792	-
"	34	Brothers	1790	?	163 <sup>71</sup> /94	Dublin 1792	2
1791	25	Adriatic	1791	?	184 <sup>22</sup> /94	RDN ?	-
"	28	Hygeia	1791	?	232 <sup>64</sup> /94	Lond. 1792	1
"	8	Isis	1792	?	251	Lond. 1793	1
"	12	Palladium	1792	?	154 <sup>36</sup> /94	Waterford 1794	-
"	13	May	1792	?	116 <sup>13</sup> /94	Lond. 1794	-
"	18	Orient	1792	?	286	Lond. 1793	1
"	23	Mariner	1792	?	371 <sup>48</sup> /94	Lond. 1793	-
1793	1	Rambler	1793	?	346 <sup>85</sup> /94	Lond. 1797	-
"	16	Progress	1793	?	281 <sup>45</sup> /94	Lond. 1794	1
"	22	Nymph	1793	?	265 <sup>41</sup> /94	Lond. 1796	1
"	30	St. John's	1793	?	119 <sup>73</sup> /94	Newc. 1794	-
"	32	Venturer	1793	?	233 <sup>70</sup> /94	Sund.	-
"	39	Assistance	1793	?	232 <sup>11</sup> /94	Cap. 1795	1
1794	8	Fortress	1794	?	299 <sup>80</sup> /94	Lost 1796	2
"	23	Defence	1794	?	436	Lost 1796	1
"	29	Patriot	1794	?	372 <sup>26</sup> /94	Lond. 1795	2
1795	4	Zealous	1795	?	145 <sup>63</sup> /94	Lond. 1796	-
"	8	Sarah	1795	?	364	Lost 1796	11
"	28	Pursuit	1795	?	408 <sup>51</sup> /94	Lond. 97	2
"	34	Camilla	1795	?	218 <sup>67</sup> /94	Sold foreign	1
1796	1	Nimble	1796	?	115 <sup>57</sup> /94	Captured	1
"	19	Trident	1796	?	236 <sup>83</sup> /94	L'pool 1796	-
"	22	Lyde	1796	?	371 <sup>78</sup> /94	Lost 1801	4
"	26	Aimwell	1796	?	263 <sup>87</sup> /94	RDN 1802	1
"	27	Swift	1796	1797	79	RDN 14/1797	-
1797	3	Ardent	1797	?	195 <sup>73</sup> /94	Lond. 1797	1
"	9	Lynx	1797	?	340 <sup>46</sup> /94	Hull 1798	2
"	19	Rachel	1797	?	383	RDN 1802	3(1/8 share)
"	21	Adroit	1797	?	299 <sup>39</sup> /94	L'pool 1798	1
"	30	Hazard	1797	?	178	reg. Lond.	1
"	34	Enterprise	1797	?	184 <sup>34</sup> /94	Reg. Lond.	-
1798	4	Edward	1798	?	165 <sup>32</sup> /94	Reg. Newc.	5
"	27	Rover	1798	?	120 <sup>65</sup> /94	Lost	-

TABLE 14 (contd.)

<u>Year</u>	<u>Reg.</u>	<u>Name</u>	<u>Aqu'd</u>	<u>Sold</u>	<u>Tons</u>	<u>Fate</u>	<u>No.othe owners</u>
1799	5	Stranger	1799	?	181	RDN 04	1
"	13	Alert	1799	?	386 <sup>64</sup> /94	Lond. 00	1
"	31	Refuge	1799	?	191	RDN 00	-
"	32	Fauconberg	1799	1801	335 <sup>16</sup> /94	Grimsby	-
"	33	Indefatigable	1799		549 <sup>56</sup> /94	Burnt 1815	2

Source: Taken from the Certificates of Registry, Custom House, Whitby.

Note: The number of 64th shares is not given until 1824. Registration began only in 1786: Atty could have owned vessels before this date. Total of 74 vessels, Atty owned 23 outright.

RDN = Registered de novo, at Whitby.

## CHAPTER THREE: WHITBY SAILING SHIPS c. 1815-1914

The prosperity of the port of Whitby greatly depends upon the prosperity of the shipping trade ? - Yes, it is our staple trade.

Gideon Smales, a Whitby shipowner in his evidence to the Select Committee on British Shipping of 1844.<sup>1</sup>

The building and ownership of wooden sailing vessels in Whitby continued as the principal activity of the inhabitants of the port until the last quarter of the nineteenth century. The period was marked by a failure to sustain the contribution to national shipbuilding output which was achieved at the end of the eighteenth century. The Whitby historian Weatherill, writing in 1908, considered that 'about 1870 the wooden ships began to decline before the increasing competition of iron and steam, and by the end of the nineteenth century the wooden sailing ships were nearly extinct at this port, only some smaller coasters remaining', and added that 'Whitby, although continuing to increase its shipping after 1828, never afterwards held the same forward position, compared with other ports of the United Kingdom. . .'<sup>2</sup>

A picture of the state of the shipping industry of Whitby in the middle decades of the nineteenth century is given by three witnesses at the Select Committees of 1833 and 1844. Robert Barry, a member of a prominent Whitby shipbuilding and shipowning family, whose papers have already been referred to, had abandoned his shipbuilding yard in 1830. He voiced the traditional complaints of the shipowner when he described the lack of profitability of his vessels, blaming foreign competition aggravated by the reciprocity treaties. He could not adequately explain why investment in the Whitby shipping industry continued, except in terms of hope: 'like a drowning sailor they [the shipowners and shipbuilders of Whitby] cling to it till their property is gone'.<sup>3</sup> Thomas Turnbull,<sup>3</sup> originally a watchmaker who invested in

shipping and whose family were later to introduce steamship building to Whitby, agreed with Barry that the depression in the shipping of the port was not the result of a lack of capital. He pointed out the significance of a fall in coal freights, and considered that the decline in earnings in this vital trade tended 'to depress the energies of the town'.<sup>4</sup> These complaints were reiterated in a 'petition of the shipowners, merchants and others, interested in the coasting coal trade of Whitby', which was accompanied by similar protests from other North East ports presented to the House of Commons in 1830.<sup>5</sup> Turnbull went on to maintain that 'I have generally considered that the only reason that shipbuilding has been driven from Whitby is, that the shipbuilders there build better ships than are built at other places in the North of England, and consequently they cannot afford to build them at the low rate as at other places; and they seem to have a pride in building the ships as good as they were some years ago, and consequently cannot build them at the same rate that others will'. He considered that shipbuilders at other ports, such as Sunderland and Shields, were prepared to build vessels of an inferior quality, which was 15% to 20% cheaper than at Whitby, which 'will answer every purpose during the ten years that she stands upon the first letter'. He complained that the regulations of the classification of ships operated as an inducement to the construction of inferior vessels to the detriment of Whitby ships.<sup>6</sup>

Gideon Smales, a shipowner, shipbuilder and block and mast maker, giving evidence in 1844 described a further fall in freights and a lack of remunerative employment. He insisted that 'the Whitby ships have always been held in high esteem in all trades, and in all markets to which they have been sent'. Smales also maintained that 'very few inferior ships were built at Whitby'. Sunderland builders used Baltic and



American timber whilst at Whitby teak and British oak, more durable yet more expensive, was the predominant shipbuilding material. He saw Whitby shipping being forced, with the lowering of freights, away from the foreign trades and back to the Baltic and Mediterranean, increasingly falling back on the coastwise coal trade. In attempting to explain the absence of a concomitant decline in tonnage registered, he suggested that 'probably the shipowners of Whitby are composed of a class of people where the fluctuation will be less than with any other body of men; they command their own vessels, and they are obliged to struggle with the times; they cannot get out of it'. He thus saw the shipowners of Whitby operating in very small units, often individually, without outside capital and dependent on shipping for their livelihood.<sup>7</sup>

A further contemporary insight to the shipping industry of Whitby in the nineteenth century is seen in the pages of the Whitby Gazette, founded in 1857. The affection and romanticism felt for sailing ships is described in ship launch reports, which were attended by the bulk of the local population amidst great ceremony. The meetings of leading shipowners of the port, the Chapmans, Barricks, Marwoods, Hobkirks, Harrowings and Smales were reported in the Gazette and considered what appeared a continuous depressed state of shipping and decline in freights. Although the sailing vessels of the mid to late nineteenth century were mainly engaged in the coasting trade, they were affected by a decline in the foreign trade as this resulted in more vessels entering coastwise trading in a search for remunerative freights. They also complained that foreigners were dominating trades that used to be predominantly British, and that British liberality through the reciprocity treaties was somewhat one-sided.<sup>8</sup>

Thus the contemporary view of the sailing ship industry at Whitby

after the Napoleonic Wars was of a steady decline in the tonnage of sailing ships built and owned at the port, finally replaced by steamers, facing falling freights, unprecedented foreign competition, with a reduction in the demand for the high quality but expensive Whitby-built ships in favour of cheaper vessels. The accuracy of this picture may be challenged, and considered in more detail, especially through an analysis of the statutory registers of shipping.<sup>9</sup> Tables 1 and 2 summarise the Whitby registers for the period 1815 to 1914, and it is clear that to see Whitby-owned sailing ships as in a steady decline in this period is an over-simplification. Tonnage registered at Whitby increased between 1815 and the late 1860's, from over 43,000 tons to a peak of 74,859 in 1866, and declined only from that point. Despite the pessimism of the witnesses of 1833 and 1844, shipowning at Whitby recovered to its pre-war levels and exceeded its eighteenth century peak. Over the nineteenth century, a total of 209,487 tons of shipping was added to the Whitby register and 131,592 aggregate tons was sold from Whitby and registered elsewhere. The ports of origin and destination of Whitby-registered tonnage were predominantly London and the ports of the North East, reflecting the continuing importance of the coastwise coal trade. The final column of Table 2 shows an analysis of the rate of growth or decline in the register each year. A tonnage deficit after the Napoleonic Wars was followed by a recovery in the second half of the 1820's. The shipping industry at Whitby as seen in the registrations seems unsteady by the time of the 1833 Committee, but the complaints of Gideon Smales of a depression in Whitby shipping in 1844 are not borne out by the series of net accretions to the register between 1835 and 1844. The middle decades of the nineteenth century, which saw the maturing of Britain's industrial economy, the development of sterling as an

international currency and an increase in the volume of world trade, encouraged the growth of British merchant tonnage.<sup>10</sup> The Metropolis enjoyed a large share of the benefits of this development, as did the ports of Newcastle and Liverpool. It has been suggested in a study of this latter port that 'between 1820 and 1832 such ports as Hull, Chester, Whitby, Whitehaven and Scarborough experienced a decline in the tonnage of shipping on their respective registers'.<sup>11</sup> The decrease in registrations at Whitby in this period is slight and this view of the polarisation of shipowning to the major ports overlooks the growth in the Whitby register in the 1860's.

Between 1815 and 1865, in thirty-two years the Whitby register gained tonnage, and in eighteen years the register suffered a net loss. In attempting to explain these variations in the annual increases and decreases to the register, it should be considered that losses of ships at sea were fortuitous and do not reflect levels of economic activity such as the buying or selling of vessels. When a ship was lost, several months would elapse before the owner was convinced of the loss, especially if the vessel was engaged on a long voyage, and then the replacement could take up to a year to build. In unprofitable times, especially when relatively few vessels were insured, the owner might not be able to afford a replacement and run down his business by natural wastage. Yet in selling a ship, the owner was responding to adverse economic conditions. Banking crises in Whitby, as discussed in Appendix One at the end of this study, reflected times of national financial difficulties, and were the occasion of losses from the Whitby register. In 1816, Miles, Wells & Co. of Whitby went out of business; there was a net loss in shipping registered in 1817-8 and 1820-3. Pease & Co., Thomas Pierson, and Sanders and Son all relinquished their banking activities in the 1820's and this

inevitably led to financial instability at the port. In addition to the investment in shipping by bankers themselves, shares were often mortgaged to the bank. In 1841, Campion's Bank, one of the most important in the town, suffered bankruptcy; in this year, the Whitby register decreased from a net gain of 3,741 tons to a loss of 235. In 1845 and 1846 two other local banks were taken over by the York City and County Bank, which may have resulted in difficulties for local ship-owners, with another decline in gains to the register in 1847.<sup>12</sup> The Overend Gurney banking crisis of 1866 saw a decline in the register from 5,543 tons added in 1865 to a deficit of 15 tons in 1866. Annual gains after this point occurred only in 1870, 1894, 1902, 1905 and 1912. This financial failure, combined with the beginnings of investment in steam tonnage, prevented the recovery of investment in sailing ships at Whitby, and interest in them was only maintained, by the end of the nineteenth and early twentieth centuries, in short coastal voyages and when the price of coal was prohibitively expensive.

The decline in shipowning at Whitby may be seen not only in the decrease in the stock of shipping registered at the port. There was a reduction in investment in new-built vessels, which declined earlier than the purchase of cheaper, second-hand vessels from other ports. The average tonnage of sailing ships on the register fell from over 200 tons to only 50 by the early 1900's. By the 1860's Whitby shipowners were not replacing lost vessels, with more losses than sales from the register dating from this period.

An approximation of the capital invested in Whitby sailing ships over this period is made possible through the construction of a price index, shown in Table 3. This considers only newly-built ships added to the register each year, without reference to investment in second-hand tonnage or subsequent transactions, but indicates the overall decline in the price per ton of sailing vessels throughout the nineteenth

century. By the 1870's the demand for sailing ships had diminished to the extent that in 1877, at an auction of ships at Whitby, the Robinsons, built at Sunderland in 1865, of 213 tons, was sold for £850, or less than £4 per ton. In a sale of small coasting schooners in 1870, it was remarked that £5 would have bought any of them, but there were no bids.<sup>13</sup> Large foreign-going barques were less popular at Whitby than Liverpool or London, for example, but an exception was the Princess Elfleda,<sup>14</sup> built by Smales Brothers in 1866, with a registered tonnage of 476.82 and length of keel of 120 feet. Her hull cost was £8 18s 3d and outfit £3 8s, a higher price per ton than the small coasters which account for the majority of the new acquisitions to the Whitby register by the end of the nineteenth century.

The most complete series of prices available is for the first four decades of the nineteenth century.<sup>15</sup> The need to replace vessels lost during the war resulted in a heavy demand for new ships, leading to a high price per ton. The ships lost by European countries during the war meant that much of the carrying trade of these countries was taken by British ships, but by the 1820's this means of employment had largely disappeared. With the fall in coal freights of the late 1820's, and the effects of the reciprocity treaties,<sup>16</sup> the price of vessels fell, from £18 per ton in 1826 to only £11 per ton in 1831. In 1826, eighteen newly-built vessels, of an aggregate tonnage of 3,591 were registered at Whitby, representing an investment of £64,638, assuming an average price per ton in that year of £18. It has not been possible to calculate the average price per ton of Whitby-built sailing ships for each year from 1815 to 1914, so an analysis of annual capital invested for this period has not been attempted; Table 3 covers only from 1815 to 1838, when an accurate price per ton is known.

What was the nature of shipbuilding at Whitby in the nineteenth century

as far as this may be deduced from the statutory registers ? Table 4a shows newly-built vessels coming on to the Whitby register, with those built at Whitby shown as a percentage of the whole. This proportion was traditionally high in the eighteenth and early nineteenth centuries, as seen in Chapter One: in many cases because the most prominent ship-owners were also shipbuilders. It is a feature of the decline of wooden sailing ships at Whitby that not only did the average tonnage of these vessels decrease, but the tonnage built at Whitby gradually diminished and new additions to the register came primarily from other ports. This decline is also seen in Table 4b, which summarises Whitby shipbuilding output from parliamentary sources.

Map One outlines the Whitby shipbuilders of this period. The personalities who dominated the Whitby shipbuilding industry of the late 1700's and early 1800's passed their businesses on to succeeding generations, but the majority had abandoned their yards entirely by the mid nineteenth century. Holt & Richardson finished shipbuilding in 1819, the Campions in 1824, Peter Cato in 1829, followed by the Fishburn & Brodrick yard and Robert Barry's business, which both closed in 1830. Campion had become bankrupt, Barry had given up his business through a decline in profits, but this was not true necessarily in the case of the other builders. The death of Fishburn in 1826 and his partner Brodrick in 1829 had led to the closure of their yard, and Peter Cato was accidentally killed by falling over the quay into a lighter in 1829. Henry Barrick was forced to abandon his yard in 1866 when he became blind, but he may have been in financial difficulties in any case as Thomas Hobkirk had become bankrupt shortly before, in 1862. Smales Brothers were to build the last Whitby sailing ship, and only the Turnbulls survived the decline of wooden sailing ship building and adapted their yard for the construction of steamships.<sup>17</sup>

Table 5 shows the steady diminution of sailing ship building at Whitby according to the output from each yard, as far as this may be determined from the registers. In 1815, fourteen shipbuilders were active at the port, but after the Napoleonic Wars, this number decreased, together with the output of tonnage and the size of individual ships. Whitby no longer attracted new shipbuilders to set up business at the port, as the demand for cheaper vessels meant that other ports became more competitive, with larger imports of timber and the presence of nearby mineral resources. The building of steamships at Whitby came late in comparison with the Clyde, Newcastle and Jarrow, and the demand for large sailing ships for the long haul trades was not supplied from Whitby, where colliers and coastwise traders were the specialty.

A further analysis of the decline of Whitby sailing ship building is made possible through a study of the Turnbull Registers, which give a year by year picture of the Whitby sailing fleet (and those of other ports), listing the owners of each vessel each year.<sup>18</sup> In 1876, fifty-seven Whitby-built sailing vessels were on the register of the port, of an average tonnage of 139.8 tons per vessel. The average age of these ships was 30.1 years. By 1882, however, the number and tonnage of Whitby-built sailing vessels registered had declined to only forty-four, with an average tonnage of 112.9 tons and an average age of 32.7 years. In 1892, only twenty Whitby-built sailing ships were owned at the port, of only 66.3 tons each and thirty-five years old, on average. Few newly-built vessels from the home port were coming on to the register any more. A remarkable longevity is shown by Whitby-built sailing ships: in 1876, two eighteenth century vessels were still afloat. The Alert, built in 1802, still appears on the 1892 Turnbull Register, highlighting the quality of local shipbuilding. So, from these three sample years of 1876, 1882 and 1892, it is possible to discern three trends in Whitby-built sailing vessels at the

port: a decline in the number and tonnage registered, a diminution in the average tonnage of each ship, and a steady increase in the average age of the fleet.

An analysis has been made of a series of sample years of Lloyd's Underwriters' Register or 'Green Book' to discern the tonnage of Whitby-built vessels registered at other ports, a feature not shown by the registers.<sup>19</sup> If the Whitby-built tonnage known to be registered at Whitby is deducted, the remainder is the tonnage built at Whitby and registered elsewhere. Table 6 shows the early popularity of Whitby built ships among the owners of other ports, but the concomitant decline of these vessels with the falling off of wooden shipbuilding at Whitby towards the end of the nineteenth century. The largest Whitby-built vessels were more likely to be sold to other ports, whilst the smaller ships were popular among Whitby shipowners. This reflects the concentration of Whitby registered shipping in the short-haul trades by the late 1800's, as discussed in Chapter Five. The 'Green Books' show that between 30% and 45% of Whitby-built vessels were also registered at the port. The Mercantile Navy List of 1875, however, includes ninety-six vessels, of 13,708 aggregate tons built at Whitby and afloat in that year, of which fifty-one vessels of 7,284 tons, or 53%, were owned at the port. This is a higher proportion than the figures listed by Lloyd's but indicates that by the mid 1870's the demand for Whitby-built sailing ships at other ports, along with the output of Whitby shipbuilders, had considerably declined. This was part of a general reduction in sailing ship building in the wake of steamship production: as early as 1872 nearly 200,000 tons of steamships were being built at the North East ports alone.

Another source for Whitby-built vessels not registered there is the 'Masting Book' of the firm of Smales of Whitby for the period 1750 to 1871,



which is also discussed in Chapter One.<sup>20</sup> Gideon Smales Senior was a shipowner and timber importer, and his son (who gave evidence to the 1844 Committee) was a shipowner and merchant and, like his father, a block and mast maker. The accounts of the family firm include a volume listing all the vessels for which the Smales' provided masts: 167 vessels of 43,806 tons are recorded, built by Whitby shipbuilders in the nineteenth century, and of these 93 of 27,315 tons were also registered at Whitby, or 62.4%. This source thus also indicates that an important sector of Whitby shipbuilding was the construction of ships for other ports. The shipbuilders who specialised in the building of larger vessels, such as Robert Barry, Thomas Brodrick, and Henry & George Barrick, appear, from these records, to have sold on average half of their output to other ports without registering them at Whitby. Builders of generally smaller vessels, such as the Hobkirks, sold the greater part of their output to Whitby owners. The smaller vessels required less capital investment and were employed in fishing and local trading.

Vessels built at Whitby but owned elsewhere may be found in the registers of other ports, but it is beyond the scope of this study to analyse the registrations of all British ports in this period. In a sample of the London registers, however, the Whitby-built vessels listed there in the 1850's and 1860's, averaged 336 tons, when few Whitby shipowners were purchasing ships of this size.<sup>21</sup> Vessels of smaller tonnage were also sold to owners of other ports: the eight Whitby-built vessels registered in the Channel Islands in the nineteenth century averaged only 151 tons,<sup>22</sup> and two vessels built at Whitby and registered at Boston in the 1830's and 1840's were 76 tons and 104 tons only.<sup>23</sup>

It has been suggested that a marked feature of shipbuilding at Whitby compared with other ports was the use of British oak in preference

to Baltic and American timber. In the Lloyd's Survey Reports, the surveyor recorded the name of each vessel, her master, tonnage, intended voyage, builders and materials used in the construction of the vessel.<sup>24</sup> Between 1834 and 1856, 282 vessels were surveyed at Whitby. Of these, 187 were built at Whitby and were being surveyed for the first time, with thirty-three built at Whitby but registered elsewhere. English oak was used in all but three of the Whitby-built vessels, with American oak and elm, Baltic and Dantzic fir, red and yellow pine, African oak, timber from Sierra Leone and New South Wales, pitch pine, Quebec oak with English beech and ash. In most cases English oak was the predominant material used, for the keel, frame and knees, with pine planking. The vessels surveyed at Whitby but built elsewhere, were mainly from the North East ports, Scotland, Nova Scotia, Prince Edward Island and New Brunswick. At the North East ports, American and Silesian oak, with American elm and Baltic timber was used as much as English wood, whereas black birch, spruce, pine and fir were used by the shipbuilders of Atlantic Canada, whose ships were as low as half the price per ton of a Whitby-built vessel. In 1833 it was estimated that, with an average number of ships built at Whitby per year of sixteen, and an annual aggregate tonnage of 3,666, 2,156 tons of oak was consumed each year. If an average of 3,000 tons of shipping calling at Whitby for repair each year is included, a further 1,500 tons of oak was required.<sup>25</sup> The high quality of Whitby shipbuilding is attested to by the visiting surveyors. The schooner Puella, built by Robert Campion in 1834 was described as 'a very fine little vessel [146 67/94 tons] and fit for any purpose'.<sup>26</sup> Appendix 1 shows the results of visits in 1844 and 1853, in which Hobkirk's and Turnbull's work is praised, but antagonism to the preference shown by Lloyd's to London shipbuilders was expressed by the Barricks, who were recorded as 'hostile to the Society'.<sup>27</sup>

English oak for Whitby shipbuilding was mostly supplied from forests and woods near Pickering, Kirby and Helmsley.<sup>28</sup> The imports of timber from the Baltic for shipbuilding is discussed in Section Four of Chapter Five, and is also shown in the Letter Books of John and Robert Barry. In 1816 Barry was importing Baltic timber for Barrick,<sup>29</sup> and an 1817 letter shows the arrangements he made with Baltic timber merchants, James Breeds & Co., for his own timber requirements: 'unless you can send me good crooks it will not answer my purpose as I have a sufficient stock of straight timber by me'.<sup>30</sup> He recorded in detail the particulars of the timber and plank used in a vessel which he was building for the Scarborough shipowners, Taylor & Mausley, which included oak plank but was principally built of Danzig deals, and was completed, ready for sea, for ten guineas. The hostility shown by the Barricks to Lloyd's was shared by Barry: 'I have to observe that I will not suffer any Power to come down to inspect the building, but will do to her in every respect the same as I should do if I was building her for myself as is the usual mode of building here'.<sup>31</sup> Barry imported iron for shipbuilding from the Tyne Iron Company, and in his order for iron knees, complained that 'I observe they are charged 1s per cwt higher than they ought to as I have been regularly supplied with them when manufactured in the same way at 21s per cwt at which price I expected to have had those sent to me last'.<sup>32</sup> Barry also imported copper, and was known to re-export it to Jamaica, where he expected a higher price than in England. Chain was brought to Whitby from Shields and the other North East ports.<sup>33</sup> The Dove, in 1823, carried hemp, tallow and studding-sail booms from the Baltic, with deals and deal-ends for dunnage from St. Petersburg.<sup>34</sup> After 1830, Barry continued importing timber from the Baltic and from the East Indies, but for other merchants and shipbuilders, as his own yard had been abandoned. Logwood was brought

back in the William Harris from Jamaica, masts, deals, tar and tallow from Archangel, and spars and Nicaragua wood in the Columbus from Jamaica.<sup>35</sup>

Contemporary local historians observed a lack of mineral resources near Whitby,<sup>36</sup> which accounts for the importation of copper and iron. Whilst the demand for wooden ships was high and their prices favourable to the builders, the expense of importing timber and materials could be overcome, but this reduced profits for the builders when demand was slack and prices low, as was the case after the Napoleonic Wars. Tonnage built in the mid 1820's was principally to replace tonnage lost, and shipbuilding continued to decline during the early 1830's, when many Whitby shipbuilders gave up their businesses. Britain no longer monopolised the carrying trade, and suffered from an excessive capacity of tonnage, and only in the late 1830's and early 1840's did shipbuilding temporarily emerge from this depression, when the war with China and rise in East India freights led to an expansion in the volume of trade.<sup>37</sup> The building of wooden sailing ships at Whitby never achieved its wartime levels again, and declined quickly after the 1840's and 1850's.

What was the nature of shipowning in Whitby in the nineteenth century ? In the analysis which follows, three different modes of considering the information given on the statutory registers have been adopted. Firstly, in looking at the owners of each vessel on the first day of registration and counting them each time they occur makes possible an analysis of the number of owners per vessel, their occupations and their place of residence. Secondly, a separate analysis was made of each individual shipowner (in this case those who gave their place of residence as Whitby) and counting them once, taking into account subsequent transactions, in considering the relative importance of each occupational category among those investing in Whitby-owned ships. Thirdly, the Turnbull Registers, which list the owners of each Whitby-registered vessel annually, at one

point in time, are useful in a further analysis of the number of owners per vessel, and the place of residence of owners. This three-way analysis is intended to give a more accurate picture of the patterns of Whitby ship-owning than would be possible from considering the details when a vessel was first registered only.<sup>38</sup>

Table 7 shows the number of owners per vessel at initial registration; the pattern differs little from the eighteenth century, as seen in Chapter Two. The average number of owners is slightly higher in the 1870's when, as seen in Table 1, a series of larger vessels of 300-550 tons were registered at the port. By the early twentieth century the majority of sailing vessels being registered and re-registered de novo were small and with generally only one owner, reflecting a reduced demand for capital, enabling a single person to own a vessel outright.

In Table 8a the residences of the owners of Whitby-registered tonnage is seen comparing local owners with the remainder. This analysis is taken from the details of owners at first registration. Whitby owners were, on average, 75.3% of the total, and from the 1880's onwards, the owners of Whitby sailing vessels were almost exclusively local. Whitby sailing ships could no longer attract outside capital, which by this period was largely concentrated in steamships. Many of the last Whitby sailing vessels were employed in the coastal trade of the port itself and nearby, and thus attracted primarily local owners.

The Turnbull Registers, the source of the information shown in Table 8b,<sup>39</sup> show that outside capital was often invested in Whitby sailing ships after they had been registered at the port for some time, rather than at first registration. In 1892, for example, although the proportion of owners from outside Whitby is higher than before (at 26%), the actual numbers involved are very small. There is also an increase of investment from owners in the outlying villages around Whitby in subsequent trans-

actions of Whitby shipping shares, suggesting that these persons were prepared to purchase shares when their price had fallen over time. Table 8c shows a detailed breakdown of the places of residence of shipowners appearing on the Whitby register: although a large number of these investors lived in London, Stockton and Sunderland (showing the importance of the coal trade to Whitby shipping), the majority resided in generally small settlements, especially near Whitby, attracted by the small capital investment required in sailing vessels, which enabled small tradesmen, farmers, fishermen and mariners of the outlying villages around Whitby to invest in shipping.

Table 9a shows an analysis of the ownership of vessels at first registration in terms of the occupations of owners. The large proportion of owners from a maritime background continues the eighteenth century tradition and reflects on the insularity of the industry, that those engaged in shipping themselves tended to re-invest their profits in their own vessels or those built by others. The largest single category, according to the declarations on the registers, was 'shipowner', possibly suggesting that investment in shipping, previously an activity peripheral to full time occupations, could be profitable enough to support an individual, although the term was often used for prestige and by persons of inherited wealth, interested in investment in shipping. The price of sailing ship shares had fallen considerably by the late nineteenth century, as seen in reports of share auctions in the Whitby Gazette,<sup>40</sup> which enabled persons of the most humble occupational groups to invest in shipping. Table 9b repeats this exercise according to each individual Whitby shipowner, and shows similar results. From the town of Whitby itself, investment in shipping came from many with commercial and professional occupations; those owners from outside Whitby were generally of a maritime background.

This consideration of the statutory registers of the port of Whitby has made possible a comparison between this port and others. Tables 12a, 10b and 10c were compiled using the findings of a series of historians and have been adjusted for purposes of comparison. Transcripts of registers available (such as those by Farr)<sup>41</sup> have been analysed for this purpose. There are obvious problems with this exercise: the years and samples of registers considered are not necessarily for the same years, and it does not appear that the registers of any other port have been studied from the inception of registration to the outbreak of the First World War. These samples from registers compared here take no account of booms and slumps and the different conditions imposed by wartime, for example. The systems of classification, used especially in the case of occupational categories, vary considerably, but that used by Neal<sup>42</sup> and later Palmer<sup>43</sup> have been employed where possible. It is regrettable that so few ports have been studied in detail, especially the ports of the North East coast with their extensive shipowning and shipbuilding industries.

Table 10a shows a comparison between selected ports according to the number of owners per vessel at initial registration. The concentration of vessels with three owners or less is more marked in Whitby than in Liverpool or London, perhaps indicating generally smaller vessels in Whitby, requiring less capital and thus less of a spread of ownership. This may also be true in the case of Chepstow, Bristol and Boston. In the first half of the nineteenth century, Whitby-registered vessels averaged approximately 160 to 170 tons (see Table 11), whilst those owned at Liverpool and London were much larger. The ownership of vessels by a partnership of two persons accounted for approximately 25% of the registrations at Whitby, Liverpool, Chepstow, Bristol and Boston, whilst this was rarer in London. The presence of many wealthy merchants and

persons of private means in the capital possibly accounts for the large number of registrations there with only one owner.

Table 10b, showing the geographical spread of ownership, reveals the large concentration in Whitby itself of the shipowners whose names appear in the local registers. It is notable that Liverpool and Bristol also show a strong predominance of local investment in the vessels registered at these ports; but these were areas of extensive population, whilst the township of Whitby did not exceed 10,000 persons in the nineteenth century (see Chapter Seven). The majority of London-registered vessels were owned by persons living in the Home Counties, reflecting a large proportion of non-maritime ownership, as borne out in Table 10c. The extent of ownership by persons with occupations that may be broadly classified as 'maritime' at the port of Whitby is greater than the other ports considered here, and suggests a high level of 'active' rather than 'passive' investment at the port. Also, the Whitby Register shows the highest proportion of 'professional investors - those referring to themselves as bankers, accountants, solicitors, or gentlemen and widows, for example. These were often second-generation members of the large shipowning and shipbuilding families of Whitby: the Barrys, Turnbulls, Chapmans, Campions, Moorsoms, Smales and the Robinsons. Many of the shopkeepers and merchants that are here classified as 'commercial and industrial' were also directly connected with the shipping industry through the importation of their goods, and in the provisioning and supplying of ships. The high level of 'maritime' investment also emphasises the importance of the local shipbuilding industry, and its supporting activities of ropemaking and sailmaking. The ports of London and Liverpool, where commercial and trading activities were more important than shipbuilding, show a correspondingly high level of investment in ships by merchants.



Patterns of shipowning at Whitby may thus be compared with other ports, and the total tonnage of sailing vessels registered may also be seen as a proportion of the British Mercantile Marine as a whole. In Table 11, it is clear that the Whitby-registered fleet as a percentage of the national total fluctuates considerably, having declined from the late eighteenth century of over 2% to 1815, increasing again in 1827-8 and 1837-41.<sup>44</sup> These peaks may be seen as a fall in national tonnage totals, rather than a spectacular growth in the tonnage owned at Whitby. The Crimean War saw a rise in shipping registered in the U.K., but there was no similar increase in Whitby shipping, which experienced a considerable decline in average tonnage by the late 1850's and was no longer suitable for Government transport work or other lucrative foreign trades.

A new method of analysis of the shipping industries of particular ports using their certificates of registry, has been suggested in recent work on the ports of Atlantic Canada.<sup>45</sup> Is it possible to interpret the fluctuations in registrations in terms of the prosperity of a port? It has been maintained that 'the development of shipping at these ports can be viewed as a movement across a series of tonnage thresholds by the vessels' registrants'. A sample of 179 owners (those owning more than 1,000 tons of shipping each) of a total of 13,815 shipowners from four ports (Pictou, Halifax, Windsor and Yarmouth) were analysed in five separate stages. Firstly, the peak of new investors entering the industry was considered, then when the largest number of owners were increasing their tonnage to the greatest extent, the second stage was reached. Thirdly, the high point of tonnage acquisition by the investment sample was defined, to be followed by the fourth stage, when the largest number of investors bought the largest mean tonnage. The final stage occurred when the largest number of investors left the industry. Each port was considered per quinquennia

to determine when the shipowners reached each stage, comparing the shipping activity with the traditional economy of each port.

This model presents difficulties when applied to the port of Whitby. Looking at the registrations at Whitby from 1786 to 1914, no clear pattern as indicated by this series of 'thresholds' emerges. At the beginning of registration, shipowning at Whitby was already established, and the late nineteenth century saw a transition to steamshipping rather than a decline in investment in shipping generally, without the advent of steamship technology, as seen in Atlantic Canada. This model is primarily concerned with the significance of the shipping industry in relation to land-based activities in these ports, when the shipowners of Whitby had few alternative opportunities for investment. Rather than taking a sample of a number of individual investors, it seems that a more accurate picture could be obtained from an analysis of new shipping coming on to the register, and then being sold from it, especially in a port with many small investors, such as Whitby. At Whitby, periods of investment and disinvestment are scattered throughout the century, as seen in Tables 1 and 2. Over 5,500 tons was added to the register as late as 1865, yet as early as 1823, there was a net loss of over 1,000 tons. The shipping industry, as seen by Gideon Smales, was the staple trade of the port, and cannot be seen as an opportunity for investment among other alternatives.

In conclusion, a number of questions remain unanswered. Graph 1 shows the decline of sailing vessels registered and the rise of steamships: why were the 1860's and 1870's the turning point in the ownership of sailing vessels at Whitby? Did Whitby shipowners sell and fail to replace their sailing vessels when lost due to a lack of profitability, for negative reasons, or was the principal feature that of a change to steam? The majority of Whitby steamship owners were previously investors in sailing vessels, and the changeover in technologies may be seen as

maintaining Whitby's interest in the coal trade: a transition from sailing colliers to steam colliers. But if this was the case, that steam replaced sail at Whitby, why was there such a decline in sailing vessels registered from the mid 1860's, and the lowest period of total tonnage registered at the port was in 1875? The reasons may be seen in the conservatism of the shipowners of Whitby, in their slowness in accepting steamship technology, when in a period of a 'dull state of trade' and a decline in freights as in the late 1860's and early 1870's,<sup>46</sup> steamships were most successful in finding remunerative employment, especially with the opening of the Suez Canal.

Meanwhile, sailing tonnage made a living from the long haul trades to Australia and San Francisco, which with the absence of bunkering stations and the high consumption of coal by steamers in the 1870's and 1880's, was uneconomic for the steamship. Liverpool and London maintained sailing vessels in these trades, where they carried tea, cotton, and guano. An example of the success of large iron, and later steel sailing barques in the late nineteenth and early twentieth centuries in these long haul trades is to be found in the recently-published diaries of Captain Robert Thomas of Llandwrog and Liverpool.<sup>47</sup> Large sailing ships owned at Whitby in the 1860's, 1870's and 1880's included the Canada Belle of 655 tons and the Mandarin of 799 tons. The Princess Elflada, a barque of 476.82 tons, was another example of a large sailing vessel owned during this period at Whitby, where she was built by Smales Brothers in 1866.<sup>48</sup> Owned by four brothers, Gideon Jr., George W., Charles and Edward H. Smales, she cost £6,600 to build. She sailed between the British ports of Sunderland, Cardiff, London, Newcastle and Glasgow to the ports of the Black Sea, the Mediterranean, Pensacola and Jamaica, carrying a variety of cargoes including grain, timber and coal, paying a dividend on each 1/64th. share of £3 19s 8d in January 1873 after a voyage from Shields

to Odessa with coal. These vessels were comparatively rare at Whitby: the typical Whitby sailing ship of the late nineteenth and early twentieth centuries is seen in the photographs of Frank Meadow Sutcliffe, of coasters and colliers of up to 200 or 300 tons at the most. Thus the depression in freights in the 1870's led to a decline in investment in sailing tonnage at Whitby, and the slowness in venturing into steam tonnage on a large scale until the early 1880's meant a time lag of twenty-five years before steamship tonnage registered at Whitby equalled the previous peak in sailing tonnage owned at the port. Yet despite the fluctuations in the shipping industry of the nineteenth and early twentieth centuries, and despite the decline of the sailing ship, shipping remained the staple trade of Whitby.

## REFERENCES: CHAPTER THREE

1. Select Committee on British Shipping, P.P., 1844, VIII, (545.), q.1318
2. Richard Weatherill, The Ancient Port of Whitby and its shipping, (Whitby, 1908), pp.19-20
3. Select Committee on Manufactures, Commerce and Shipping, P.P., 1833, VI, (690.), q. 152
4. S.C. on Manufactures, P.P., 1833, VI, (690.), qq. 6118, 7648, 7654
5. House of Commons' Journals, LXXXVI, 13 December 1830
6. S.C. on Manufactures, P.P., 1833, VI, (690.), qq. 7667-7670
7. S.C. on British Shipping, P.P., 1844, VIII, (545.), qq. 1373, 1397, 1405
8. For example, see the Whitby Gazette, 29 August 1857, a description of the launch of the Sylvan, and 27 November 1858, report of a meeting of Whitby shipowners
9. Reg. Ship.
10. Between 1817 and 1821 shipbuilding nationally was depressed and the tonnage owned declined. The increase in shipbuilding in the period 1822-6 was largely for the replacement of lost vessels, and 1827-32 was also marked by a stagnation of tonnage registered. In the late 1830's and early 1840's shipbuilding recovered, with an increase in investment activity and improved trading conditions. A.D. Gayer, W.W. Rostow, A.J. Schwartz, The Growth and Fluctuation of the British Economy, 1790-1850, (Oxford, 1953), pp.149, 187, 217, 286
11. F. Neal, 'Liverpool Shipping, 1815-1835', Unpublished Liverpool M.A. thesis, (1962), p.127
12. Maberly Phillips, A History of Banks, Bankers and Banking in North-umberland, Durham and North Yorkshire, illustrating the Commercial Development of the North of England from 1755 to 1894, (London, 1894), pp.219-373
13. Whitby Gazette, 13 January 1877, 23 July 1870
14. Accounts of the Princess Elfleda, Wh. Lit & Phil.
15. The principal source for these prices has been the Letter Book of Robert Barry, 1815-1843, Wh. Lit & Phil.
16. R.C.O. Matthews, A Study in Trade Cycle History: economic fluctuations in Great Britain, 1833-1842, (Cambridge, 1954), p.118
17. Weatherill, Whitby, pp.28-30
18. Turnbull's Shipping Register & British & Foreign Maritime Advertiser, (Newcastle, 1876), (North Shields, 1882) and (North Shields, 1892)
19. Lloyd's Register, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1900
20. Wh. Lit. & Phil.
21. London Registers of Shipping, 209, 267, 273, 430, 459/1852; 58, 67, 88, 116, 260, 401, 457, 495, 552/1853; 64, 456, 484, 525/1854; 193 /1855; 99, 112, 175/1865; 121, 194, 354/1866; 12, 131/1867. Seventeen Whitby-built vessels registered at London in the 1820's and 1830's averaged 326 tons: 82, 250/1821; 56, 100, 141, 170, 367, 566/1824;

- 237, 871, 1098/1825; 298/1827; 4/1828; 34, 336/1830; 24, 239/1833
22. Whitby built vessels on the Registers of Guernsey, 2/1836, 1/1861, 32/1873, 3/1885; and Jersey, 12/1819, 22/1820, 14/1829, 51/1844. Details of these vessels were brought to my attention by Dr. Alan Jamieson
  23. The Snipe and the Ocean. From research for an article, 'Shipowning in Boston, Lincs., 1836-1848', Mariner's Mirror, 65 (1979), pp.339-348
  24. Lloyd's Survey Reports, N.M.M. A single volume only survives for Whitby.
  25. W. Thompson, The Whitby and Pickering Railway: its probable traffic and revenue, (Whitby, 1833), p.7. The number of vessels built per year seems slightly exaggerated
  26. Lloyd's Survey Reports, N.M.M., Whitby volume
  27. Archives of Lloyd's Register, Reports of Visiting Surveyors, 1844-1852, and Reports and Committees of Visitation, 1851-1879
  28. Thompson, Whitby and Pickering Railway, p.7
  29. Robert Barry to Mr. March, 7 March 1816. Wh. Lit. & Phil.
  30. Robert Barry to Messrs. James Breeds & Co., 5 February 1817
  31. Particulars of Timber and Plank of the Vessel now laid down for Messrs. Taylor & Mausley, signed by Robert Barry, 17 February 1817. Price per ton
  32. Robert Barry to the Tyne Iron Co., 23 June 1820
  33. Robert Barry to Captain Kennedy of the Columbus, 8 January 1822
  34. Robert Barry to Captain Matthew Dobson of the Dove, 12 August 1823
  35. Barry Freight Book, 1822-1831
  36. For example, Lionel Charlton, The History of Whitby, etc..., (York, 1779), p.307, and see also W.G. East, 'The Historical Geography of the Town, Port and Roads of Whitby', Geographical Journal, LXXX (1932), pp.484-97
  37. See note 10
  38. An analysis of the owners at first registration only was used in the large task of considering the London registers of 1824, 1836 and 1848 in S.R. Palmer, 'The Character and Organisation of the Shipping Industry of the Port of London, 1815-1849', Unpublished London Ph.D. thesis, (1979), and in an article, 'Investors in London Shipping, 1820-1850', Maritime History, II (1972)
  39. See note 18
  40. Wh. Gaz., from 1870
  41. G. Farr, Chepstow Ships, (Chepstow, 1954), pp.31-106
  42. See note 11, and F. Neal, 'Liverpool Shipping in the early Nineteenth Century', ed. J.R. Harris, Liverpool and Merseyside: essays in the economic and social history of the port and its hinterland, (London, 1969)
  43. See note 38
  44. Based on data calculated from the Reg. Ship., Accounts and Papers: Annual Statement of the Navigation and Shipping of the United Kingdom, P.P. from 1842, P.R.O. CUST 17 / 1-30, Cesar Moreau, Chronological

Records of the British Royal and Commercial Navy, (1827),  
Marshall's Digest of All the Accounts, (London, 1833), and B.R.  
Mitchell and P. Deane, Abstract of British Historical Statistics,  
(London, 1971)

45. Gerry Panting, 'Personnel and Investment in Canadian Shipping - a paper for the 4th annual conference of the Atlantic Canada Shipping Project', eds. R. Ommer and G. Panting, Working Men Who Got Wet, (St. John's, 1981)
46. E.A.V. Angier, Fifty Years' Freights, 1869-1919, (London, 1920), Freight Market Reports for 1869 and 1870
47. Aled Eames, Shipmaster: Captain Robert Thomas of Llandwrog and Liverpool, (Gwynedd Archives Service, 1980). See G.S. Graham, 'The Ascendancy of the Sailing Ship, 1850-1885', Economic History Review, IX (1956)
48. See note 14

TABLE 1:

## SHIPPING REGISTERED AT WHITBY 1815-1914, SAILING SHIPS

<u>Sail</u>						
<u>Year</u>	<u>No. Regs.</u>	<u>RDNs</u>	<u>(At Whitby and other ports)</u>		<u>Bought from other</u>	
			<u>New built</u>		<u>ports</u>	
1815	35	16	10	2391	9	1021
1816	44	15	15	2401	14	1743
1817	37	14	9	1262	14	1799
1818	31	12	9	1747	10	1165
1819	46	16	18	2744	12	1023
1820	27	9	5	745	13	1588
1821	23	12	5	576	6	542
1822	33	16	8	1942	9	809
1823	34	15	9	1498	10	1252
1824	146	112	4	795	30	4779
1825	126	89	13	2479	24	4094
1826	71	33	18	3591	20	2988
1827	38	11	13	2299	14	1601
1828	38	15	9	1626	14	1960
1829	40	21	11	2204	8	977
1830	29	10	13	1637	6	662
1831	34	16	11	2060	7	1117
1832	31	15	5	1471	11	1801
1833	23	10	4	1003	9	1704
1834	38	23	6	1028	9	1877
1835	53	21	16	3015	16	2508
1836	119	90	4	618	25	4080
1837	80	43	11	2998	26	4405
1838	71	27	20	3983	24	3400
1839	56	20	24	5243	12	1781
1840	82	31	27	5736	24	3816
1841	59	17	19	2898	23	3230
1842	30	10	10	1328	10	1447
1843	45	16	10	1464	19	3299
1844	41	13	13	2143	15	3027
1845	35	14	6	826	15	2477
1846	55	26	5	920	24	4061
1847	44	21	12	2630	11	1292
1848	79	28	12	1794	39	6783
1849	63	28	5	759	30	4062
1850	55	17	7	1457	31	53319
1851	47	27	6	1392	14	1708
1852	55	25	7	1311	23	3384
1853	61	39	13	2798	9	1221
1854	68	32	12	2755	24	4113
1855	69	32	8	1199	29	5043
1856	74	29	8	1647	37	6177
1857	70	18	7	882	45	8134
1858	53	12	8	1150	33	6066
1859	41	15	6	929	20	2817
1860	44	18	5	1258	21	3365
1861	51	23	5	816	23	3732
1862	56	23	6	1951	27	5503
1863	33	4	5	1418	24	5011
1864	32	3	3	927	26	6636
1865	47	3	4	1075	40	9207



TABLE 1: (contd.)

Year	No. Reqs.	RDNs	(At Whitby and other ports)		125	
			New built		Bought from other ports	
1866	38	10	3	1704	25	5900
1867	18	4	5	606	9	1792
1868	14	4	3	1214	7	1582
1869	15	8	---	---	7	1228
1870	16	7	1	422	8	3459
1871	9	2	2	439	5	2305
1872	4	2	---	---	2	550
1873	7	2	---	---	5	1397
1874	16	10	---	---	6	1485
1875	16	9	1	526	6	1122
1876	20	11	---	---	9	1401
1877	4	2	---	---	2	405
1878	1	-	1	42	-	-
1879	5	1	1	29	3	573
1880	2	1	1	103	-	-
1881	5	-	1	42	4	451
1882	4	-	3	163	1	215
1883	3	-	1	72	2	459
1884	4	-	2	159	2	239
1885	1	-	---	---	1	87
1886	1	-	1	88	-	-
1887	-	-	---	---	-	-
1888	-	-	---	---	-	-
1889	-	-	---	---	-	-
1890	1	-	---	---	1	277
1891	1	-	---	---	1	38
1892	-	-	---	---	-	-
1893	-	-	---	---	-	-
1894	1	-	---	---	1	63
1895	1	-	---	---	1	66
1896	-	-	---	---	-	-
1897	1	-	---	---	1	70
1898	1	-	1	83	-	-
1899	1	-	---	---	1	40
1900	2	-	---	---	2	81
1901	1	-	---	---	1	11
1902	1	-	1	223	-	-
1903	-	-	---	---	-	-
1904	-	-	---	---	-	-
1905	1	-	---	---	1	100
1906	1	-	---	---	1	18
1907	-	-	---	---	-	-
1908	-	-	---	---	-	-
1909	-	-	---	---	-	-
1910	-	-	---	---	-	-
1911	-	-	---	---	-	-
1912	2	-	1	38	1	39
1913	-	-	---	---	-	-
1914	-	-	---	---	-	-
TOTAL	3509	1499		145629 tons		209487 tons

Source: Certificates of Registry, Custom House, Whitby

Note: Reqs. - Registrations  
RDNs - Registrations de novo

TABLE 2:

NET GAINS AND LOSSES TO THE STOCK OF SHIPPING REGISTERED AT WHITBY  
1815-1914 - TONS

<u>Year</u>	<u>(New bt. + from other ports) Net tons req.</u>	<u>Lost from req.</u>		<u>Tons + or -</u>
		<u>Sold</u>	<u>Lost</u>	
1815	3412	2052	1879	-519
1816	4144	1054	972	+2118
1817	3061	2645	667	-251
1818	2912	3783	694	-1565
1819	3767	909	533	+2325
1820	2333	2636	1361	-1664
1821	1118	1236	139	-257
1822	2751	1539	1868	-656
1823	2750	2535	1303	-1088
1824	5574	1328	1863	+2383
1825	6573	3321	1656	+1596
1826	6579	678	535	+5366
1827	3900	1193	737	+1970
1828	3586	1695	1606	+285
1829	3181	2372	1349	-540
1830	2299	1595	1540	-836
1831	3177	2001	269	+907
1832	3272	1792	1275	+205
1833	2707	2748	1081	-1122
1834	2905	742	3044	-881
1835	5523	1149	1200	+3174
1836	4698	3493	380	+825
1837	7403	3129	747	+3527
1838	7383	3711	1608	+2064
1839	7024	2793	1258	+2973
1840	9552	2012	1862	+5678
1841	6128	397	1990	+3741
1842	2775	1508	1502	-235
1843	4763	745	1242	+2776
1844	5170	1222	2543	+1405
1845	3303	1046	1964	+293
1846	4981	2536	487	+1958
1847	3922	1611	1707	+604
1848	8577	2009	1120	+5448
1849	4821	1238	4713	-1130
1850	6788	1034	1531	+4223
1851	3100	604	3696	-1200
1852	4695	1236	3070	+389
1853	4019	1959	2803	-743
1854	6868	2229	2789	+1850
1855	6242	2574	3352	+316
1856	7824	743	2995	+4086
1857	9016	1060	4257	+3699
1858	7216	224	2249	+4743
1859	3746	985	4196	-1435
1860	4623	1841	3927	-1145
1861	4548	3559	1635	-646
1862	7454	925	5765	+764
1863	6429	2761	6246	-2578

TABLE 2: (contd.)

Year	<u>(New bt. + from other ports)</u> Net tons req.	<u>Lost from req.</u>		<u>Tons + or -</u>
		<u>Sold</u>	<u>Lost</u>	
1864	7563	883	3141	+3539
1865	10282	1197	3542	+5543
1866	7604	1243	6376	-15
1867	2398	392	6951	-4945
1868	2796	295	5886	-3385
1869	1228	607	2861	-2240
1870	3881	294	3117	+470
1871	2744	918	4855	-3029
1872	550	2359	4831	-6640
1873	1397	2018	1994	-2615
1874	1485	2069	2467	-3051
1875	1648	1186	2150	-1688
1876	1401	496	3466	-2561
1877	405	905	2252	-2752
1878	42	1162	2014	-3134
1879	602	2678	2565	-4641
1880	103	1917	3683	-5497
1881	493	858	2947	-3312
1882	377	1482	2277	-3382
1883	531	-	2773	-2242
1884	398	-	2214	-1816
1885	87	-	547	-460
1886	88	88	1903	-1903
1887	-	526	302	-828
1888	-	-	439	-439
1889	-	465	648	-1113
1890	277	298	512	-533
1891	38	-	541	-503
1892	-	-	631	-631
1893	-	100	838	-938
1894	63	-	29	+34
1895	66	-	247	-181
1896	-	63	290	-353
1897	70	250	504	-684
1898	83	86	78	-81
1899	40	47	269	-276
1900	81	34	128	-81
1901	11	-	907	-896
1902	223	-	185	+38
1903	-	35	43	-78
1904	-	83	530	-613
1905	100	-	-	+100
1906	18	37	299	-318
1907	-	-	-	-
1908	-	-	208	-208
1909	-	-	100	-100
1910	-	87	-	-87
1911	-	-	-	-
1912	77	-	-	+77
1913	-	-	39	-39
1914	-	-	-	-
TOTALS	355115	131592	188667	+34856
per year	3115.0	1154.3	1655.0	+305.8

Source: Certificates of Registry, Custom House, Whitby

TABLE 3:

INDEX OF AVERAGE PRICE PER TON REGISTER (COMPLETE FOR SEA) OF WHITBY-BUILT VESSELS, AND CALCULATION OF INVESTMENT IN NEW TONNAGE PER YEAR AT WHITBY, 1815 TO 1838

<u>Year</u>	<u>Approx. average price per ton</u>	<u>No. &amp; tons new bt. req. each year</u>	<u>Annual capital investment in new tonnage each year</u>
1815	£13	10 2391	£31,083
1816	£11	15 2401	£26,411
1817	£10	9 1265	£12,650
1818	£12	9 1747	£20,964
1819	£13	18 2744	£35,672
1820	£13 10s	5 745	£10,057 10s
1821	£13	5 576	£7,488
1822	£12	8 1942	£23,304
1823	£13 10s	9 1498	£20,223
1824	£15 10s	4 795	£12,322 10s
1825	£17	13 2479	£42,143
1826	£18	18 3591	£64,638
1827	£16	13 2299	£36,784
1828	£12 15s	9 1626	£26,731 10s
1829	£12 5s	11 2204	£26,999
1830	£13 10s	13 1637	£22,099 10s
1831	£11	11 2060	£22,660
1832	£11 10s	5 1471	£16,916 10s
1833	£11	4 1003	£11,033
1834	£11	6 1028	£11,308
1835	£10	16 3015	£30,150
1836	£10 10s	4 618	£6,489
1837	£11 10s	11 2998	£34,477
1838	£10	20 3983	£39,830

---

Source: Letter Book of Robert Barry, 1815-1843, Wh. Lit. & Phil.

Note: Column 2 of this table shows the 'average' price per ton, i.e. the average of a number of vessels built in each year for which the price per ton is known.

TABLE 4a:

SAILING VESSELS AT WHITBY. VESSELS BUILT AND REGISTERED AT WHITBY PER YEAR 1815-1914 AS A PROPORTION OF THE TOTAL NEW-BUILT TONNAGE ADDED TO THE WHITBY REGISTER EACH YEAR

<u>Year</u>	<u>Whitby-built</u>		<u>Total built at Whitby and built at other ports and newly-reg. at Whitby</u>		<u>% Wh./Others</u>
	<u>No.</u>	<u>Tons</u>	<u>No.</u>	<u>Tons</u>	
1815	9	2208	10	2391	92.3
1816	11	2138	15	2401	89.0
1817	9	1261	9	1261	100.0
1818	9	1747	9	1747	100.0
1819	14	2301	18	2744	83.9
1820	3	619	5	745	83.1
1821	5	576	5	576	100.0
1822	8	1942	8	1942	100.0
1823	9	1498	9	1498	100.0
1824	4	795	4	795	100.0
1825	9	1871	13	2479	75.5
1826	14	1768	18	3591	49.2
1827	11	1888	13	2299	82.1
1828	8	1504	9	1626	92.5
1829	8	1903	11	2204	86.3
1830	13	1637	13	1637	100.0
1831	7	1462	11	2060	71.0
1832	4	1224	5	1471	83.2
1833	2	600	4	1003	59.8
1834	5	927	6	1028	90.2
1835	16	2907	18	3015	96.4
1836	4	618	4	618	100.0
1837	9	2469	11	2998	82.4
1838	12	2410	20	3983	60.5
1839	12	2390	24	5243	45.6
1840	19	3766	27	5736	65.7
1841	11	1163	19	2898	40.1
1842	5	722	10	1328	54.4
1843	6	942	10	1464	64.3
1844	5	800	13	2143	37.3
1845	4	460	6	826	55.7
1846	5	920	5	920	100.0
1847	6	1284	12	2630	48.8
1848	5	1017	12	1794	56.7
1849	4	539	5	759	71.0
1850	4	1052	7	1457	72.2
1851	3	634	6	1392	45.5
1852	5	915	7	1311	69.8
1853	6	1360	13	2798	48.6
1854	7	1758	12	2755	63.8
1855	4	573	8	1199	47.8
1856			8	1647	
1857	1	330	7	882	37.4
1858			8	1150	
1859			6	929	
1860			5	1258	
1861			5	816	
1862			6	1951	

TABLE 4a: (contd.)

Year	Whitby-built		Total built at Whitby and built at other ports and newly-reg. at Whitby		% Wh./Others
	No.	Tons	No.	Tons	
1863			5	1418	
1864			3	927	
1865			4	1075	
1866			3	1704	
1867			5	606	
1868			3	1214	
1869					
1870			1	422	
1871			2	439	
1872					
1873					
1874					
1875			1	526	
1876					
1877					
1878			1	42	
1879			1	29	
1880	1	104	1	103	100.0
1881	1	42	1	42	100.0
1882	2	114	3	163	69.9
1883	1	72	1	72	100.0
1884	2	159	2	159	100.0
1885					
1886	1	88	1	88	100.0
1887					
1888					
1889					
1890					
1891	1892				
1893					
1894					
1895					
1896					
1897					
1898			1	83	
1899					
1900					
1901					
1902			1	223	
1903					
1904					
1905					
1906					
1907					
1908					
1909					
1910					
1911					
1912	1	39	1	39	100.0
1913					
1914					

Note: Average % of Whitby-built in total = 63.7

Source: Reg. Ship.

TABLE 4b;

NUMBER AND TONNAGE OF SAILING SHIPS BUILT AT WHITBY, 1815-1832  
AND 1871 TO 1914

<u>Year</u>	<u>Number</u>	<u>Tons</u>
1815	17	4121
1816	13	2622
1817	16	3145
1818	13	3351
1819	16	3184
1820	7	1206
1821	12	2386
1822	12	2644
1823	13	2437
1824	14	2206
1825	15	2856
1828	18	3730
1827	17	3270
1828	13	2904
1829	13	3419
1830	3	905
1831	10	2018
1832	2	732
<hr/>		
1871	1	37
1872	1	67
1873	-	-
1874	-	-
1875	-	-
1876	-	-
1877	1	60
1878	-	-
1879	1	42
1880	-	-
1881	1	42
1882	2	114
1883	-	-
1884	-	-
1885	-	-
1886	-	-
1887	-	-
1888	-	-
1889	-	-
1890	-	-
1891	-	-
1892	-	-
1893	-	-
1894	-	-
1895	-	-
1896	-	-
1897	2	466
1898	1	239
1899	-	-

Sources: 1815 to 1832, Accounts and Papers, P.P., 1826-7, XVIII, (327.), p.286  
S.C. on Manufactures, P.P., 1833, VI, (690.), evidence of  
Robert Barry, qq. 6012-6223.

TABLE 4b; (contd.)

Sources: 1871-1914 (no evidence of any other sailing vessels built at Whitby after 1898).

Accounts and Papers, P.P., 1872, LIII; 1873, LXIII; 1874, LXIV; 1875, LXXIII; 1876, LXXII; 1877, LXXX; 1878, LXXI; 1878-9, LXVIII; 1880, LXXI; 1881, LXXXVII; 1882, LXVIII; 1883, LXX; 1884, LXXVII; 1884-5, LXIX; 1886, LXIII; 1887, LXXX; 1893-4, LXXXVIII; 1898, XCI; 1903, LXXI; 1908, CIV.

In the 1860s, shipbuilding totals were given for Britain only, not port by port, except 1866 - 6 vessels, 773 tons, and 1867 - 9 vessels, 1047 tons. No earlier references of port by port shipbuilding totals in the Parliamentary Papers have been found, except those given.

.....

TABLE 5:

WHITBY SHIPBUILDERS: OUTPUT 1800-1914 OF SAILING SHIPS REGISTERED AT WHITBY

<u>Name</u>	<u>No.</u>	<u>Tons</u>	<u>Av. tons</u>	<u>Dates of build and registration</u>
Thomas Barrick	24	5460	227.5	1800-1828
Thomas Coates	3	222	74.0	1800-1804
Fishburn & Brodrick	60	14457	241.0	1800-1822
John Barry sen.& jnr.	22	5422	246.5	1800-1830
Ingram Eskdale	4	645	161.3	1800-1802
Chapman & Campion	10	2866	286.6	1800-1803
Nat. & Geo. Langborne	6	1171	195.2	1800-1802
William Webster	3	261	87.0	1800-1802
Jonathan Lacy	4	327	81.8	1800-1801
Marshall & Copley	6	342	57.0	1802-1804
Robert Marshall sen.& jnr.	8	472	59.0	1802-1843
James Waite	1	60	60.0	1802
James Wake	5	806	161.2	1802-1806
Peter Cato	14	1938	138.4	1802-1829
Eskdale, Cato & Co.	13	1910	146.9	1803-1805
Richard Wake	4	499	124.8	1804-1804
Thomas Gale	1	57	57.0	1803
Thomas Nesbitt	1	72	72.0	1803
William Jackson	1	92	92.0	1804
Holt & Richardson	27	7226	267.6	1804-1819
Valentine Pinkney	1	61	61.0	1804
Matthew Dring	1	81	81.0	1804
Smales & Co.	5	1232	246.4	1807-1812
Smales & Cato	4	1191	297.8	1808-1812
G. Smales	4	462	115.5	1809-1817
John Langborne & Co.	9	2394	266.0	1811-1835
Whitby Builders	9	2844	316.0	1811-1815
Holt & Co.	1	138	138.0	1812
John Holt	2	639	319.5	1813-1816
W.L. Chapman & Co.	1	403	403.0	1813
Thomas Chapman & Co.	1	399	399.0	1814
Robert Campion	23	5349	232.6	1814-1837
Christopher Gale sen.& jnr.	8	489	61.1	1815-1912
Robert Barry	30	6437	214.6	1815-1830
W.S. Chapman	6	1286	214.3	1815-1817
Thos.& Hen. Barrick	2	518	259.0	1816-1818
Wm. Falkingbridge	16	897	56.1	1819-1846
John Spencelayh	11	1395	126.8	1819-1835



TABLE 5: (contd.)

<u>Name</u>	<u>No.</u>	<u>Tons</u>	<u>Av. tons</u>	<u>Dates of build and registration</u>
Peter Ayres	1	14	14.0	1819
Francis Spencelayh	1	161	161.0	1819
John Jackson	1	207	207.0	1823
Thomas Brodrick	9	2018	224.2	1823-1875
William Hobkirk	33	6042	183.1	1824-1850
Robert Holmes	1	70	70.0	1826
Henry Dring	1	73	73.0	1827
Robert & Nat. Campion	8	1807	225.9	1828-1831
Hen. & Geo. Barrick	21	5301	252.4	1828-1853
Nat. Campion	2	386	193.0	1829
Hen. Barrick	42	9207	219.2	1829-1855
Geo. Barrick jnr.	2	570	285.0	1837-1838
William Campion	4	966	241.5	1838-1840
William Lister	1	95	95.0	1838
John & Wm. Campion	10	1980	198.0	1838-1874
Thomas Wright	2	333	166.5	1839-1876
Thomas Turnbull sen. & jn.	24	6171	257.1	1840-1870
J. & R. Gale	1	36	36.0	1849
Thomas Hobkirk	16	4498	281.1	1850-1880
E.G.J. Falkingbridge	2	64	32.0	1881-1887

Note: Shipbuilders referred to as first building vessels in 1800 were also building in the eighteenth century.

Source: Reg. Ship.

TABLE 6:

SAILING VESSELS BUILT AT WHITBY, REGISTERED AT WHITBY AND AT OTHER PORTS, WITH AVERAGE TONNAGES

<u>Date of register</u>	<u>Whitby-built</u>			<u>Whitby-built on Whitby register</u>		
	<u>No.</u>	<u>Tons</u>	<u>Average</u>	<u>No.</u>	<u>Tons</u>	<u>Average</u>
1820	297	78137	263	145	29643	204
1830	258	62307	242	125	21949	176
1840	216	50486	234	66	15202	230
1850	138	35102	154	60	12355	206
1860	98	25870	264	51	11646	228
1870	37	10463	283	16	4366	273
1880	58	13407	231	26	5467	210
1900	5	1071	214	1	174	174

<u>Date of register</u>	<u>Whitby-built req. at Whitby as % of total Whitby built</u>	<u>Whitby-built vessels req'd at other ports</u>		
		<u>No.</u>	<u>Tons</u>	<u>Av.</u>
1820	37.9%	152	48494	319
1830	35.2%	133	41358	303
1840	30.1%	150	35284	235
1850	35.2%	78	22747	292
1860	45.0%	47	14224	303
1870	41.7%	21	6097	291
1880	40.8%	32	7940	248
1900	16.2%	4	897	224

Source: Underwriters' 'Green Book' and Lloyd's Register, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1900.

TABLE 7:

NUMBER OF OWNERS PER VESSEL (SAILING SHIPS) ON FIRST DAY OF REGISTRATION:  
WHITBY REGISTERS, 1815-1914 - AVERAGE PER YEAR

<u>Year</u>	<u>Total no. owners</u>	<u>No. registrations</u>	<u>Av. no. owners per vessel</u>
1815	77	35	2.2
1816	101	44	2.3
1817	111	37	3.0
1818	65	31	2.1
1819	106	46	2.3
1820	46	27	1.7
1821	64	23	2.8
1822	56	33	1.7
1823	71	34	2.1
1824	274	144	1.9
1825	214	126	1.7
1826	142	71	2.0
1827	87	38	2.3
1828	72	38	1.9
1829	72	40	1.8
1830	55	29	1.9
1831	68	34	2.0
1832	43	31	1.4
1833	44	23	1.9
1834	99	38	2.6
1835	95	53	1.8
1837	176	80	2.2
1838	121	71	1.7
1839	129	56	2.3
1840	189	83	2.3
1841	118	59	2.0
1842	72	30	2.4
1843	54	45	1.2
1844	74	41	1.8
1845	60	35	1.7
1846	99	55	1.8
1847	101	44	2.3
1848	174	79	2.2
1849	132	63	2.1
1850	121	55	2.2
1851	89	47	1.9
1852	88	55	1.6
1853	159	61	2.6
1854	177	68	2.6
1855	159	69	2.3
1856	163	74	2.2
1857	156	68	2.3
1858	122	53	2.3
1859	86	41	2.1
1860	101	44	2.3
1861	117	51	2.3
1862	123	56	2.2
1863	66	33	2.0
1864	51	32	1.6
1865	66	47	1.4
1866	65	38	1.7

TABLE 7: (contd.)

<u>Year</u>	<u>Total no. owners</u>	<u>No. registrations</u>	<u>Av. no. owners per vessel</u>
1867	43	18	2.4
1868	32	14	2.3
1869	34	16	2.1
1870	43	16	2.7
1871	55	9	2.9
1872	6	4	1.5
1873	11	7	1.6
1874	46	16	2.9
1875	30	16	1.9
1876	53	21	2.5
1877	12	4	3.0
1878	4	1	4.0
1879	12	6	2.0
1880	10	2	5.0
1881	9	6	1.5
1882	12	4	3.0
1883	5	4	1.3
1884	4	4	1.0
1885	2	1	2.0
1886	2	2	1.0
1887	1	1	1.0
1888	1	1	1.0
1889	-	-	-
1890	-	2	1.0
1892	-	-	-
1893	-	-	-
1894	1	1	1.0
1895	1	1	1.0
1896	-	-	-
1897	2	2	1.0
1898	1	1	1.0
1899	1	1	1.0
1900	3	2	1.5
1901	1	1	1.0
1902	1	1	1.0
1903	-	-	-
1904	-	-	-
1905	3	1	3.0
1906	1	1	1.0
1907	-	-	-
1908	-	-	-
1909	-	-	-
1910	-	-	-
1911	-	-	-
1912	2	2	1.0
1913	-	-	-
1914	-	-	-

---

Source: Reg. Ship.

TABLE 8a:

PLACE OF RESIDENCE OF OWNERS ON FIRST DAY OF REGISTRATION, 1815-1914,  
WHITBY-OWNED SAILING SHIPS

<u>Year</u>	<u>Total owners</u>	<u>Non- Whitby</u>	<u>No. Whitby owners</u>	<u>Whitby/Total %</u>
1815	77	12	65	84.4
1816	101	34	67	66.3
1817	111	23	88	79.3
1818	65	20	45	69.2
1819	106	26	80	75.5
1820	46	13	33	71.7
1821	64	7	57	89.1
1822	56	9	47	83.9
1823	71	12	59	83.1
1824	274	61	213	77.7
1825	214	88	126	58.9
1826	142	34	108	76.1
1827	87	9	78	89.7
1828	72	24	48	66.7
1829	72	18	54	75.0
1830	55	7	48	87.3
1831	68	10	58	85.3
1832	43	9	34	79.1
1833	44	12	32	72.7
1834	99	9	90	90.9
1835	95	22	73	76.8
1836	286	40	246	86.0
1837	176	44	132	75.0
1838	121	32	89	73.6
1839	129	27	102	79.1
1840	189	57	132	69.8
1841	118	39	79	66.9
1842	72	24	48	66.7
1843	54	14	40	74.1
1844	74	19	55	74.3
1845	60	11	49	81.7
1846	99	23	76	76.8
1847	101	21	80	79.2
1848	174	43	131	75.3
1849	132	37	95	72.0
1850	121	35	86	71.1
1851	89	26	63	70.8
1852	88	17	71	80.7
1853	159	51	108	67.9
1854	177	47	130	73.4
1855	159	26	133	83.6
1856	163	27	136	83.4
1857	156	46	110	70.5
1858	122	29	93	76.2
1859	86	22	64	74.4
1860	101	23	78	77.2
1861	117	32	85	72.6
1862	123	32	91	74.0
1863	66	21	45	68.2
1864	51	22	29	56.9

TABLE 8a: (contd.)

<u>Year</u>	<u>Total owners</u>	<u>Non- Whitby</u>	<u>No. Whitby owners</u>	<u>Whitby/Total %</u>
1865	66	26	40	60.6
1866	65	19	46	70.8
1867	43	15	28	65.1
1868	32	14	18	56.3
1869	34	11	23	67.6
1870	43	10	33	76.7
1871	55	5	50	90.9
1872	6	1	5	83.3
1873	11	1	10	90.9
1874	46	19	27	58.7
1875	30	13	17	56.7
1876	53	17	36	67.9
1877	12	2	10	83.3
1878	4	2	2	50.0
1879	12	7	5	41.7
1880	10	3	7	70.0
1881	9	-	9	100.0
1882	12	5	7	58.3
1883	5	-	5	100.0
1884	4	-	4	100.0
1885	2	-	2	100.0
1886	2	-	2	100.0
1887	1	1	1	50.0
1888	1	-	1	100.0
1889	-	-	-	-
1890	-	-	-	-
1891	2	-	2	100.0
1892	-	-	-	-
1893	-	-	-	-
1894	1	-	1	100.0
1895	1	-	1	100.0
-	-	-	-	-
1897	2	-	2	100.0
1898	1	-	1	100.0
1899	1	-	1	100.0
1900	3	-	3	100.0
1901	1	-	1	100.0
1902	1	-	1	100.0
1903	-	-	-	-
1904	-	-	-	-
1905	3	-	3	100.0
1906	1	-	1	100.0
1907	-	-	-	-
1908	-	-	-	-
1909	-	-	-	-
1910	-	-	-	-
1911	-	-	-	-
1912	2	-	2	100.0
1913	-	-	-	-
1914	-	-	-	-

Source: Statutory Registry of Shipping, Custom House, Whitby

Note: Average proportion of Whitby-based owners of the total owners of Whitby-registered tonnage, 1815 to 1914, was 75.3%.

TABLE 8b:

SAILING VESSELS: SHIPOWNING AT WHITBY - AN ANALYSIS OF THE TURNBULL  
REGISTERS, SAMPLE YEARS 1876, 1882, 1892: RESIDENCES OF OWNERS

<u>Sample years</u>	<u>1876</u>		<u>1882</u>		<u>1892</u>	
	<u>Total no.</u> <u>owners</u>	<u>%</u>	<u>Total no.</u> <u>owners</u>	<u>%</u>	<u>Total no.</u> <u>owners</u>	<u>%</u>
Whitby...	319	(56.5)	144	(47.1)	31	(27.0)
Within 20 miles radius, e.g. RHB...	179	(31.7)	95	(31.0)	54	(46.9)
H'pool, M'boro <sup>e</sup> & Newcastle etc.....	49	(8.6)	53	(17.3)	23	(20.0)
London & surrounding area.....	9	(1.6)	4	(1.3)	1	(0.9)
Elsewhere GB....	9	(1.6)	10	(3.3)	6	(5.2)
Foreign....	-		-		-	
Total	565		306		115	
% Whitby + locality	498 88%		239 78%		85 74%	

Source: See note 18

TABLE 8c:

RESIDENCES OF SHIPOWNERS ON FIRST DAY OF REGISTRATION IN THE 19TH CENTURY

<u>Place</u>	<u>Number of owners</u> <u>(counted each time place mentioned)</u>
Whitby	5682
<u>Within 20 miles' radius</u> (See Map Two)	
Robin Hood's Bay	441
Hawsker	13
Danby	4
Ruswarp	33
Redcar	7
Mulgrave	12
Marske	10
Hinderwell	38
Lealholm	5
Brotton	16
Saltburn	4
Ellerby	7
Lythe	60
Staithes	224
Egton	10
Fylingdales	39
Stanghow	2
Loftus	25
Stainsacre	5
Runswick	82
Sandsend	33
Sneaton	7
Boulby	16
Scarborough	21
Ugthorpe	9

TABLE 8c: (contd.)

<u>Place</u> <u>Within 20 miles' radius</u>	<u>Number of owners</u> <u>(counted each time place mentioned)</u>
Skelton	9
Aislaby	7
Upleatham	2
Pickering	31
Cloughton	2
Kirby Moorside	2
Guisborough	8
Scalby	5
Mickleby	7
Kettleness	12
Sleights	6
Skinningrove	5
Borrowby	1
Barnby	6
Ugglebarnby	2
Dunsley	1
Newholm	2
Easington	6
Fryup	1
Hackness	1
Grosmont	1
Fylingthorpe	1
<u>Rest of North East</u>	
Newcastle	13
North Shields	13
Gateshead	2
Lofthouse	49
Sunderland	16
Hartlepool	40
Stockton	26
Middlesborough	13
Others	150
<u>North West</u>	12
<u>Midlands</u>	6
<u>East Coast</u>	64
<u>South and S.W.</u>	4
<u>Wales, Scotland, Ireland</u>	5
<u>London</u>	136
<u>Foreign</u>	1
<u>Unknown</u>	20

---

Source: Reg. Ship.

See Map Two

TABLE 9a:

## OCCUPATIONS OF WHITBY SHIPOWNERS 1800-1914 COUNTING EACH SHAREHOLDER EACH TIME OCCURS

Master mariners	1222
Shipowners	2345
Shipbuilders	415
Merchants	489
Mariners	183
Gentlemen	399
Ropemakers	41
Farmers	171
Spinsters	83
Husbandman	1
Shipwrights	65
Yeomen	54
Bankers	65
Brokers	25
Flax dresser	1
Butchers	42
Watermen	2
Brewers	15
Harbour Master	6
Whitesmiths	7
Provision merchants	6
Clerks	28
Trustees	3
Railway manager	11
Colliery viewer	1
Labourer	6
Widows	223
Parsons	5
Druggists	3
Housewives	7
Fishermen	238
Victuallers	4
Grocers	148
Pilots	11
Companies	6
Attorneys	6
Ham dealer	1
Ironmonger	4
Patten-maker	1
Lightermen	4
Spirit merchant	21
Cordwainer	31
Miners	2
Joiners	36
Tailors	46
Coal fitters	6
Hay dealers	1
Printers	4
Chimney sweep	1
Gamekeepers	3
Postmaster	2



TABLE 9a: (contd.)

Coffee roaster	1
Baker	19
Weaver	14
Ship chandler	12
Hairdressers	13
Fitter	1
Shopkeepers	9
Doctors	2
Shipkeeper	3
Drapers	39
Iron masters	6
Ship carpenters	31
Corn merchant	1
Insurance brokers	2
Blockmaker	12
Corn dealer	1
Rigger	3
Blacksmith	21
Flax draper	1
Tanner	3
Watchmaker	9
Alum maker	6
Cartwright	4
Cooper	4
Solicitor	18
Boat builders	22
Upholsterer	3
Wheelwright	3
Painters	12
Glaziers	9
Corn factors	21
Hatter	5
Book-keeper	4
Servant	1
Gardener	2
Fishmonger	5
Wine merchant	7
Farrier	3
Schoolmaster	11
Cabinetmaker	17
Carpenter	23
Mast maker	7
Lime agent	2
Plumber	1
Writer	1
Miller	10
Fryer	1
Bacon factor	5
Timber merchant	27
Plumber/glazier	19
Jet manufacturer	27
Silversmith	1
Plasterer	1
Curate	3
Agent	5
Furniture broker	3

TABLE 9a: (contd.)

Carrier		2
Architect		3
Police Officer		1
Saddler		4
Millwright		4
Dyer		2
Accountant		6
Maltster		2
Engineer		16
Coal merchant		29
Marine stores		2
Shoemakers		14
Merchant's porter		1
Builder		6
Tea dealer		1
Coachman		6
Ham dealer		1
Cheese factor		1
Retired		1
	Total	7098
<u>Summary</u>		%
Maritime	4737	66.8
Professional	910	12.8
Commercial	1451	20.4

Source: Certificates of Registry, Custom House, Whitby

Note: This table counts each occupation each time it occurs in the registers, compared with Table 9b, which analyses the occupation of each shipowner, resident in Whitby only.

TABLE 9b:

ANALYSIS OF THE 973 INDIVIDUALS WHO OWNED SHARES IN WHITBY SAILING SHIPS 1800-1914 AND REFERRED TO THEIR RESIDENCE AS WHITBY

Merchants (incl. coal, timber etc.)	60
Master Mariners	245
Shipowners	212
Shipbuilders	21
Mariners	49
Ropemakers	6
Gentlemen	50
Farmers	11
Shipwrights	19
Bankers	7
Brewers	3
Yeomen	6
Whitesmiths	2
Cordwainers	7
Widows	46
Clerks	6
Housewives	1
Parsons	2
Victuallers	1
Surgeons	3

TABLE 9b: (contd.)

Masons	9
Block and mast makers	2
Pattern makers	1
Tinners and braziers	3
Ship carpenters	12
Grocers	17
Sailmakers	7
Attorneys	3
Ironmongers	3
Butchers	10
Lightermen	3
Joiners	12
Tailors	8
Innkeepers	18
Spinsters	13
Fishermen	7
Linen drapers	5
Riggers	3
Shoemakers	5
Tanners	2
Watchmakers	2
Bakers	5
Boat builders	6
Wheelwrights	2
Upholsterers	1
Weavers	3
Painters	3
Hatters	2
Shopkeepers	1
Bookkeepers	1
Gardeners	1
Cabinet makers	3
Lime agent	1
Plumbers - glaziers	2
Hairdressers	3
Writers	1
Ship chandlers	5
Schoolmasters	2
Coopers	1
Jet manufacturers	6
Pilots	3
Flax dealers	1
Smiths	4
Fishmonger	1
Printer	1
Chimney sweep	1
Solicitor	2
Harbour master	2
Silversmith	1
House carpenter	10
Builder	1
Railway manager	1
Ship agent	1
Jet miner	1
Postmaster	1
Shipsmith	1
Carrier	1

TABLE 9b: (contd.)

143

Storedealer		1
Station master		1
Druggist		1
<u>Summary:</u>	Total	988 (15 with two occupations)
Maritime	606	61.3%
Commercial	244	24.7%
Professional	138	14.0%
	988	100

Source: Certificates of Registry, Custom House, Whitby

TABLE 10a:

## COMPARATIVE ANALYSIS OF THE PATTERNS OF SHIPOWNING OF SELECTED PORTS

<u>Port and details of sample and register no.</u>	<u>J-S Co.</u>	<u>No. owners per vessel on first day of registration: % of registrations</u>										
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>+</u>
Whitby (3509 regs.) 1800-1914		43.0	26.7	15.7	8.5	2.8	1.5	0.5	0.6	0.3	0.2	0.
London (1781 regs.) 1824, '36, '48	8.3	56.9	17.0	8.1	5.0	2.0	0.6	0.6	0.4	0.3	0.8	0.
Liverpool (2180 regs.) 1815-20, '29-'35		37.2	25.9	15.0	8.5	3.8	2.5	1.9	1.3	0.7	0.4	2.
Chepstow (139 regs.) 1800-9, '50-'81		60.4	20.9	10.8	4.3	2.2	-	-	-	-	-	1.
Bristol (100 regs.) 1800-'38		25.0	25.0	14.0	14.0	9.0	2.0	5.0	4.0	2.0	-	-
Boston (350 regs.) 1836-1848		57.7	23.7	12.8	4.9	0.6	-	-	0.3	-	-	-

Sources: See notes 38, 41, 42 and G. Farr, Records of Bristol Ships 1800-1830 (Bristol, 1950). Figures for Boston calculated in the course of research for an article, 'Shipowning in Boston, 1836-1848' Mariners' Mirror, 65 (1979), pp.339-349

TABLE 10b:

COMPARATIVE ANALYSIS OF THE PATTERNS OF SHIPOWNING AT SELECTED PORTS.  
AREAS OF RESIDENCE OF SHIPOWNERS

<u>Port</u>	<u>Places of residence %</u>			
	<u>Port itself</u>	<u>County &amp; surround- ing area</u>	<u>Rest GB</u>	<u>Foreign</u>
Whitby	75.3	18.2	6.5	(1 owner only)
London	29.2	57.5	5.4	7.9
Liverpool	79.8	9.3	4.6	6.3
Chepstow	54.0	39.2	6.8	-
Bristol	87.4	5.8	5.8	1.0
Boston	50.9	45.4	3.7	-

Sources: See Table 10a

TABLE 10c:

COMPARATIVE ANALYSIS OF THE PATTERNS OF SHIPOWNING AT SELECTED PORTS  
OCCUPATIONS OF SHIPOWNERS

<u>Port</u>	<u>%</u> <u>Type of Occupation</u>		
	<u>Maritime</u>	<u>Commerce and</u> <u>Industry</u>	<u>Professional</u>
Whitby	66.8	20.4	12.8
London	59.5	29.6	10.9
Liverpool	20.9	69.3	9.8
Chepstow	38.7	53.2	8.1
Bristol	17.4	74.6	8.0
Boston	61.0	34.6	4.4

Sources: See Table 10a

.....

TABLE 11:

NUMBER AND TONS SAILING VESSELS REGISTERED AT WHITBY COMPARED WITH UK  
REGISTERED TONNAGE (SAIL) 1815-1914

<u>Year</u>	<u>Whitby No. &amp; tons</u>		<u>UK No.</u>	<u>UK</u> <u>Tons 000s</u>	<u>Wh./UK</u> <u>%</u>
1815	231	43938	21861	2477	1.77
1816	251	46341	22014	2503	1.85
1817	254	45700	21761	2420	1.88
1818	248	42797	22005	2450	1.74
1819	268	45660	21973	2449	1.86
1820	267	44551	21935	2436	1.82
1821	265	43123	21593	2350	1.83
1822	263	43313	21153	2307	1.87
1823	254	44147	20941	2293	1.92
1824	250	40298	21164	2338	1.72
1825	248	39572	20442	2313	1.71
1826	260	44938	20738	2387	1.88
1827	265	46908	19269	2154	2.17
1828	271	47193	19372	2165	2.17
1829	258	41576	18821	2170	1.91
1830	255	40740	18876	2168	1.87
1831	260	41647	19126	2192	1.89
1832	258	41194	19312	2226	1.85
1833	251	40072	19302	2233	1.79
1834	247	39191	19545	2268	1.72
1835	244	42365	19797	2307	1.83
1836	241	43190	19827	2289	1.88
1837	272	46717	19912	2264	2.06
1838	281	48781	20234	2346	2.07
1839	350	51754	20947	2491	2.07
1840	360	57432	21883	2680	2.14
1841	380	61173	22668	2839	2.15
1842	325	49046	23121	2933	1.67
1843	323	47957	23040	2898	1.65
1844	338	50066	23116	3931	1.27
1845	351	52413	23471	3004	1.74
1846	350	51359	23808	3069	1.67
1847	358	53624	24167	3167	1.69

TABLE 11: (contd.)

Year	Whitby No. & tons		UK No.	UK	Wh./UK
				Tons 000s	%
1848	359	54545	24520	3249	1.67
1849	389	61182	24753	3326	1.83
1850	386	60456	24797	3397	1.77
1851	397	62866	24816	3476	1.80
1852	386	61336	24814	3550	1.72
1853	389	61553	25224	3780	1.62
1854	389	60923	25335	3943	1.54
1855	390	62106	24274	3969	1.56
1856	386	63053	24480	3980	1.58
1857	413	67519	25273	4141	1.63
1858	431	70042	25615	4205	1.66
1859	455	74387	25784	4226	1.76
1860	459	74662	25663	4204	1.77
1861	454	73436	25905	4301	1.70
1862	444	71448	26212	4396	1.62
1863	418	68696	26339	4731	1.45
1864	414	69295	26142	4930	1.40
1865	406	71231	26069	4937	1.44
1866	411	74859	26140	4904	1.52
1867	401	74513	25842	4853	1.53
1868	374	68773	25500	4878	1.40
1869	348	65277	24187	4765	1.36
1870	330	62028	23189	4578	1.35
1871	309	60519	22510	4374	1.38
1872	283	55804	22103	4213	1.32
1873	256	49743	21698	4091	1.21
1874	237	46581	21464	4108	1.13
1875	221	42756	21291	4207	1.01
1876	210	40959	21144	4258	0.96
1877	197	37570	21169	4261	0.88
1878	181	34814	21058	4239	0.82
1879	169	31415	20538	4069	0.77
1880	155	27547	19938	3851	0.71
1881	124	20789	19325	3688	0.56
1882	111	17565	18892	3622	0.48
1883	96	14073	18415	3514	0.40
1884	87	12115	18053	3465	0.34
1885	81	10182	17018	3457	0.29
1886	77	9396	16179	3397	0.27
1887	70	8324	15473	3250	0.25
1888	65	7276	15025	3114	0.23
1889	61	6683	14640	3041	0.21
1890	52	5617	14181	2936	0.19
1891	50	5114	13823	2972	0.17
1892	42	4382	13578	3080	0.14
1893	39	3818	13239	3038	0.12
1894	39	3852	12943	2987	0.12
1895	32	2972	12617	2867	0.10
1896	31	2805	12274	2736	0.10
1897	29	2489	11911	2590	0.09
1898	24	1921	11566	2388	0.08
1899	21	1916	11167	2247	0.08
1900	19	1671	10773	2096	0.07
1901	18	1613	10572	1991	0.08
1902	18	1348	10455	1951	0.06

TABLE 11: (contd.)

<u>Year</u>	<u>Whitby No. &amp; tons</u>	<u>UK No.</u>	<u>UK Tons 000s</u>	<u>Wh./UK %</u>
1903	18 1450	10330	1869	0.07
1904	16 1372	10210	1803	0.07
1905	13 1018	10059	1671	0.06
1906	14 1073	9887	1555	0.06
1907	12 802	9648	1461	0.05
1908	11 765	9542	1403	0.05
1909	9 577	9392	1301	0.04
1910	5 290	9090	1113	0.02
1911	3 204	8830	981	0.02
1912	3 204	8510	903	0.02
1913	4 243	8336	847	0.02
1914	3 204	8203	794	0.02

---

Sources: See note 44

## APPENDIX 1

## REPORTS OF SURVEYORS OF LLOYD'S REGISTER

REPORTS OF VISITING SURVEYORS 1844-1852

Ships building at the outports abstracted from Lloyd's surveyors returns, 31 December 1844

## WHITBY

<u>Being built by</u>	<u>tons</u>	<u>progress</u>	<u>for what class</u>
H. Barrick	290	in frame	12A
Hobkirk	216	partly planked	10A
Turnbull	260	floors crossed	10A

The first vessel was for sale, second two under contract.

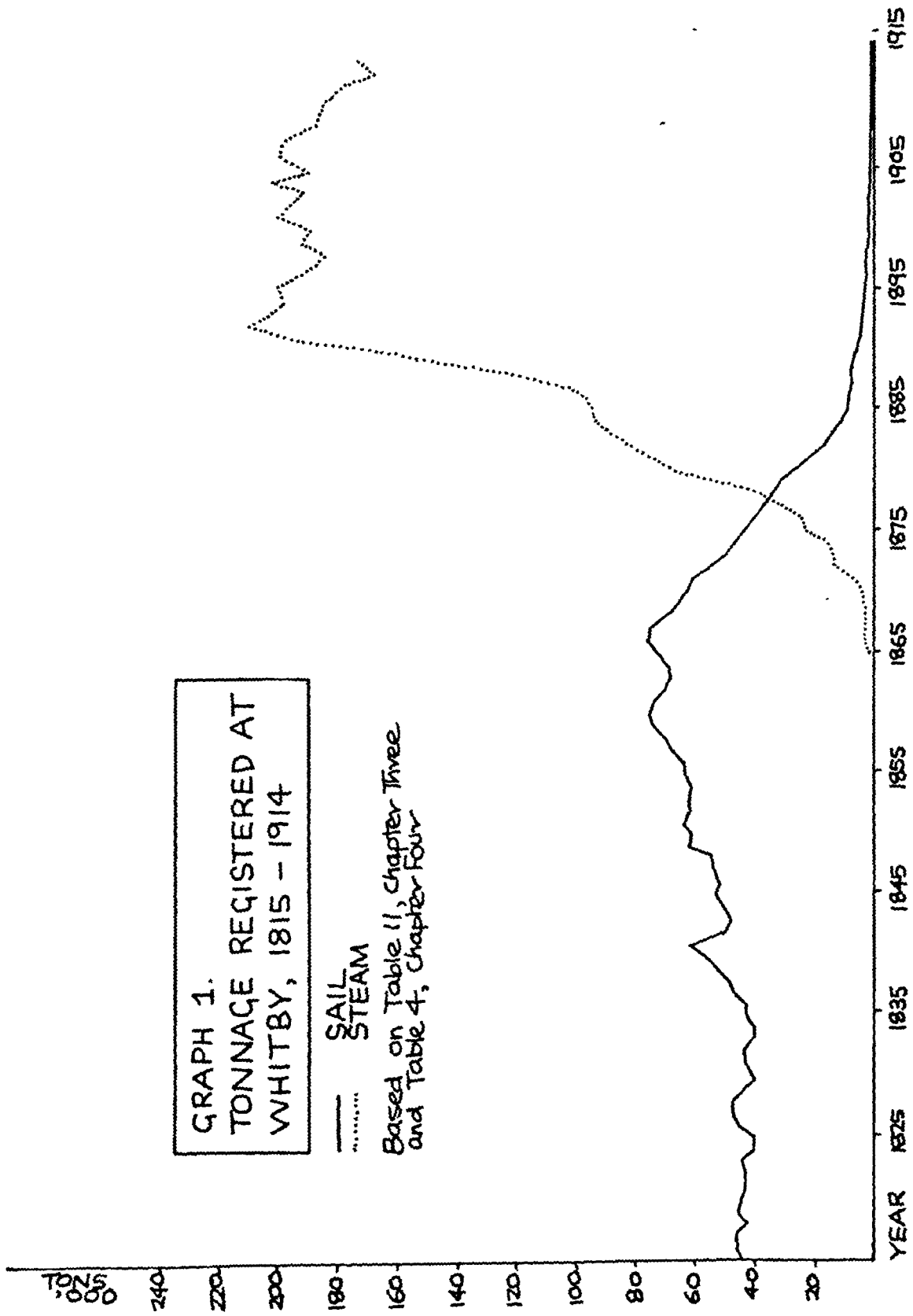
REPORTS OF COMMITTEES OF VISITATION 1851-1879

In July 1853 the following shipyards were inspected:-

1. H. Barrick - one vessel building (230 tons) for the 10 years grade. Another, the Aid, a collier belonging to Mr. Smales, under repair.
2. Mr. Hobkirk - one vessel (225 tons) nearly ready to launch, for the 8 years grade. One vessel (220 tons) fully framed, for the 8 years grade. Both vessels building for Mr. Smales. Also keel and part of the floors laid for a vessel of 350 tons, which Mr. Hobkirk was about to build. Hobkirk's work seems very creditable.
3. Messrs. Turnbull and Son. One vessel (350 tons) nearly completed, for the 10 years grade. We are pleased to see he has adopted the recent increase in the thickness of topside planking, but he did not concur in increasing the size of the top timbers. Turnbull is a very experienced and active shipbuilder. A very satisfactory visit.
4. Messrs H. & G. Barrick. One vessel (300 tons) building, for the 10 years grade. The builders are hostile to the society, but they allowed us to look at this vessel, which is for sale. Nothing to remark.

Source: Archives of Lloyd's Register

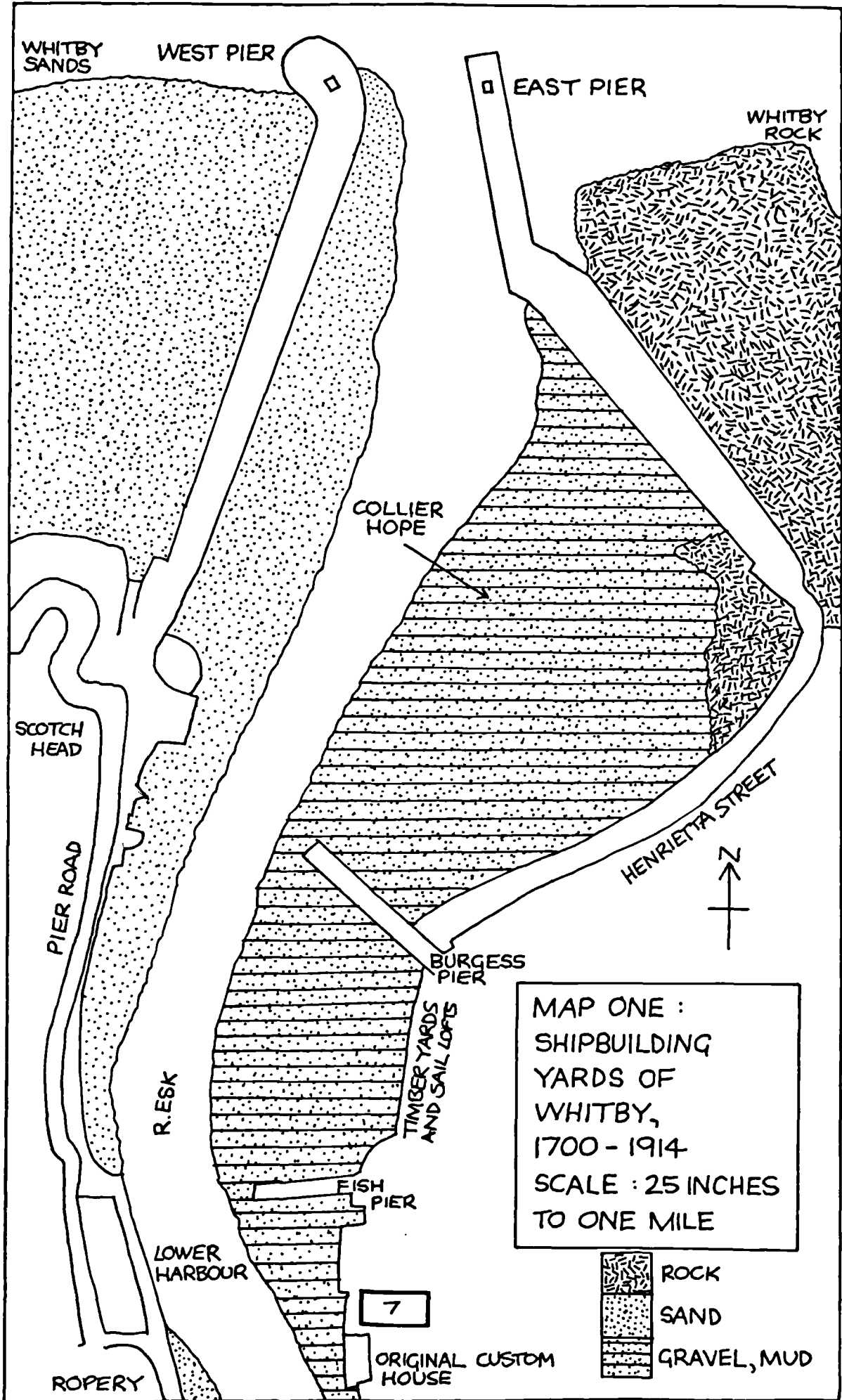


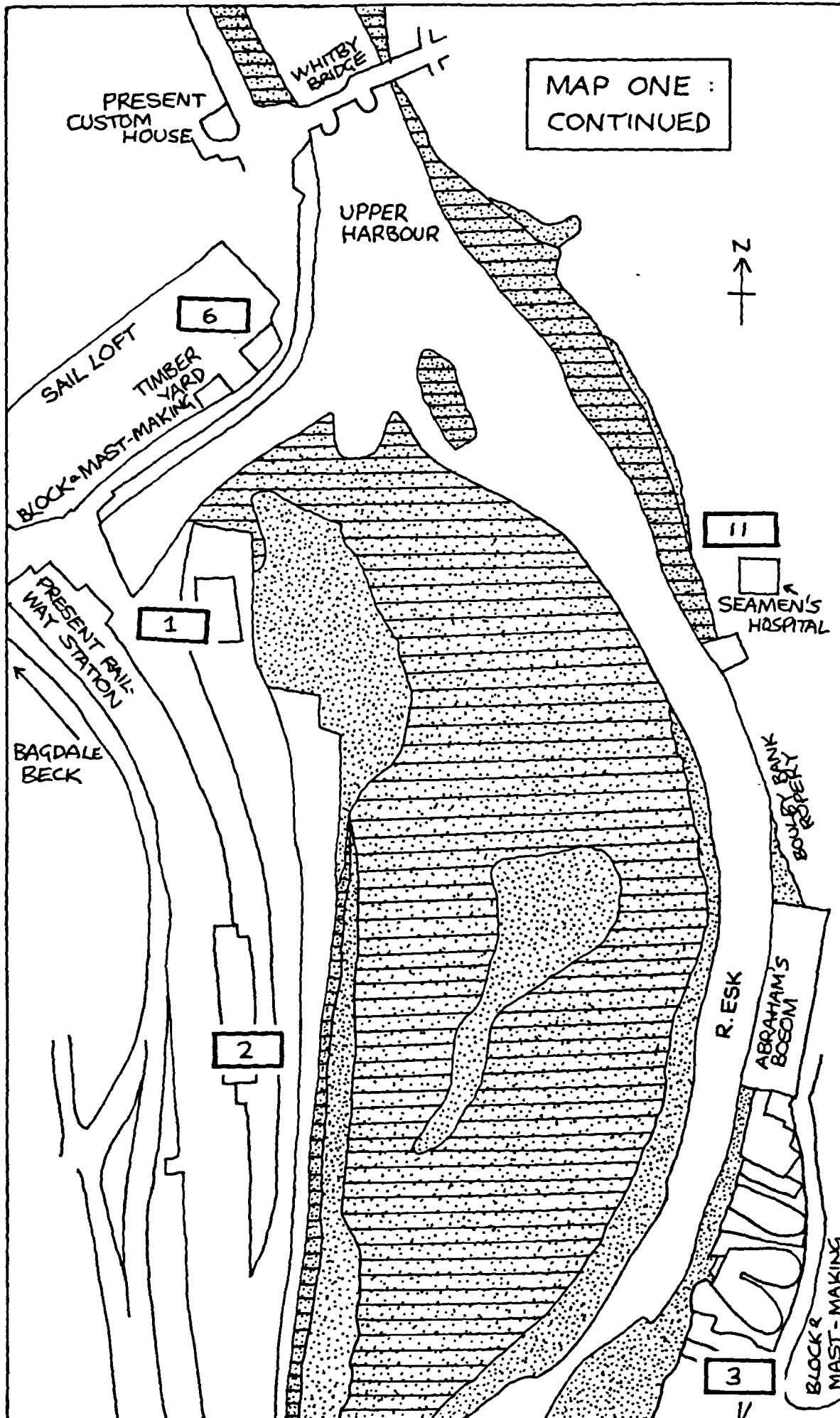


GRAPH 1.  
 TONNAGE REGISTERED AT  
 WHITBY, 1815 - 1914

— SAIL  
 ..... STEAM

Based on Table 11, Chapter Three  
 and Table 4, Chapter Four





MAP ONE :  
CONTINUED



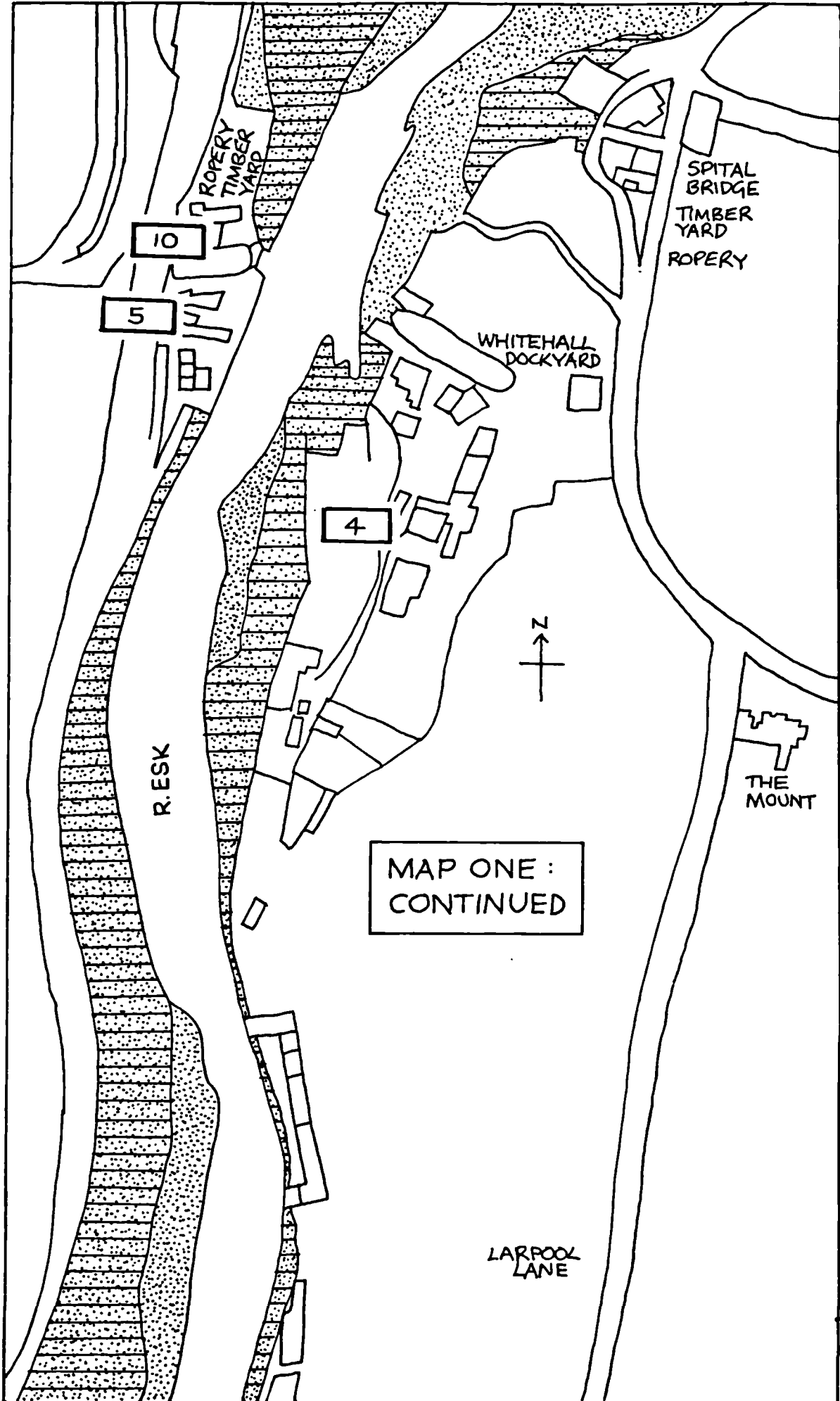
6

1

11

2

3



MAP ONE :  
CONTINUED

R. ESK

ROPERY  
TIMBER  
YARD

SPITAL  
BRIDGE  
TIMBER  
YARD  
ROPERY

WHITEHALL  
DOCKYARD

THE  
MOUNT

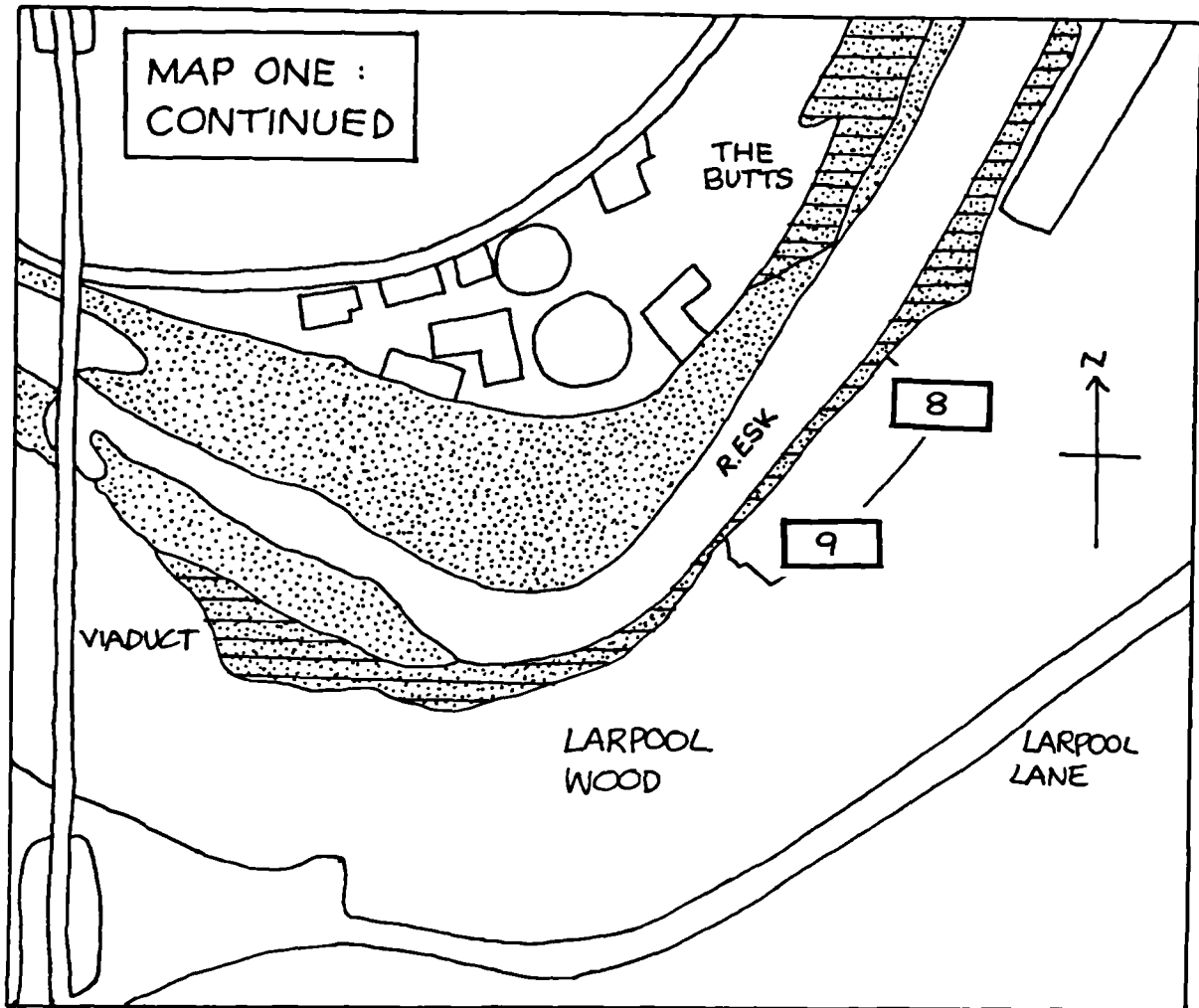
LARPOOL  
LANE

10

5

4





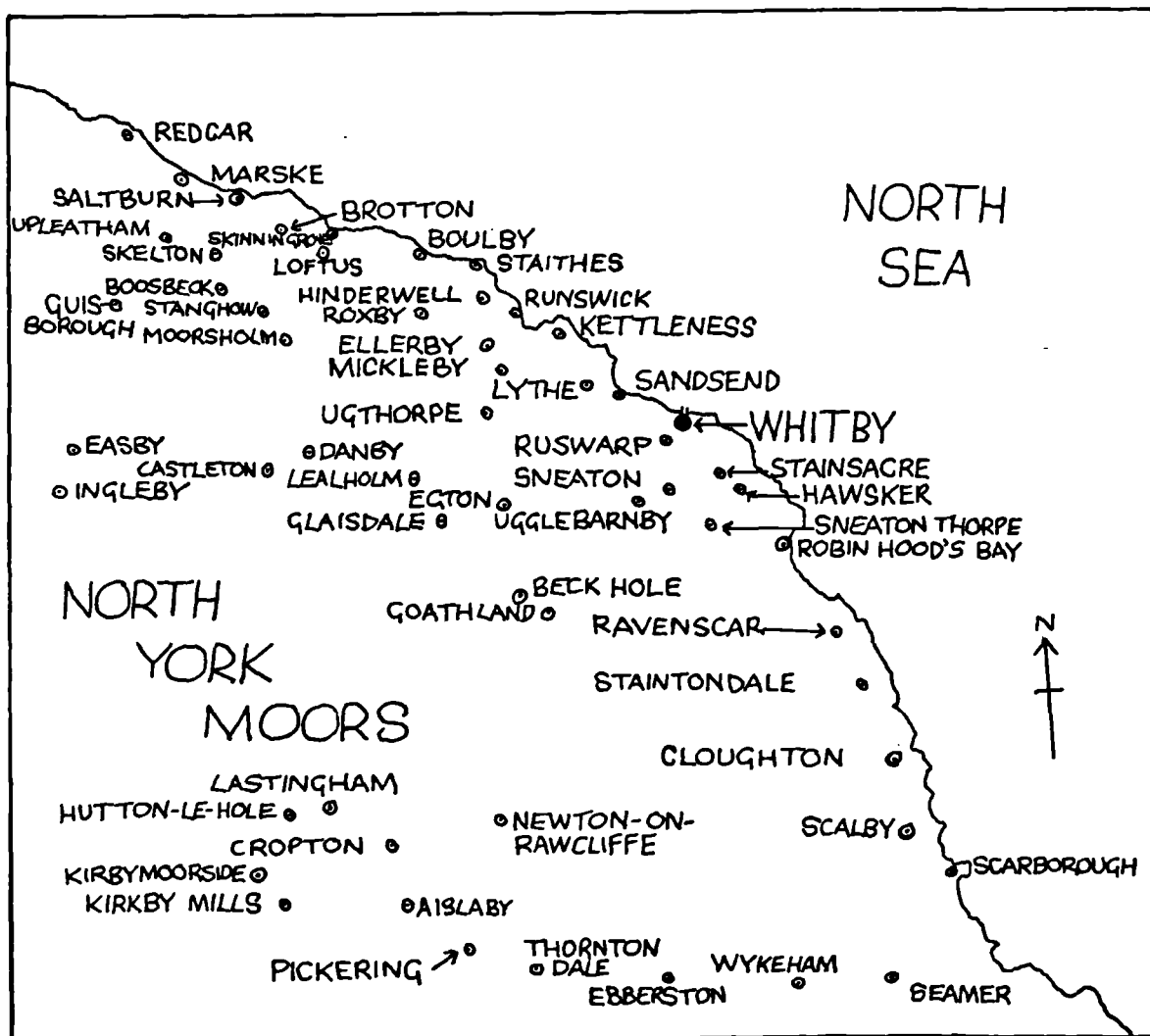
THE PRINCIPAL WHITBY SHIPYARDS WERE BEGUN BY :

- 1 Jarvis & Benjamin Coates, c.1717-1756
- 2 Jarvis Coates, jnr., c.1740-1759
- 3 Dock Company, c.1730
- 4 William Coulson, c.1790
- 5 William Simpson, c.1760
- 6 Thomas Hutchinson, previous to 1763
- 7 Unidentified Yard behind Custom House
- 8 Jonathan Lacey, 1800-1803
- 9 James Wake, 1801-1806
- 10 Thomas Fishburn, c.1757
- 11 William Falkingbridge, c.1800

Yard 1 was divided c.1763 and subsequently occupied by Thomas Hutchinson, 1763-1777, Robert Barry to 1793, John Barry to 1826 and was given up by Robert Barry in 1830. The southern part of the yard was occupied by Henry & Thomas Barrick until abandoned in 1866. Yard 2 was bought by Thomas Fishburn in 1759 and was closed in 1830. Yard 3 continued to be owned by the Dock Company, including Reynolds, Campion, Langborne, Holt, Richardson and Cato: the last vessel built there was by Smales, Evans, in 1871. Yard 4 was occupied by members of the Eskdale, Chapman and Campion families, and was owned by Thomas Turnbull and Son from 1851, their last steamer built in 1902. Yard 5 was subsequently occupied by William Huxter, then Geo. & Nat. Langborne, then Thomas Hobbs, until closed in 1862. Based on the 3rd. edition Ordnance Survey of Whitby, 1891-2.

MAP TWO:  
SETTLEMENTS WITHIN TWENTY MILES'  
RADIUS OF WHITBY. SEE TABLE 8c

The settlements mentioned here were recorded in the Registers of Shipping as places of residence of investors in whitby-registered vessels. Other locations of shipowners within this area included: Easington, Borrowby, Barnby, Mulgrave, Dunsley, Newholm, Sleights, Gosmonk, Fylingthorpe, Fylingdales, Hackness, Fryup, Carlin How, Port Mulgrave, Yearby and Atherston.



## CHAPTER FOUR: STEAMSHIPPING AT WHITBY c. 1865-1914

'Our harbour has a deserted appearance, whilst our steamers trade to and from all parts of the world'.<sup>1</sup> The dichotomy of a thriving shipping industry at a small and isolated port which saw very little shipping traffic itself is emphasised especially by the development of steamship building and owning at Whitby.

Steamshipping at Whitby was essentially part of the growth of that industry on the North East coast as a whole, beginning with the building of the John Bowes, the first steam screw collier, at Charles Mark Palmer's Jarrow yard in 1852. In the coal trade between the Tyne and London the advent of the screw collier had considerable impact, especially as the seaborne coal trade was adversely affected by competition from railways.<sup>2</sup> Sailing colliers had low running costs and six could be purchased secondhand for the price of one screw collier (approximately £12,000 in the 1850's and 1860's) but the latter could carry an average of 600 tons and make 30 voyages per year, whilst the average capacity of a sailing vessel of that period was 300 tons, completing an average of ten voyages annually. It had been calculated that at an average freight of 8s to 9s per ton of a 300 ton cargo a vessel would earn £1070 profit per year in ten voyages. A 600 ton cargo making 30 voyages would pay £6420.<sup>3</sup>

The increased efficiency of the steam collier according to the quantity of coal carried resulted in a considerable increase in the exports of coal generally from 7 million tons in 1860, 11 million in 1870 and 134 million tons in 1880.<sup>4</sup> The development of the steamship in the second half of the nineteenth century led to an overall increase in the volume of trade and it has been plausibly suggested that technical change in

increase in size of individual vessels; the overall rise in output from British yards and, in the late nineteenth and early twentieth centuries, the beginnings of the building of vessels for specialised trades and commodities. Table 1 shows the net tonnage of steam vessels built at Whitby in this period compared with steam tonnage launched from the North East coast yards and the United Kingdom total.

The transition from the building of sailing vessels to steamers at Whitby was almost complete by the mid 1870's. Only seventeen sailing vessels of 1,599 tons were built at Whitby in the period 1870 to 1913 and only five were over 200 tons. Whitby shipbuilders were largely unconcerned with large sailing barques, of the kind built at Scottish ports, Liverpool and other North East ports because of the concentration of Whitby shipbuilders on vessels for the coal trade, rather than the long haul trades to Australia and the Far East that remained a mode of employment for sailing vessels in the late nineteenth century and beyond. Whitby shipbuilding changed from the building of sailing colliers to steam colliers, and did not participate in the final peak in the development of the sailing ship. In the North East, however, nearly 500,000 tons of sailing vessels were built from 1870 to 1914, averaging 567 tons each showing a particular increase in the early 1890's reflecting the high price of coal which increased the running costs of steamers. In 1870 Shields and Sunderland produced largely sailing vessels and in 1880 Stockton's output was 28% sail, but by 1900 only 0.1% of new vessels built in the North East were sailing vessels. In 1870 the annual tonnage of steamships built in the U.K. exceeded the annual sailing tonnage built for the first time. Only in three subsequent years - 1875, 1876 and 1885 did sailing tonnage account for over 50% of total output and in 1892 sailing vessels were 37.3% of all vessels built that year, showing that the change from sailing ship building to the



shipbuilding more than anything else accounts for the rapid expansion of the British shipping industry so that in the twenty five years before the First World War Britain built two-thirds of all new tonnage launched.<sup>5</sup>

The building and owning of steamships at the port of Whitby may be seen as a contribution to this growth in the British Mercantile Marine. This forms a background to an analysis of, firstly, the nature of steamship building at Whitby, and secondly, the reasons why shipowners at the port invested in steam tonnage, and finally a consideration of the details of operation of individual steamships.

The building of iron vessels with steam propulsion compared with fully rigged sailing vessels required totally new materials and skills. Scott Russell remarked in 1862 that 'it was amusing to me to see how in early ships the copy of wood frames was carried so far that the frames were made in separate bits of angle-iron, and scarphed and spliced like frame timbers'. The entire design of iron steamers differed from sailing vessels: by the mid 1870's iron vessels were built with cellular double bottoms, with transverse frames with iron plating.<sup>6</sup> The materials in an iron vessel which registered 1,000 tons weighed 35% less than a comparable wooden vessel. Iron of only 1/8" thick was equal in strength to 1" of oak, and 11/16" thick iron to 5" of oak.<sup>7</sup> In iron merchant ships as in wooden ships, minimising costs was of principal concern to the shipbuilder. Simple design was most effective: as Abell wrote, 'the early iron ships were mainly sides and bottom kept in shape by the support of transverse frames, which also carried the deck beams'.<sup>8</sup>

Four principal trends may be identified in an analysis of the British shipbuilding industry from the second half of the nineteenth century which stem from this technological change: the transition from sail to steam propulsion and from wood to iron and steel hulls; the

construction of steamers varied between ports and shipbuilding regions: in the South West, for example, steam tonnage built equalled sailing ship production only in 1883 and 1889-91 and in 1909 steamship tonnage built was only four per cent of the total of South West-built vessels that year.<sup>9</sup>

The change in shipbuilding materials used at Whitby shipyards was as complete as the replacement of sail by steam. No wooden steamers were built at the port (as was the practice on a limited scale in the South West ports, for example) and iron was used rarely in sailing ships at Whitby, an exception being the composite built Monkshaven of 1871. The first steel vessel built at Whitby was the Dora of 1558 net, 2376 gross in 1887 and from that year onwards all Whitby steamships were built of steel. The North East ports generally were amongst the first to build in steel. In 1879, when the first steel steamers are recorded in the annual statement of navigation and shipping, 83% of all steel tonnage was built in the North East. Steel sailing barques were also built in this region, and by 1890 iron had largely disappeared as a shipbuilding material. Wooden vessels continued to feature in the U.K. shipbuilding returns but represented only 1.5% of total tonnage launched in 1911.

The second principal feature among changes in shipbuilding in the late nineteenth century to be considered here was the overall increase in the size of individual vessels. In Table 1 average tonnages have been analysed per quinquennia, showing that Whitby-built steamers were of a particularly large size. This may be explained by a concentration on the building of large steam colliers and ocean going vessels, with only a limited interest in steam tugs, trawlers or steam yachts of relatively small tonnage, vessels which would appear especially small in net tons and reduce the overall average. The harbour traffic of Whitby itself was too limited to produce a large demand for tugs and harbour craft and the few steam trawlers used in this period were imported. The ships built in the

North East ports as a whole were every year above the national average, reflecting their importance in specialising in vessels for the bulk trades. The average tonnage of all vessels built nationally does not reach over 1,000 net tons until 1900 whilst the average tonnage of Whitby steamers was 1056.5 net in 1880. It may be suggested that the maximisation of profits and pursuit of economies of scale led to the development of larger vessels and Whitby-built steamers kept pace with this demand.

Whitby shipbuilding output reached a peak in 1884, a year after the North East ports as a whole and the overall U.K. figures. The period 1880-82 was marked by a 'great increase in manufactures and produce and consequently an enormous increase in consumption and demand'.<sup>10</sup> From the initial order and contract to completion of a vessel could take over a year, and by 1883 the freightmarket was again depressed. The resultant over-production of tonnage led to a decrease in vessels built until the late 1880's when a rapid rise in freights restored demand. Shipbuilding may be said to be subject to especially violent fluctuations, affected by every other branch of industry: in manufacturing, food and raw materials which determined the demand for shipping, in addition to the price of materials and labour in shipbuilding itself. Ships were large and expensive and shipyards highly specialised, and thus unable to gain orders from other fields of industry in a shipping depression. A decline in replacement requirements, calculating approximately twenty years for each ship could result in a depression in shipbuilding even when current shipping was operating profitably.<sup>11</sup> The subsequent years of large output in the North East ports as a whole, which follow the pattern of U.K. built tonnage, viz. 1898-1902, 1904-7 and 1911-3 were influenced by high freights due to the Spanish American War of 1898 and the later Boer War with an increase in freight rates just before the First World War.

A final feature of the late nineteenth and early twentieth century

shipbuilding industry in Britain was the building of specialised vessels such as oil tankers and refrigerated ships. In the twenty years before 1906, seventeen shipbuilding companies on the Tyne, Wear and Tees built 200 oil tankers beginning with the Gluckauf of 2300 gross of 1886.<sup>12</sup> William Gray's yard at West Hartlepool became well known for the building of bulk carrying vessels of a relatively standardised design and tonnage.<sup>13</sup> The building of warships and luxury passenger liners was a feature of the North East ports but steamship building at Whitby did not progress beyond ocean going steam colliers, and it never again reached the peak of production achieved in 1883.

The nature of steamship building at Whitby may be analysed in part by the annual tonnage output figures as shown in Table 1, but a further consideration of the only Whitby steamship builders, Thomas Turnbull and Son, can lend further insight into the reasons why the port of Whitby became the scene of steamship construction in 1871 and why this industry declined and ceased in 1902.<sup>14</sup> Steamship building had become established at the North East ports since the 1850's and 1860's and the increase in steamers nationally by 1871 was almost double that of any preceding year, with a comparatively small number of sailing vessels built that year.<sup>15</sup> The beginning of the 1870's was marked by a growth in trade with the outbreak of the Franco-Prussian War, and the Black Sea grain trade was showing profits, but only for steamers as the 1870 grain crop was unfit for long voyages. The Turnbells were thus attracted to steamshipping, as shipbuilders and as shipowners. The grandson of the first Thomas Turnbull attended the Royal School of Naval Architecture and Marine Engineering at Kensington where he had gained experience in the use of iron and steel and marine engines, and with the death of his grandfather, a decision was made in the late 1860's to break with the age-old tradition of wooden shipbuilding at Whitby and follow the pattern set by the other North East

ports and the Clyde.<sup>16</sup> A further influential factor was possibly the opening of the Suez Canal and the developments in marine engineering which made possible a more economical use of fuel, providing more cargo space. The increased capital cost that steamshipping represented is shown by the cost of the Whitehall - the first Turnbull built steamer, of 488 net, 753 gross tons - which amounted to £13,084, when launched in February 1871. This may be compared with their last sailing ship, the barque King Arthur of 422 tons, costing £6,260.<sup>17</sup> With this change to steamship building, the Turnbells seem to have recognised a demand among Whitby-resident investors for steamship shares, in the vessels which the builders themselves managed and those owned by other Whitby shipowners. Table 2 shows the original owners and contractors of Turnbull built steamers, and it is clear that over half were owned by the firm themselves, either the parent company in Whitby or its branches, Turnbull Scott and Company in London or Turnbull Brothers of Cardiff. A further twenty-four Turnbull-built steamers were owned at Whitby, and the majority of the remainder were owned in the North East, South Wales or London. Thus a total of 71% of steamships built at Whitby were owned by their builders or at the port itself, representing a response to a local demand for steam tonnage, in continuation of the port of Whitby's involvement in the shipping industry and especially in the coal trade.

The decline of steamship building at Whitby similarly reflects a falling-off in local demand. The last steamer to be built for a Whitby company other than the Turnbells was in 1895 and at the end of the nineteenth century their orders seriously diminished, to the point of building three small sailing barges and two steam tugs or launches. Of their last six vessels all but one was owned by the Turnbells themselves, reflecting an inability to attract outside interest. In 1902, a week

after the Broomfield (the last Turnbull built steamship) was launched, the Whitby Gazette reported thus:

We regret to say that Messrs. Thomas Turnbull and Son have no more orders on hand and, after the vessel now in the harbour is completed, the shipyard will probably be closed, provided nothing happens in the meantime to obviate this unfortunate necessity.<sup>18</sup>

It has been suggested that 'the building of the steel screw steamers ended at Whitby early this century because of the limitation on the size of ship imposed by the narrow opening of Whitby Bridge'.<sup>19</sup> However, the Warrior II, the largest Turnbull-built steamer of 3674 gross, safely negotiated this obstacle and, with average North East built steamships 2235.2 and the average of all U.K. steamers only 1258.3 in 1913 (see Table 1), Turnbells could have continued to build vessels of an above average tonnage for many years, despite a restriction to keep below 4,000 gross. The average tonnage of U.K. built steamships actually declines by the 1920's and 1930's. In the discussions preceding the building of a new bridge at Whitby in 1905 however, the local councillors obviously did not consider the shipyard to be permanently closed, as they thought a new bridge would encourage shipbuilding and that the Turnbells should pay towards it. The local councillors also planned to charge the company an increased rent, based on the number of ships they built. The company had been wary in reply to the authorities, as a spokesman reported, 'he had it from the firm themselves that, if the waterway were altered, there would be every inducement to build ships'.<sup>20</sup> Hopes were maintained locally that the closure of the yard would be only temporary, but only a skeleton staff had been kept on since May 1903,<sup>21</sup> indicating that Turnbells had decided to specialise in shipowning and managing. 1901 had seen a general depression in the freight market, due to an overbuilding of tonnage, rates were down, and many trading voyages were no longer profitable with many vessels laid up. Government transport work, generally a reliable source

of profits, was reduced with the end of the Boer War.<sup>22</sup> The many disadvantages that Turnbulls faced in building steamships at Whitby, such as the lack of nearby iron and coal resources and the non-existence of a local boiler-making or engineering industry meant that, in times of low profits and reduced demand for steamships, their prices, compared with other North East ports, remained high. In periods of prosperity and high demand these disadvantages could be borne, but when profit margins became narrower the Whitby steamship building industry became unremunerative.

Pollard and Robertson noted a contraction in the number of ports involved in shipbuilding in this period with the change from sail to steam and considered that the final distribution of the industry was determined by accessibility to cheap supplies of labour, raw materials, land, a ready market for ships, the existence of subsidiary industries and availability of repair work. 'As a result', they concluded, 'in the second half of the nineteenth century shipbuilding came to be increasingly concentrated in a small number of centres that were exceptionally well endowed with these prerequisites'.<sup>23</sup> The existence of steam shipbuilding at Whitby in many ways contradicts this statement, although, as suggested, the lack of many of these attributes ultimately contributed to the decline of the industry. However, the capital that local shipowners were prepared to invest, and the ready demand for colliers with a nearby bulk cargo, temporarily outweighed the disadvantages and supported steamship building at Whitby for over thirty years.

The owning of steamships at the port of Whitby resulted in as many changes for the shipowner as the building of steamers had had for the Turnbulls. The increased efficiency of steamships, their capacity and profitability compared with the sailing vessel has already been indicated. A sailing collier voyaging from the Tyne to the Thames could take three weeks to carry up to 400 tons of coal. After taking up to a week to

discharge her cargo, she would take on river gravel as ballast, paying, in the mid 1870's, one shilling a ton and sixpence a ton for loading it. Not only could a steam collier complete a thirty-six hour voyage but the use of a double bottom (which also served to strengthen the vessel) for water ballast effectively trimmed the vessel for her homeward voyage without extra cost.<sup>24</sup> The improvements in marine engines and reduced coal consumption meant that after the 1860's and 1870's screw steamers were no longer confined to coastal voyages,<sup>25</sup> and coal could for example, be exported to the Mediterranean, and Black Sea grain brought home.

The main difference felt by the shipowner in transferring his interests from sailing vessels to steamers was the high capital cost of the latter. In 1865, the 638 gross ton Primus cost £6750, compared with around £1800 for a sailing vessel of comparable capacity, and by 1914 the price of a new steamer reached £50,000 as in the case of the 4702 ton Nuceria.<sup>26</sup> Running costs could also be high depending largely on the cost of bunkering: a three month voyage in 1888 with coal at 9s 3d per ton would cost £130, but a comparable voyage and ship in 1891 when coal cost 16s per ton would mean an outlay of £237.<sup>27</sup>

The traditional form of ownership of British vessels was popularly the division of shares into sixty-fourths. However, the considerable increase in capital investment required by the ownership of steam vessels compared with sail made even the cost of one sixty-fourth a large sum. The Bernard for example, built in 1900 and of 3682 gross tons cost £43,250 new, thus £676 was required for a one sixty-fourth share (see Table 11). The growing popularity of joint-stock companies enabled smaller sums to be invested, as in the case of issues of £10 shares.<sup>28</sup> Three representatives of the North of England Steam Shipowners Association speaking as witnesses at the 1886 Royal Commission stated that if a ship, owned in sixty-fourths, was to sink another, and there was loss of life,



she would be liable to pay £15 per ton, but if a single ship company under the limited liability Act was to do the same, if the whole of the capital was paid up, and she was uninsured, there would be no liability at all.<sup>29</sup> The coming of limited liability thus reduced risk to the investor's capital in event of a collision and attracted small sums from a wider range of investors. W.R. Price, a London shipowner at the same Royal Commission, described the ease by which the new system of ownership attracted would-be shipowners:

Under the limited liability Act, a large number of very enterprising nobodies, without experience of the shipping trade, were enabled to put a balance sheet before gentlemen in the country who knew nothing at all about the subject, and they said this vessel made twenty-five per cent profit last voyage, and we are going to get up a company for another vessel, and we will put you down for any amount you like, we will either put you down for £500, or £1,000, and you will know that is the extent of your responsibility.<sup>30</sup>

The popularity of limited liability joint-stock companies in the ownership of steamers is seen in the work of Cottrell on the port of Liverpool and Craig on Cardiff and Swansea, where this manner of investing in steamships is a predominant feature. Cottrell discovered ninety-six joint-stock companies and forty-nine single ship companies in Liverpool between 1856 and 1881.<sup>31</sup> He subsequently showed that of the number of shipping companies effectively registered in England and Wales between the same dates, nearly half were Merseyside promotions.<sup>32</sup> Craig has shown that a total of 288 joint stock, limited liability shipping companies were floated at Cardiff, with a further thirty-two at Swansea, in the years 1877 to 1900.<sup>33</sup>

The ownership of steamships at Whitby, however, was in great contrast to the manner of investment in steamers at other ports. Before 1900, joint stock shipping companies were almost unknown at the port of Whitby. Table 7a shows that only five limited liability companies were formed

before the turn of the century, three of which were set up after the end of the 1880's. A further two unlimited companies were established in the 1870's. Thus at the peak of investment in steam tonnage at the port of Whitby in 1892, only a single limited liability company was in existence. Of 209 steamships newly registered at Whitby between the years 1865 and 1914, only eight were managed as single ship companies, and only another ten limited liability companies were established in this period.

Thus the majority of Whitby-registered steamships, a total of 146 of 209, continued to be owned by the traditional principal of the division of shares into sixty-fourths. Often a one sixty-fourth share was divided between three or four investors and held jointly, in order to spread the amount of capital to be raised by each individual, which rather contravened the spirit of the old sixty-fourth type of ownership, but the adoption of the joint stock system was avoided by most Whitby shipowners. Despite the fact that later Whitby steamships cost as much as £50,000 each and thus investment in one sixty-fourth share would require £780, a considerable sum for an individual, Whitby shipowners continued, in the main, with the old-fashioned form of ownership. The port of Whitby in this period was dominated by a small number of ship-owning families, of whom most had originally owned tonnage at the port in the eighteenth and early nineteenth centuries, and whose shipping interests had been passed to succeeding generations. A strong feeling of local conservatism, and the accumulation of considerable capital by individuals resident at the port, thus resulted in a late and piecemeal development of limited liability companies at Whitby, which occurred only when the capital requirement of Whitby's growing steam fleet exceeded the capital available locally.

The extent of capital invested annually in Whitby-owned steamers is summarised in Table 5, which shows the number and tonnage of new steamships registered at the port each year, and the price paid by the owner or part-owners in each case. This does not include second-hand steamers, those which were not new when first registered at Whitby, of which there were only fourteen. It does not consider transactions and subsequent sales of the vessels, so that it inevitably includes some double-counting of capital, when a vessel was sold and the cash proceeds re-invested in another steamer in the same year. Whitby registered steamship shares changed hands many times in the course of the ownership of vessels at the port, so that considerable sums were being invested in steamers that had been on the register for some time, which have not been included in Table 5, which shows the number and tonnage of new steamships registered at the port each year, and the price paid by the owner or part-owners in each case. This does not include second-hand steamers, those which were not new when first registered at Whitby, of which there were only fourteen. It does not consider transactions and subsequent sales of the vessels, so that it inevitably includes some double-counting of capital, when a vessel was sold and the cash proceeds re-invested in another steamer in the same year. Whitby registered steamship shares changed hands many times in the course of the ownership of vessels at the port, so that considerable sums were being invested in steamers that had been on the register for some time, which have not been included in Table 5. The large number of steamships registered, and the many subsequent sales of each sixty-fourth share, which often amounted to over a hundred transactions in each ship, and the shares taken up each year in the joint stock steamship companies, would make the task of taking into account all the capital invested each year in Whitby steamships complex to the point of impossibility, and therefore this has

not been attempted. The total of £5,685,180 shown in the fifth column of Table 5, is the sum of all the prices when first purchased of the 209 newly-built steamships which were registered for the first time at Whitby each year between 1865 and 1914. It is included here to emphasise the nature and extent of the capital required to finance the ownership of steamships on this scale.

This capital invested in Whitby registered steamships was predominantly raised from within the port itself. Whitby in this period was an active shipowning community, rather than just a convenient port of registry for shipowners and companies based elsewhere. An analysis of the Statutory Registers of Shipping of Whitby shows that the majority of owners resided locally as seen in Table 8.<sup>34</sup> In most cases when a steamer was first registered, only one or two persons were responsible for the initial purchase and then, in the first few years of ownership, a wider distribution of shares generally took place, possibly to raise capital to pay the builders and for the running costs of the vessel, especially in unprofitable times. The initial investors in Whitby steamships, of which there were an average of 3.1 per vessel shown in Table 9, were overwhelmingly local: 81.5 per cent of those investing in steamships when first registered resided at the port itself. If the residents of within a twenty mile radius of Whitby are included, the percentage of local owners would be even higher, as the non-Whitby investors predominantly lived in nearby Robin Hood's Bay, Pickering or Scarborough. The largest group of these initial owners were shipowners or shipbrokers, or concerned with marine insurance. Shipbuilders, shopkeepers, those working in small local consumer industries, professional people and those of independent means were also important investors in Whitby registered steamers, as seen in Table 10. The term 'shipowner' is imprecise; it may have been used as a term of prestige, even by a person with only modest holdings in shipping, or it

may indicate the culmination of a shipowning career of a person who may previously have been a merchant, shipbuilder or shopkeeper of some description. In the 1870's, in the early period of steamship owning at the port, investors were mixed in regard to their occupations, but by the 1880's and 1890's they were almost exclusively shipowners.

When subsequent transactions are taken into account, however, it may be seen that the ownership of Whitby steamers became more diversified: an analysis of Whitby registered steamships in the sample years 1876, 1882 and 1892 shows averages of 23.5, 36.2 and 35.9 owners per vessel,<sup>35</sup> in comparison with an average of only 3.1 owners on first registration. These sample years show a decline in the proportion of Whitby resident investors in each vessel owned throughout the period: 73.7% in 1876, 69.2% in 1882 and 59.6% in 1892. This may be explained by the increased capital cost of investment in steamships with the higher average tonnage of an 1890's steamer in comparison with a steamship of the 1870's (as shown in the fourth column of Table 5) which created a need for a wider spread of investment. In addition, many of the most important Whitby steamship owners, such as the Turnbells, Robinsons and Harrowings retained their ties with Whitby but established offices in London and Cardiff and declared this as their place of residence in the Custom House registers. Their move to larger centres enabled them to expand their operations, to act as brokers and merchants, whilst more closely supervising their ship-owning business. The total number of individuals who invested in Whitby steamships and resided at the port was only 561. Thus the bulk of the capital invested in Whitby registered steamship owning was derived from a relatively small number of people, of a total population of Whitby of 7,886 in 1871 and 11,139 in 1911.

Details of individual investors in Whitby limited liability shipping companies are not given in the registers but in the records of the

companies themselves, summarised in Table 7a. Despite the large nominal capital of most of these companies - of up to £275,000 each, and totalling nearly £2 million - an average of 58.2% of the shareholders of these companies were shipowners from the port of Whitby. Other investors in Whitby steamship companies were from the woollen and textile towns of Huddersfield, Bradford, Halifax and Leeds, showing the employment of surplus capital from industries other than shipping. Shipping agents from the ports to which Whitby steamers traded, such as Constantinople, Odessa, Sulina, Genoa, Venice, Naples and Malta also invested in these enterprises. Other more traditional sources of capital for Whitby shipping were London and the coal ports, of the Tyne and South Wales.

The high proportion of investors from the locality in Whitby steam shipping was also in contrast to other ports. In the case of Swansea owned steamships, for example, most of the shareholders were predominantly non-Welsh, the bulk of the capital coming from Scotland. It was also a feature of the investment in Cardiff steamships before the First World War that finance was largely provided from beyond Wales.<sup>36</sup> Investment in Liverpool registered steamships was predominantly from Merseyside: an average of 68.4% of the shareholders in Liverpool steamship companies were local,<sup>37</sup> but this area had a much larger population and industrial hinterland to support investment in steamshipping than Whitby. The lack of alternative possibilities for investment in the Whitby area concentrated local capital into shipping and led to the establishment of such a large fleet of steamships at a relatively small port.

Yet in the management, operation and deployment of Whitby-owned steamships, this port may be seen as a typical shipowning community. The impetus for investment in Whitby steamers, and ultimately the profits they earned were largely determined by movements in the freight market. This is apparent in a comparison between the number and tonnage of

steamships on the Whitby register each year (as summarised in Table 4), and changes in the freight market each year, as discussed by E.A.V. Angier, a journalist of the shipping industry and member of the London-based firm of merchants and brokers J.C. Gould, Angier & Co. Ltd.<sup>38</sup> Table 4 thus shows the variations in the stock of steamers owned at the port and the years when the total tonnage of Whitby-owned steamers expanded and declined. The years when more than ten thousand aggregate tons were added (after deducting the tonnage which left the register each year, from sale or loss) were 1879-80, 1888-1892, 1901 and 1904. 1879 was the first year of a substantial increase in steam tonnage on the Whitby register, and coincided with an improvement in coal and Baltic freights, which began in 1877, allowing for the time taken in the building of a vessel - at least twelve months - which imposed a time lag in the response of shipowners to economic fluctuations. 1879 was notable for a general increase in steamships, as Angier mentions an 'ever-increasing supply of steamers'.

Between 1881 and 1887, years which saw a decline in new steamers registered at Whitby, Angier reported that freights were generally depressed. In June 1883 he wrote that 'taking the world's trade - there is hardly a voyage to be found for general trading steamers which, when worked out, leaves a profit for expenses and depreciation'. In 1888, however, when the steam tonnage on the Whitby register saw a net increase from 6,164 tons to nearly 21,000, as shown in Table 4, Angier described a 'transformation from abject depression to revival and prosperity' in the freight market, especially in the Baltic and Black Sea trades. Over 20,000 gross tons of steamships were added to the Whitby steam fleet each year for the next three years, which follows the general trend referred to by Angier as 'unparalleled and reckless' overbuilding. Angier considered that the depression in freights of the early 1880's to 1887 was caused by the

overproduction of tonnage, between 1879 and 1883 and that the overbuilding of the late 1880's and early 1890's pointed to a longer consequent depression, which is reflected in the net decrease in new tonnage registered at Whitby in 1893-4 and 1896-8. The engineers' strike of 1897 put a temporary stop to the construction of new shipping, causing a rise in freights due to the resultant artificial scarcity of tonnage. The demand for shipping was intensified by the Spanish-American War of 1898, and the South African War of 1900, and in the years immediately following these occurrences, the tonnage registered at Whitby was increased significantly, by nearly 7,000 tons in 1899 and over 11,000 tons in 1901. The rise in tonnage registered in 1904 may be accounted for by the expectation of improved freights with the outbreak of the Russo-Japanese War. The abnormal increase in tonnage occasioned by wars tended to be followed by a fall in freights and thus a diminution in the earnings of steamers, which is reflected in the large net losses of steamers from the Whitby register in 1902-3 and 1905. Freight rates, by 1902, fell by more than twenty-five per cent and continued at an unremunerative level until 1911,<sup>39</sup> and tonnage registered rose temporarily again only with the outbreak of the First World War.

Whitby shipowners, in the timing of their decisions to invest in new tonnage, were thus influenced by changes in the freight market and tended to follow increases of tonnage registered nationally. For example, steamships registered in the United Kingdom rose from 220,000 tons to 285,400 tons from 1877 to 1878 and reached 344,600 tons in 1880. Tonnage registered nationally almost doubled from 1886 to 1887, and reached a peak of 553,500 tons in 1889, a year which saw an addition of 23,343 tons to the Whitby register. 1901 and 1904 were years when more than 700,000 tons of shipping was added to the British merchant fleet, in each case showing a significant increase in the previous year's figures.<sup>40</sup> These increases



are accurately reflected in Table 4.

An analysis of thirty-five steamships in the period 1887 to 1914 is summarised in Table 6. If the average annual percentage rates of return, shown in the seventh column of Table 6, are calculated on an annual basis which is given in the last column of Table 5, only the years 1888 to 1890 show more than ten per cent. It is notable that these were also years of substantial net additions to the Whitby register. Profits were highest in periods of high freights. In 1897, the rate of return from the sample of ships shown in Table 6 reached 8.2%, at a time when Angier reported favourably on the nitrate ports, ore chartering in the Mediterranean and on freights from the United States. In 1900, this sample of Whitby steamers showed an average rate of return of 9.6%. These percentage rates of return are based on the price of a share when the ship was newly built and registered. In many cases they would have been higher, if a share had been resold for a lower price and if the ship continued to pay high dividends. They represent the income of a theoretical investor only, and the income of an individual shipowner throughout his shipowning career would be a further point of consideration. From Table 6, however, it may be calculated that a typical Whitby steamer would take between six and twelve years to pay back to each investor the value of his shares, but the frequent buying and selling of shares prevents positive conclusions on the exact amounts received by each investor. The high earnings of Whitby steamers in the late 1880's certainly influenced the unprecedented investment in new tonnage at Whitby in the years 1888-92, to the extent of over-building, and the flooding of the freight market with tonnage in these years dissuaded investors from a repetition of this move in the future. The tonnage of steamers owned at Whitby remained significant, despite the closure of the port's steamship-building yard in 1902 as seen in Table 7b, but the losses suffered as a result of submarine

attacks in the First World War, of over twenty vessels, prevented the future recovery of steamship owning at Whitby, although it remained associated with the port until the 1950's.

The vagaries of the freight market in determining profit or loss in a steamshipping venture are apparent in an analysis of the operating of individual vessels. Philip and Lewis Turnbull, sons of Thomas Turnbull of Whitby, were established at Cardiff, in 1877, with the help of the parent company's capital, to act as chartering agents for the Whitby fleet. Another branch of the family firm is Turnbull Scott & Company of London who still manage and own shipping. The booming South Wales coal industry attracted Turnbull Brothers to Cardiff which, with the Tyne, was important for the shipment of coal outwards, a trade in which Whitby owned steamers and the steamships operated by Turnbull Brothers themselves were primarily engaged. The voyage accounts which have survived of the Everilda, Gwendoline, Eric and Bernard, vessels built at Whitby and owned by Turnbull Brothers, cover twenty-five years, from 1882 to 1906 and show the disbursements and income of a total of 156 voyages.<sup>41</sup> The accounts for the Gwendoline are complete from her date of build in 1883 until her loss in 1891, and the Everilda's accounts cover her career from building in 1882 until she was sold to Glasgow in 1894. The first ten years of the operation of the Eric, from 1892 to 1902, are described in the accounts; she was wrecked in the Bay of Fundy in 1912. The Barnard, for which nineteen voyage accounts survive, between 1900 and 1906, was sunk by an enemy submarine in 1917. These voyage accounts were originally sent by Turnbull Brothers to Captain Joseph Page of Whitby, a shareholder, with the appropriate dividend.

Each voyage account gives the details of the main ports of call and the number of the voyage of each particular ship, together with the dates when employed on that voyage. On the debit side, the accounts show the cost

of coal per ton and total expenditure for bunkers, the disbursements at each port, the cost of the crew's wages and provisions and the balance carried over to the general account. Then the accounts list the freights obtained on outward and homeward cargoes, demurrage and any other income. The 'General Account' shows insurance calls, the dividends paid, and the balance left over to the next voyage.

Table 11 shows the percentage rate of return on an investment in a one sixty-fourth share in each ship, as purchased when the vessel was first employed. The periods of high return, i.e. over ten per cent, were 1882-3, 1887-9 and 1894-1900. The lowest profits were made in 1885, 1891, 1893, 1902 and 1904. Five factors may be considered in seeking to explain the wide variations over time in the profits earned by these four vessels: freights obtained, bunkering costs, crew's wages and provisions, port charges and insurance.

A typical voyage of one of these vessels would have been from Cardiff to Port Said or Constantinople with coal and from the Black Sea to the U.K. or Continent with grain. Most freights obtained for coal by these vessels were nearer the highest rather than the lowest figures prevailing, according to a contemporary analysis of the freight market, so that it may be said that Turnbull Brothers employed their vessels to good advantage. It is clear that the fluctuations in profits earned by the four vessels being considered match the freight market generally, and show the extent of profit which could be made.<sup>42</sup> In many cases a higher rate of return would be achieved when a shareholder bought a share later in the vessel's career. For example, by 1892 a share in the Everilda could be bought for £125 when the original price, in 1882, was £316.<sup>43</sup>

The costs of bunkering fluctuated considerably in this period. In most cases best Welsh coal was used, for its good steam raising qualities, but when this coal was exceptionally expensive, in 1892 for example, 'thro

and thro' coal was substituted. This was a mixture of large and small coals which, with more ash, meant more work for the stokers and firemen.<sup>44</sup> Table 12 lists the average annual price of bunkering coal per year from the accounts from 1884 to 1906. Column 7 shows the percentage fluctuations of these figures, and it can be seen that they reached their highest in 1889-1892 and 1900-1. Compared with Table 11, it is clear that, broadly, high profits occurred in periods of low bunkering prices, but in 1889, when the average rate of return on shares was 16.2%, coal was 13s a ton, and in 1900 with return on shares at an average of 14.3%, a relatively high level of profits, coal reached its highest price in this period. 1900 was a year of 'large profits, abundant employment' and 'good freights' with extensive government transport work.<sup>45</sup> Thus it seems likely that the state of the freight market exerted a more sustained influence than the price of coal on the profitability of steam shipping, although the importance of coal prices is revealed by the fact of the last boom in sailing ship building in the period of high coal prices in the early 1890's. The fluctuations in bunkering prices of the Turnbull Brothers' vessels are comparable with a range of coals available on the London market over the same years.

A consideration of the costs of wages and provisions for the crew shows a decline in the amount paid per day per ship from approximately £6 to £4 10s between 1882 and 1893 in the Everilda, and from £7 10s to £6 from 1892 to 1906 in the Eric. It seems that the Turnbull Brothers attempted to cut costs in times of low profits and this was a convenient area for economy.

Port charges were another significant item of expenditure for the shipowner. During the voyages of the Everilda, port charges varied from 32.3% to 66.6% of total voyage costs. The port costs incurred by the Bernard varied from 28% to 53.5% but in the majority of cases these disbursements accounted for between 40 and 50% of total costs. South

American ports like Buenos Aires and Rio de Janeiro made the heaviest charges - nearly £1,000 in 1903 for the Bernard in one voyage. But although port charges formed a considerable proportion of voyage costs, they did not vary sufficiently or in any distinct pattern to explain the fluctuations in profitability shown by these voyage accounts.

Finally, the burden of insurance premiums on the steamship owner was heavy. The Bernard, for example, was mainly insured at Lloyd's but also in the Mutual clubs to her full cost price and this required payments, 'insurance calls' of over £1,000 on each of six voyages and a total expenditure on insurance of nearly £16,000 between 1900 and 1906. These calls were higher with a larger, more expensive vessel - the total is less in the case of the Everilda.

To summarise: the voyage accounts reveal the relative importance of cost factors such as bunkering, wages, port charges and insurance, which were the principal items of expenditure incurred by the steamship owner. On the other hand, in relation to income, the state of the freight market, which was the consequence of the relationship between the supply of, and demand for, steam tonnage, principally determined the level of profitability in this industry. Thus, these voyage accounts graphically indicate the earning capabilities of late nineteenth and early twentieth century steamships.

In conclusion, the transformation of Whitby from a port dominated by the building and owning of wooden sailing ships to the place of construction and port of registry of a considerable fleet of large steamships (which, of new tonnage registered in 1890, represented nearly five per cent of U.K. tonnage),<sup>46</sup> with its physical and commercial disadvantages, may be seen as exceptional among the minor ports of Britain. The adherence to the traditional form of ownership of vessels with only a late and short-lived interest in joint-stock limited liability companies,

and the concentration of ownership in the hands of a small number of individuals residing in this small town, was also not typical of steamship owning communities of Britain in the late nineteenth and early twentieth centuries. The survival and flourishing of the shipping industry at Whitby from its origins in the seventeenth and eighteenth centuries to the outbreak of the First World War reflected the response of the shipowners and shipbuilders of Whitby to the demand for colliers, sail and then steam, in the coal trade between the north east ports and London, and in the expansion of the trade to the Mediterranean and beyond. Variations in the extent of investment in Whitby steamers, and in the profits they earned, as in the case of steamships owned at any port or by any company, were largely the result of movements in the freight market generally, and in this respect the owning of steamships at the port of Whitby may be seen as representative of the shipping industry as a whole in the late nineteenth and early twentieth centuries.

## REFERENCES: CHAPTER FOUR

1. Richard Weatherill, The Ancient Port of Whitby and its Shipping, (Whitby, 1908), p.20
2. Hunter and de Russett, 'Sixty Years of Merchant Shipbuilding on the North East Coast', Transactions of the Institute of Engineers and Shipbuilders in Scotland, (1908-9)
3. Edward Ellis Allen, 'On the Comparative Cost of Transit by Steam and Sailing Colliers, and on the Different Modes of Ballasting', Transactions of the Institution of Civil Engineers, (1855).  
These are highly theoretical figures
4. John Glover, 'Tonnage Statistics of the Decade 1870-1880', Journal of the Royal Statistical Society, (1882), pp.37-81
5. H.J. Dyos and D.H. Aldcroft, British Transport: an economic survey from the seventeenth century to the twentieth, (London, 1969), pp.248, 254
6. Sir Westcott Abell, The Shipwright's Trade, (London, 1948), pp.111, 139
7. Charles Mark Palmer, 'The Construction of Iron Ships, and the Progress of Iron Shipbuilding on the Tyne, the Wear and the Tees', in W.G. Armstrong, The Industrial Resources of the district of the Tyne, Wear and Tees, (London, 1864), pp.237-247
8. Abell, The Shipwright's Trade, p.138
9. See the author's 'A Comparative View of the Merchant Shipbuilding Industries of the North East and South West Ports of England, 1870-1914', Exeter Papers in Economic History, forthcoming
10. E.A.V. Angier, Fifty Years' Freights 1869-1919, (London, 1920).  
Reports of the Freight Market in 1881, 1883
11. F. Cyril James, Cyclical Fluctuations in the Shipping and Shipbuilding Industries, (Philadelphia, 1927), pp.11, 41
12. David Dougan, The History of North East Shipbuilding, (London, 1968)
13. Robert Craig, 'William Gray and Company: a West Hartlepool Shipbuilding Enterprise, 1864-1913' in eds. P.L. Cottrell and D.H. Aldcroft, Shipping, Trade and Commerce: Essays in Memory of Ralph Davis, (Leicester, 1981), p.188
14. See Anne and Russell Long, A Shipping Venture: Turnbull Scott and Company 1872-1972 (London, 1974)
15. Angier, Fifty Years' Freights, Freight Market Report for 1871
16. A. and R. Long, A Shipping Venture, pp.49-54
17. A. and R. Long, p.59
18. Whitby Gazette, 18 April 1902
19. Robin Craig, Steam Tramps and Cargo Liners 1850-1950, (London, 1980), p.41
20. Whitby Gazette, 10 February 1905
21. A. and R. Long, p.131
22. Angier, Freight Market Reports for 1901 and 1902
23. Sidney Pollard and Paul Robertson, The British Shipbuilding Industry 1870-1914, (London, 1979), p.49

24. Abell, p.139
25. Robin Craig, Steam Tramps, p.7
26. Calculated from reports of steamship sales, Whitby Gazette
27. Calculated from tables of freights and costs in Angier
28. Douglas Owen, Ocean Trade and Shipping, (Cambridge 1914), pp.100-105  
The Act limiting the liability of members of certain joint-stock companies of 1854-5 was 18/19 Vic. c.133
29. Royal Commission on the Depression in Trade and Industry, P.P., 1886, XXIII, evidence of Arthur Scholefield, Daniel Stephen and George Renwick, q.10930
30. R.C. on Depression, P.P., 1886, XXIII, q.10154
31. Notes made by Philip Cottrell on the joint-stock shipping companies of Liverpool were kindly lent to the author by Mr. R.S. Craig
32. Eds. P.L. Cottrell and D.H. Aldcroft, Shipping, Trade and Commerce: essays in memory of Ralph Davis (Leicester, 1981). See P.L. Cottrell, 'The steamship on the Mersey, 1815-1880: investment and ownership', p.150
33. Eds. Arthur John and Glamor Williams, Glamorgan County History V: Industrial Glamorgan 1700-1970, (Cardiff, 1980). See Chapter X, 'The ports and shipping c. 1750-1914' by Robin Craig, pp.497-507
34. Reg. Ship.
35. Turnbull's Shipping Register and British and Foreign Maritime Advertiser (Newcastle, 1876), (North Shields, 1882), (North Shields, 1892)
36. Eds. John and Williams, Glamorgan, p.503
37. See note 31
38. See note 10
39. F. Cyril James, Cyclical Fluctuations in the Shipping and Shipbuilding Industries, (Philadelphia, 1927), p.24
40. Annual Statement of Shipping and Navigation, Parl. Papers, 1878, LXXI, (c.1999); 1878-9, LXVIII, (c.2254); 1881, LXXXVII, (c.2860); 1887, LXXX, (c.5067); 1888, XCVII, (c.5399); 1890, LXXII, (c.6040); 1902, C (Cd.1113); 1905, LXXX (Cd.2556)
41. See 'Turnbull Brothers of Cardiff: the voyage accounts of four ships 1882-1906', Maritime Wales / Cymru a'r Môr, 6 (1981), pp.52-8. I am particularly indebted to Peter Frank of the University of Essex for the loan of these accounts.
42. The fluctuations in the profits of the four vessels are also broadly comparable with the Board of Trade Freight Index, P.P., 1801-1903 (Cd.2337) British and Foreign Trade Memoranda Statistics and Charts, Vol.II, p.253. See also L. Isserlis, 'Tramp Shipping Cargoes and Freights', Proceedings of the Royal Statistical Society, (1938)
43. Compiled from reports of sales of shares in the Whitby Gazette
44. Charles E. Evans, Hints to Coal Buyers, (Cardiff, 1921), p.42
45. Angier, Freight Market Report for 1900
46. Annual Statement of Shipping and Navigation, P.P. 1889, LXXV, (c.5731)



TABLE 1:

STEAMSHIP BUILDING - AT WHITBY COMPARED WITH THE OUTPUT OF THE NORTH  
EAST PORTS AND NATIONAL TOTALS, 1870-1914, NET TONS

Table removed due to third party copyright

TABLE 1: (contd.)

Table removed due to third party copyright

Sources: British Parliamentary Papers, Annual Statement of  
Navigation & Shipping

.....

TABLE 2:

## STEAMSHIPS BUILT BY THOMAS TURNBULL &amp; SON, 1871-1902

<u>Built for</u>	<u>No.</u>	<u>Tons gross</u>	<u>Tons net</u>
*Thomas Turnbull & Son, Whitby	40	62784	42688
*James Gray & Co., Whitby	7	10691	6893
Geo. Pyman & Co., W. Hartlepool	5	6744	4293
Pyman, Watson & Co., Cardiff	2	1957	1261
*Robt. Harrowing, Whitby	1	1010	637
Richards, Power & Co., Swansea	1	1013	634
*Whitby Steamship Co.	1	417	269
J. Harman & Sons, Exeter	1	999	637
Turner, Brightman & Co., London	6	11705	7557
J. Benyon & Co., Newport		no details	
Pyman Brothers, London	2	3964	2561
*Robinson, Rowland & Co., Whitby	5	7260	4632
Huddart, Parker & Co. Ltd., Melbourne	1	1393	886
H. Hogarth, Ardrossan	2	3257	2072
Turnbull Scott & Co., London	9	20741	13327
Turnbull Brothers, Cardiff	10	24750	15936
Stoddart & Co., Liverpool	2	2806	1793
T.D. Woodhead & Co., Hull	1	1456	933
T. Smailes & Son, Whitby	4	7790	4996
H. Baxter & Co., Whitby	5	11037	7024
W.H. & T. Marwood, Whitby	1	2391	1536
Glamorgan SS Co. Ltd. (D. & L. Radcliffe)	1	2768	1791
Glasgow Nav. Co. Ltd. (Maclay & McIntyre)	1	2473	1573
London & Northern SS Co. Ltd. (Pyman Bros.)	1	3597	2346
Century Shipping Co. Ltd. (Harris & Dixon)	1	3683	2365
J. Constant, London (+ 3 sailing barges)	2	700	235
Heinrich Diederichsen, Keil	1	3667	2386

Note: Whitby owners buying Turnbull-built steamers:

Thomas Turnbull & Son  
James Gray & Co.  
Robt. Harrowing

TABLE 2: (contd.)

Whitby Steamship Co.  
 Robinson, Rowland & Co.  
 T. Smailes & Son  
 H. Baxter & Co.  
 W.H. & T. Marwood

Other ports

Hartlepool  
 Cardiff  
 Swansea  
 Exeter  
 London  
 Newport  
 Hull  
 Melbourne  
 Ardrossan  
 Liverpool  
 Glasgow  
 Keil

Engine builders

Blair & Co. Ltd., Stockton  
 G. Clark, Sunderland  
 T. Richardson & Sons, Hartlepool  
 Whyte & Main, Dundee  
 J.G. Kay & Co. Ltd., Southampton

---

\*Owned at Whitby

Source: Certificates of Registry, Custom House, Whitby,  
 and A. & R. Long - see note 14

.....

TABLE 3:

## STEAMSHIPS REGISTERED AT WHITBY 1849-1914

<u>Req.</u>	<u>Name</u>	<u>Official No.</u>	<u>Year built</u>	<u>Year left req.</u>	<u>Tons gross</u>	<u>Tons net</u>	<u>H.P.</u>
48/1849	Streonshalh		1836	1858	45	?	?
57/1857	Marshall	2108	1852	1862	47	?	?
68/1857	Esk	18458	1857	?	86	21	45
47/1861	Atlas	44082	1857	1865	106	?	12
5/1865	Primus	45740	1865	1882	638	?	80
34/1866	Hilda	45747	1866	1873	653	444	90
6/1867	Delta	54566	?	1868	1002	633	130
15/1868	Ebor	58754	1868	1882	705	450	90
12/1869	Duse	58780	1869	1883	701	442	90
15/1869	Esk	58781	1869	1882	706	447	90
3/1871	Captain Cook	58783	1871	1873	250	155	40
6/1871	Nellie	58785	1871	1874	847	548	95
10/1871	Whitehall	58787	1871	1886	763	488	90

TABLE 3: (contd.)

<u>Req.</u>	<u>Name</u>	<u>Official No.</u>	<u>Year</u> <u>built</u>	<u>Year</u> <u>left</u> <u>req.</u>	<u>Tons</u> <u>gross</u>	<u>Tons</u> <u>net</u>	<u>H.P.</u>
13/1871	Kate	58788	1871	1877	969	628	95
1/1872	Maud	58789	1872	1887	1295	843	120
2/1872	Isaac Pennock	58790	1871	1886	863	557	90
4/1872	York	58791	1871	1882	990	639	90
5/1872	Alice	58792	1872	1872	973	627	99
6/1872	R.M. Hunton	58793	1872	1882	977	619	98
7/1872	Gladys	58794	1872	1882	1552	998	140
10/1872	Robin Hood	58795	1872	1881	815	514	90
12/1872	Scoresby	58796	1872	1898	963	609	99
5/1873	Daisy	58797	1873	1886	665	418	80
7/1873	Emu	65385	1871	1895	73	7	80
8/1873	Pansy	58798	1873	1886	666	421	80
15/1874	Kate	58799	1874	1879	1416	916	130
18/1874	Unity	58800	1874	1889	1010	637	99
1/1875	King Arthur	72126	1874	1883	1007	636	99
5/1875	Darent	72128	1875	1894	1008	636	99
10/1875	Cosmopolitan	72129	1875	1899	1581	1017	150
12/1875	Syra	72130	1875	1891	1007	635	100
15/1875	Emma Lawson	72132	1875	1892	1008	636	99
17/1876	Nellie	72134	1876	1889	1447	919	130
20/1876	Stainsacre	72135	1876	1885	1108	705	99
1/1877	Lizzie	72136	1876	1889	1421	916	130
5/1877	Golden Grove	72137	1877	1893	1455	932	130
6/1877	Rishanglys	72138	1877	1897	1198	778	110
7/1877	Ravenhill	72139	1877	1887	1454	924	130
9/1877	James Gray	72140	1877	1883	1626	1059	140
10/1877	Caedmon	78861	1877	1897	1271	803	110
1/1878	Aislaby	78862	1877	1884	1198	775	110
2/1878	Streonshalh	78863	1877	1894	1589	1022	140
3/1878	Peace	78864	1878	1879	1623	1055	140
4/1878	Emily	78865	1878	1891	1203	777	110
6/1878	Helena	78867	1878	1898	1243	803	110
7/1878	Wilfred	78868	1878	1898	1289	817	120
1/1879	Annie	78869	1879	1890	1242	806	110
5/1879	Annie	81201	1879	1897	1872	1205	170
6/1879	Crescent	81202	1879	1884	1391	900	130
7/1879	Arthur	81203	1879	1894	1260	817	110
8/1879	Edgar	81204	1879	1893	1503	959	140
9/1879	Isabel	81205	1879	1903	1260	820	110
10/1879	Mildred	81206	1879	1880	1384	883	130
12/1879	Snaresbrook	81207	1879	1888	1733	1116	150
14/1879	Kate	81208	1879	1895	1934	1251	170
15/1879	Norah	81210	1879	1899	1489	955	120
16/1879	Beatrice	81209	1879	1883	1385	884	140
1/1880	Jane	81211	1879	1905	1387	881	140
2/1880	Mary	81212	1879	1900	1298	839	110
4/1880	Laxham	81214	1880	1884	1294	836	110
6/1880	Stakesby	81215	1880	1910	1418	920	130
7/1880	Thomas Turnbull	82661	1880	1906	1997	1292	190
8/1880	Marion	82662	1880	1895	2085	1356	180
9/1880	Cholmley	82663	1880	1896	1402	894	140
10/1880	Larpool	82664	1880	1913	1288	836	120
11/1880	Solon	82665	1880	1896	1357	859	120

TABLE 3: (contd.)

184

<u>Req.</u>	<u>Name</u>	<u>Official No.</u>	<u>Year built</u>	<u>Year left req.</u>	<u>Tons gross</u>	<u>Tons net</u>	<u>H.P.</u>
1/1881	Nemesis	82666	1880	1881	1393	886	120
2/1881	Rosella	82667	1881	1900	1415	916	130
4/1881	Florence	82669	1881	1881	2213	1430	180
7/1881	Sharon	82670	1881	1897	1398	892	130
10/1881	Carisbrook	82671	1881	1892	1723	1113	150
11/1881	Saxon	82672	1881	1896	1613	1032	140
12/1881	Elsie	82673	1881	1900	2373	1554	220
1/1882	Matthew Bedlington	82674	1882	1904	2216	1433	200
5/1882	Susan	82678	1882	1896	1506	967	130
6/1882	Sarah	82679	1882	1898	1509	969	130
7/1882	B. Granger	82680	1882	1899	1419	906	130
8/1882	Wilberforce	86631	1882	1897	1508	967	130
9/1882	Monkshaven	86632	1882	1898	1507	963	130
11/1882	Moss Brow	86634	1882	1882	1751	1131	150
12/1882	Wykeham	86635	1882	1883	1473	943	130
13/1882	Saltwick	86636	1882	1911	1704	1103	150
14/1882	Henrietta	86637	1882	1894	1447	925	120
1/1883	Cairo	86638	1882	1896	1780	1145	150
2/1883	Gwendoline	86641	1883	1899	1779	1143	150
5/1883	Southgate	86641	1883	1899	1779	1143	150
6/1883	Albany	86642	1883	1883	1456	933	130
7/1883	Robina	86643	1883	1892	1697	1100	140
9/1883	Claymore	86644	1883	1892	1694	1098	150
10/1883	March	86645	1883	1905	2053	1341	160
11/1883	City of Manchester	86646	1883	1904	3209	2089	350
2/1889	Concord	95668	1889	1902	1811	1162	140
3/1889	Whitby	95670	1889	1906	2081	1352	180
4/1889	Cambria	96541	1889	1912	1957	1257	180
5/1889	Dunsley	96542	1889	1902	2022	1321	180
6/1889	B.T. Robinson	95669	1889	1905	1844	1199	160
7/1889	Ethelreda	96543	1889	1911	2159	1401	220
8/1889	Hibernia	96544	1889	1906	2372	1557	220
9/1889	Roma	96545	1889	1900	2606	1674	230
10/1889	Sarmatia	96546	1889	1906	2065	1319	180
11/1889	Vectis	86100	1882	1900	2230	1450	230
12/1889	Westbrook	96547	1889	1902	1681	1070	150
13/1889	Caledonia	96548	1889	1912	2599	1670	230
1/1890	Garnet	96635	1889	1895	1471	959	130
2/1890	Maud Hardtmann	83895	1881	1896	1658	1064	150
3/1890	Edith	96549	1890	1900	1784	1123	140
4/1890	Fairmead	96650	1890	1911	2245	1432	175
5/1890	Endeavour	96552	1890	1907	2795	1762	230
6/1890	Germania	88768	1884	1909	2970	1948	216
8/1890	Clara	96551	1890	1902	1854	1166	150
9/1890	Lizzie	96553	1890	1902	2138	1334	180
10/1890	Oswald	96554	1890	1894	1835	1157	170
11/1890	Red Cross	96555	1890	1913	2877	1832	230
12/1890	Ethelwalda	96556	1890	1912	2431	1566	250
13/1890	Alacrity	96557	1890	1903	2190	1412	180
1/1891	Vera	96558	1890	1911	2391	1536	218
2/1891	Blenheim	96559	1891	1909	2403	1547	200
3/1891	Highlander	96560	1891	1915	2490	1595	200
4/1891	Ravenswood	99131	1891	1905	2390	1530	218
5/1891	Epworth	99132	1891	1896	2404	1530	190
6/1891	Sydmonton	99133	1891	1911	2526	1619	200

TABLE 3: (contd.)

184A

<u>Req.</u>	<u>Name</u>	<u>Official No.</u>	<u>Year</u> <u>built</u>	<u>Year</u> <u>left</u>	<u>Tons</u> <u>gross</u>	<u>Tons</u> <u>net</u>	<u>H.P.</u>
7/1891	Kendal	99134	1891	<u>req.</u> 1906	2392	1530	218
8/1891	Ethelgonda	99135	1891	1898	2692	1726	270
9/1891	Ethelaida	99136	1891	1914	2669	1705	270
10/1891	City of Gloucester	98514	1891	1906	2423	1570	180
1/1892	Masonic	99138	1892	1895	2399	1560	220
2/1892	Whitehall II	99139	1892	1911	2776	1793	235
3/1892	Blue Cross	99140	1892	1913	3028	1973	220
4/1892	Dacia	99141	1892	1892	2957	2244	265
5/1892	Duke of York	99142	1892	1907	3026	1973	220
6/1892	Eshcolbrook	99143	1892	1905	2143	1357	180
7/1892	Mutual	99144	1892	1905	2128	1351	187
8/1892	Thracia	99145	1892	1893	3015	1944	250
1/1893	Golden Cross	99146	1893	1913	3014	1944	250
2/1893	Gena	99147	1893	1911	2784	1795	236
2/1894	Woodleigh	99148	1894	1917	2664	1697	190
1/1895	Penelope	99149	1895	1907	2746	1761	236
2/1895	Duchess of York	99150	1895	1909	2605	1649	200
3/1895	Eddie	106101	1895	1911	2652	1686	224
4/1895	North Sands	106102	1895	1910	3526	2253	300
1/1896	Wiliysike	95248	1888	1906	2501	1974	220
2/1896	Cape Colonna	96138	1889	1912	2789	1783	300
3/1896	Alton	106103	1896	1911	3347	2169	273
1/1897	City of York	106104	1897	1912	3100	1959	240
2/1897	Ethelhilda	106105	1897	1922	2902	1874	300
3/1897	Cornucopia	94341	1887	1907	2231	1416	250
1/1898	Ethelbryhta	106101	1898	1916	3084	1985	260
3/1898	Valentia	106107	1898	1917	3242	2111	289
1/1899	Phoenicia	99230	1892	1912	3100	2018	300
2/1899	Hit or Miss	104119	1896	1900	39	14	3½
3/1899	Wennington Hall	96356	1889	1911	2947	1913	209
4/1899	Aislaby	99135	1891	1916	2692	1726	270
5/1899	Wilberforce	106108	1899	1917	3074	1986	258
6/1899	Ekside	104806	1894	1910	2837	1838	300
1/1900	John H. Barry	106104	1899	1917	3083	2002	267
2/1900	Pretoria	106110	1900	1917	3700	2409	337
1/1901	Crusader	113726	1901	1910	4210	2744	380
2/1901	Warrior	113727	1901	1911	3674	2394	282
3/1901	Roma	113729	1901	1923	3634	2363	299
5/1901	Corinthia	113730	1901	1917	3625	2359	299
2/1902	Broomfield	113731	1902	1911	2386	1526	224
3/1902	Concord	113732	1902	1915	2861	1825	260
4/1902	Carisbrook	11373	1902	1916	2784	1785	263
1/1904	Glenaen	113734	1904	1916	3227	2683	287
2/1904	Burnholme	113735	1904	1924	3423	2209	321
3/1904	Ethelwynne	118851	1904	1919	3230	2067	287
4/1904	Meadowfield	118852	1904	1911	2750	1736	263
5/1904	Bagdale	118853	1904	1917	3045	1934	300
2/1905	Ethelstan	118854	1905	1919	3875	2518	260
2/1906	Glenesk	118855	1906	1916	3286	2093	287
3/1906	Barnby	118856	1906	1911	3868	2482	357
4/1906	Arndale	118857	1906	1915	3587	2871	308
5/1906	Kildale	118858	1906	1917	3830	2436	356
6/1906	Ethelwolf	118859	1906	1932	4317	2875	250
7/1906	Helredale	118860	1906	1918	3567	2289	260

TABLE 3: (contd.)

<u>Req.</u>	<u>Name</u>	<u>Official No.</u>	<u>Year built</u>	<u>Year left req.</u>	<u>Tons gross</u>	<u>Tons net</u>	<u>H.P.</u>
8/1906	Goathland	124556	1906	1917	3044	1973	292
1/1907	Cilicia	124557	1907	1917	3693	2360	315
2/1907	Crossby	124558	1907	1916	3893	2531	260
3/1907	Ryde	124559	1907	1929	3556	2288	307
4/1907	Duke of York	124560	1907	1911	3181	2013	284
5/1907	John Usher	27702	1859	1912	74	23	35
6/1907	Competitor	124561	1907	1918	3526	2216	312
1/1908	Lythe	124562	1908	1916	98	38	20
1/1910	Glenclyffe	124563	1910	1916	3673	2296	342
2/1910	E.J.M.	124564	1910	1913	72	25	28
3/1910	Leucadia	124565	1910	1917	3738	2376	307
4/1910	Moorlands	131831	1910	1918	3600	2281	331
5/1910	Ingleside	131832	1910	1918	3736	2368	307
1/1911	Monkshaven	131833	1911	1918	3357	2097	300
2/1911	Etolia	131834	1911	1917	3733	2371	307
3/1911	Roburn	131835	1911	1916	83	36	21
4/1911	Darnholme	131836	1911	1919	3693	2331	341
5/1911	Glenbridge	131837	1911	1918	3845	2431	342
6/1911	Erlesburgh	131838	1911	1929	3809	2375	307
7/1911	Glendene	131839	1911	1918	3841	2428	342
1/1912	Oburn	131840	1912	1929	93	32	26
2/1912	Florentia	133651	1912	1917	3688	2338	307
3/1912	Alaburn	133652	1912	1928	85	28	20
5/1912	Thessalia	133654	1912	1917	3691	2341	307
1/1913	Fairhaven	133655	1913	1919	3124	1948	299
2/1913	J. Burn	133656	1913	1929	90	41	26
3/1913	Ellerdale	133657	1913	1919	3721	2332	341
1/1914	Aspire	117458	1914	1928	62	39	20
2/1914	Energy	115041	1914	1917	62	39	28
3/1914	Nuceria	133658	1914	1917	4702	2872	396
4/1914	Wyeburn	133659	1914	1939	94	41	26
5/1914	Eskburn	133660	1914	1916	90	41	26
6/1914	Beemah	137071	1914	1917	4750	2929	400

Source: Compiled from the Registers of Shipping, Custom House, Whitby

TABLE 4:

STEAMSHIPS REGISTERED IN THE PORT OF WHITBY, 1865-1914: showing numbers, and aggregate gross tonnage of steamships on the register in each year, with net increase or decrease in the total steamship tonnage registered at the port

<u>Year</u>	<u>No. of steamships</u>	<u>Aggregate Gross Tons</u>	<u>Net Increase</u>	<u>Net Decrease</u>
1865	1	638	638	
1866	2	1291	653	
1867	3	2293	1002	
1868	3	1996	297	
1869	5	3403	1407	
1870	5	3403	-	
1871	9	6232	2829	
1872	17	13687	7455	
1873	18	14188	501	
1874	19	15767	1579	
1875	23	21378	5611	
1876	26	23933	2555	
1877	31	31389	7456	
1878	37	39534	8145	
1879	47	52948	13414	
1880	54	65090	12142	
1881	57	72797	7707	
1882	61	81518	8721	
1883	62	87538	6020	
1884	64	93736	6198	
1885	64	94681	945	
1886	65	95751	1070	
1887	69	101915	6164	
1888	79	122884	20969	
1889	89	146227	23343	
1890	100	169989	25006	
1891	109	195136	22570	
1892	111	208109	10865	
1893	105	200472		5758
1894	102	197093		6249
1895	100	199026	3567	
1896	95	194119		5347
1897	88	187270		7030
1898	82	182962		2877
1899	84	191766	6964	
1900	80	189617		4962
1901	81	198373	11284	
1902	78	195375		5057
1903	75	190412		5213
1904	78	200640	10250	
1905	71	188366		10297
1906	71	197884	9668	
1907	69	197151	1381	
1908	69	195701		1593
1909	65	185484		10354
1910	64	184310	916	
1911	62	182949		4172
1912	61	176382		8493
1913	57	166213		8478
1914	61	171058	4846	

Source: Registers of Shipping, Custom House, Whitby



TABLE 5:

CAPITAL FORMATION IN WHITBY-REGISTERED STEAM SHIPPING - 1865-1914: showing number, gross tonnage and average tonnage of new steamships registered in each year; annual capital invested therein; and percentage rate of return of a sample of 35 steamships registered at the port between 1886 and 1914.

<u>Year</u>	<u>No.of steamships</u>	<u>Total Gross Tons</u>	<u>Average Gross Tons</u>	<u>Estimated Annual Capital Invested</u> (£)	<u>% rate of return, average of 35 ships</u>
1865	1	638	638	6750	
1866	1	653	653	7000	
1867	-	-	-	-	
1868	1	705	705	12000	
1869	2	1407	703	24000	
1870	-	-	-	-	
1871	4	2829	707	53700	
1872	8	8428	1053	165000	
1873	1	1331	665	29250	
1874	2	2426	1213	53400	
1875	5	5611	1122	112300	
1876	2	2555	1277	43200	
1877	6	8425	1404	129400	
1878	6	8145	1357	122500	
1879	11	16453	1495	209450	
1880	9	13526	1503	175290	
1881	7	12128	1733	168730	
1882	10	16040	1604	208930	
1883	8	15448	1931	231375	
1884	8	13353	1669	211730	
1885	1	2053	2053	32850	
1886	3	4027	1342	64645	1.9
1887	5	11284	2251	132730	6.1
1888	10	20099	2009	236650	11.6
1889	13	27221	2094	348430	19.2
1890	10	21620	2162	281060	10.9
1891	10	24780	2478	271200	8.4
1892	8	21472	2684	236190	4.9
1893	2	5798	2899	63780	3.5
1894	1	2664	2664	29305	3.8
1895	4	11529	2882	126820	3.1
1896	1	3347	3347	36820	5.7
1897	2	6002	3001	66020	8.2
1898	2	6326	3163	69585	7.2
1899	1	3074	3074	33815	6.8
1900	2	6783	3391	74615	9.6
1901	4	15143	3786	166575	3.8
1902	3	8031	2677	88340	0.3
1903	-	-	-	-	0.3
1904	5	15675	3135	172425	2.6
1905	1	3875	3875	42625	2.3
1906	7	25769	3681	282645	2.1
1907	5	17849	3570	196340	4.6
1908	-	-	-	-	2.5
1909	-	-	-	-	4.9
1910	4	14747	3687	162215	3.7
1911	6	22278	3713	245060	6.7
1912	2	7379	3689	81170	8.9
1913	2	6845	3423	75295	15.2
1914	2	9452	4726	103970	5.4
Totals	209	455223		5,685,180	

Sources: See Table 6

TABLE 6:

DIVIDENDS DECLARED BY WHITBY STEAMSHIP OWNERS IN SELECTED YEARS BETWEEN 1887 AND 1914: showing name of ship, date of building, gross tonnage, name of owner/manager, dates between which dividend data are available, price of 1/64th share at time of commissioning, percentage average rate of return on investment, and average annual dividend per 1/64th share

<u>Name of Vessel</u>	<u>Year built</u>	<u>Owner/Manager</u>	<u>Gross Tons</u>	<u>Dates of dividends</u>	<u>Original price per 1/64th</u>	<u>Average annual % rate of return</u>	<u>Average annual dividend per 1/64th</u>
					(£)	(%)	(£)
Crescent	1887	Barry	2122	1887-1893	325.0	17.9	58.0
Dunsley	1889	Barry	2022	1889-1902	400.0	7.45	30.0
Falshaw	1888	Baxter	2317	1888-1904	400.0	8.9	36.0
Carisbrook	1881	Foster	1723	1887-1892	363.0	6.7	24.0
City of Manchester	1883	Gray	3209	1887-1889	752.0	9.7	73.0
Marion	1880	Gray	2085	1887-1891	424.0	9.8	42.0
Elsie	1881	Gray	2373	1887-1898	519.0	4.2	22.0
Ethelreda	1889	J. Harrowing	2159	1890-1899	402.0	8.1	32.5
Millfield	1889	J. Harrowing	2169	1891-1897	390.0	6.0	23.5
Monkshaven	1882	R. Harrowing	1507	1886-1897	306.0	7.8	12.0
Adventure	1886	R. Harrowing	2050	1887-1889	512.5	4.7	24.0
Helena	1878	R. Harrowing	1243	1887-1893	291.0	6.1	17.5
John H. Barry	1899	C. Marwood	3083	1904-1914	530.0	8.3	44.0
Goathland	1906	C. Marwood	3044	1907-1914	523.0	5.3	28.0
Vera	1890	T. Marwood	2391	1896-1900	411.0	5.1	21.0
B. Granger	1882	Robinson Bros.	1419	1886-1896	318.0	4.6	14.5
B.T. Robinson	1889	Robinson Bros.	1844	1889-1905	365.0	2.9	21.0
Blenheim	1891	Roffey	2403	1898-1905	400.0	6.9	27.0
Stakesby	1880	Rowland & Marwood	1418	1887-1890	288.0	10.3	29.5
Claymore	1883	" " "	1694	1887-1892	400.0	8.3	33.0
Mulgrave	1884	" " "	1704	1887-1899	400.0	4.1	16.5
John Stevenson	1884	T. Smailes	1461	1887-1892	365.0	5.3	19.5
Concord I	1889	T. Smailes	1811	1889-1902	370.0	9.3	34.5
Concord II	1902	T. Smailes	2861	1903-1914	534.0	5.9	31.0
Highlander	1891	C. Smales	2490	1891-1898	428.0	12.5	53.0
City of Gloucester	1891	C. Smales	2423	1891-1898	416.0	7.6	31.5
Flowergate	1884	T. Turnbull	2053	1886-1901	513.0	5.2	26.5
Matthew Bedlington	1882	T. Turnbull	2216	1886-1901	461.0	11.2	37.0
Broomfield	1902	T. Turnbull	2386	1903-1914	410.0	4.8	20.0
Mandalay	1886	T. Turnbull	1763	1887-1902	441.0	6.2	27.0
Warrior	1901	T. Turnbull	3674	1901-1914	631.0	3.3	21.0
Cairo	1882	T. Turnbull	1780	1887-1896	414.0	5.9	24.0
Thos. Turnbull	1880	T. Turnbull	1997	1887-1906	400.0	4.9	19.5
Cosmopolitan	1875	T. Turnbull	1581	1887-1895	515.0	4.2	21.5
Fairmead	1890	T. Turnbull	2245	1890-1914	456.0	5.7	26.0

Sources: Whitby Statutory Register of Merchant Ships, Custom House, Whitby; Mercantile Navy Lists; Whitby Gazette 1856-1914, monthly list of dividends and reports of sales of steamship shares.

TABLE 7a:

189

## WHITBY STEAMSHIP OWNERS AND COMPANIES

<u>Name</u>	<u>Year of first steamer</u>	<u>No. vessels</u>
Asolvesby Steam Shipping Co. Ltd.*	1905	1
Bagdale Steam Shipping Co. Ltd.	1904	1
J.H. Barry & Co.	1879	12
Harrison Baxter & Co.	1886	12
Dillon & Co.	1888	1
Eskside Steam Shipping Co. Ltd.*	1898	2
John Foster & Co. Ltd.	1879	5
Glenae Steam Shipping Co. Ltd.*+	1903	1
Glenbridge Steam Shipping Co. Ltd.*+	1911	1
Glencliffe Steam Shipping Co. Ltd.*+	1909	1
Glendene Steam Shipping Co. Ltd.*+	1911	1
Glenesk Steam Shipping Co. Ltd.*+	1905	1
James Gray & Co.	1871	14
Arthur Harrowing	1891	3
John Henry Harrowing	1887	19
Robert Harrowing & Co.	1865	24
Harrowing Steamship Co. Ltd.*	1899	9
Helredale Steam Shipping Co. Ltd.*+	1906	1
Horner Wilson & Co.	1890	2
Horngarth Steam Shipping Co. Ltd.*+	1911	1
International Line Steam Shipping Co. Ltd.*	1889	30
Charles and Christopher Marwood	1884	8
T. Marwood and Sons	1871	6
Parkgate Steam Shipping Co. Ltd.*+	1905	1
George Pyman	1871	19
Captain Rayment	1900	1
Robinson Brothers* (Joint Stock Co. 1907)	1888	17
W.G. Robinson & Co.	1890	7
Robinson & Rowland	1880	8
H. Roffey & Co.	1900	1
John Rowland	1876	4
Rowland & Marwood	1886	31
Rowland & Marwood Steam Shipping Co. Ltd.	1890	13
T. Smailes & Co.	1884	11
C. Smailes & Son	1891	7
Jefferson Suggit	1900	1
Thomas Turnbull & Son	1871	36
Thomas Turnbull & Son Shipping Co. Ltd.*	1912	8
Thomas Trattles & Co.	1908	1
Whitby Shipping Investment Co. Ltd.*	1910	1
Whitby Steam Shipping Co. Ltd.*	1902	2
H. Wilson	1890	2

Sources: Compiled from the Registers of Shipping, the Whitby Gazette lists of dividends and PRO BT/31

\* Joint Stock Shipping Companies Registered at Whitby 1866-1912  
PRO BT/31, 86810/11336, 60017/16103, 78739/17112, 114857/19933,  
105761/12969, 118341/20278, 85858/17558, 61971/31700, 89726/17834,  
118239/20267, 20430/14783, 86179/17579, 93852/12018, 120039/20449,  
108398/19331, 73895/16832.

+ Single ship companies.

TABLE 7b:

## WHITBY SHIPOWNERS AND MANAGERS IN 1914

<u>Name</u>	<u>No. vessels owned in 1914</u>	<u>Aggregate gross tons</u>
Robert Harrowing & Co.	1	3875
Harrowing Steamship Co. Ltd.	6	19276
Marwood, Christopher	1	3044
International Line Steamship Co. Ltd.	9	33879
Rowland & Marwood's Steamship Co. Ltd.	8	27786
Thomas Smailes & Sons' Steamship Co. Ltd.	5	16903
Whitby Steam Shipping Co. Ltd.	2	5908
Charles Smales & Sons	3	10485
Thomas Turnbull & Son	1	3567
Thomas Turnbull & Son Shipping Co. Ltd.	6	17277

Source: Lloyd's Register of Shipping, 1914-5

.....

TABLE 8:

## RESIDENCE OF OWNERS OF WHITBY REGISTERED VESSELS 1849-1914 - WHITBY AS PROPORTION OF OTHERS

<u>Year</u>	<u>Total owners</u>	<u>Whitby-resident owners</u>	<u>Other places</u>	<u>Wh/Total %</u>
1849	2	1	1	50
1857	4	-	4	-
1861	3	-	3	-
1865	2	1	1	50
1866	2	1	1	50
1867	1	1	-	100
1868	1	1	-	100
1869	4	2	2	50
1870	-	-	-	-
1871	35	28	7	80
1872	142	79	53	55.6
1873	27	23	4	85.2
1874	5	3	2	60
1875	131	56	75	42.7
1876	29	11	18	37.9
1877	66	36	30	54.5
1878	12	12	-	100
1879	15	14	1	93.3
1880	15	15	-	100
1881	10	9	1	90
1882	12	12	-	100
1883	10	10	-	100
1884	10	10	-	100
1885	2	2	-	100
1886	3	2	1	66.6
1887	7	6	1	85.7
1888	20	17	3	80.9
1889	17	16	1	94.1
1890	25	17	8	68
1891	14	13	1	92.8
1892	13	13	-	100
1893	3	3	-	100

TABLE 8: (contd.)

<u>Year</u>	<u>Total owners</u>	<u>Whitby-resident</u>	<u>Other places</u>	<u>Wh/Total</u> <u>%</u>
1894	1	1	-	100
1895	9	9	-	100
1896	3	3	-	100
1897	3	2	1	66.6
1898	2	2	-	100
1899	6	5	1	83.3
1900	4	3	1	75.0
1901	5	5	-	100
1902	5	5	-	100
1903	-	-	-	-
1904	5	5	-	100
1905	1	1	-	100
1906	7	7	-	-
1907	6	5	1	83.3
1908	5	5	-	100
1909	-	-	-	-
1910	5	5	-	100
1911	7	7	-	100
1912	4	4	-	100
1913	3	3	-	100
1914	8	8	-	100

Total 3995.5 = 81.5% of Whitby registered vessels owned by persons living in Whitby.

Source: Analysed from the Registers of Shipping, Custom House, Whitby.  
Counted by each share, rather than individuals.

TABLE 9:

WHITBY REGISTER 1849-1914: NUMBER OF OWNERS ON FIRST REGISTRATION BY YEAR

<u>Year</u>	<u>No. vessels</u>	<u>Average no. owners</u> <u>per year of vessels</u> <u>registered that year</u>
1849	1	2
1857	2	2
1861	1	3
1865	1	2
1866	1	2
1867	1	1
1868	1	1
1869	2	2
1870	-	-
1871	4	8.75
1872	8	17.75
1873	3	9
1874	2	2.5
1875	5	26.2
1876	2	14.5
1877	6	11
1878	6	2
1879	10	1.5
1880	9	1.77
1881	7	1.4

TABLE 9: (contd.)

<u>Year</u>	<u>No. vessels</u>	<u>Average no. owners per year of vessels registered that year</u>
1882	10	1.2
1883	8	1.25
1884	8	1.25
1885	1	2
1886	3	1
1887	6	1.166
1888	13	1.61
1889	13	1.3
1890	12	2.08
1891	10	1.4
1892	8	1.6
1893	2	1.5
1894	1	1
1895	4	2.25
1896	3	1
1897	3	1
1898	2	1
1899	6	1
1900	2	2
1901	4	1.25
1902	3	1.66
1903	-	-
1904	5	1
1905	1	1
1906	7	1
1907	6	1
1908	1	5
1909	-	-
1910	5	1
1911	7	1
1912	4	1
1913	3	1
1914	6	1.33

---

Source: Reg. Ships

Average no. owners per vessel at first registration, 1849-1914 - 3.1  
 .....

TABLE 10:

## OCCUPATIONS OF WHITBY STEAMSHIP OWNERS

<u>Shipowning</u>		<u>Totals</u>	<u>%</u>
Shipowner	196	284	38.9
Shipbroker	16		
Ship Insurance Broker Company	15 57		
<u>Shipbuilding</u>			
Shipbuilder	92	108	14.8
Cooper	1		
Joiner	12		
Boat builder	2		
Shipwright	1		

TABLE 10: (contd.)

		<u>Totals</u>	<u>%</u>
<u>Merchants</u>			
Merchant	5	25	3.4
Timber merchant	3		
Provision "	2		
Wine "	5		
Jet "	7		
Seed "	2		
<u>Shopkeepers</u>			
Grocer	27	112	15.3
Druggist	3		
Draper	39		
Confectioner	4		
Ironmonger	14		
Pawnbroker	4		
China dealer	2		
Watch maker	1		
Baker	1		
Hosier	2		
Butcher	5		
Silversmith	1		
Bookseller	3		
Hatter	2		
Chemist	2		
Fishmonger	2		
<u>Services and Industry</u>			
Engineer	7	78	10.7
Carrier	7		
Jet manufacturer	24		
Engine driver	3		
Builder	1		
Farmer	13		
Artist	1		
Woollen manufacturer	1		
Commercial traveller	2		
Clerk	2		
Coachman	1		
Innkeeper	2		
School's Inspector	1		
Architect	1		
Commission agent	3		
Rail clerk	1		
Cloth finisher	3		
Corn miller	1		
Leather cutter	1		
Cotton spinner	1		
Blacksmith	1		
Banker's clerk	1		
<u>Professional</u>			
Solicitor	18	37	5.1
Doctor	2		
Clergyman	7		
Surgeon	3		
Workhouse master	1		

TABLE 10: (contd.)

194

		<u>Totals</u>	<u>%</u>
Cemetery keeper	2		
Land agent	1		
Army	2		
Station master	1		
<u>Master mariners</u>	18	18	2.5
<u>No profession</u>			
Gentleman	41	68	9.3
Widow	14		
Spinster	9		
Housewife	4		
Total owners each time mentioned		730	

Source: Registers of Shipping, Custom House, Whitby. Based on each share rather than individuals.

TABLE 11:

PROFITS OF THE FOUR VESSELS PER YEAR - PERCENTAGE RATE OF RETURN OF THE INVESTMENT IN 1/64TH SHARE WHEN NEW

	<u>Everilda</u>	<u>Gwendoline</u>	<u>Eric</u>	<u>Bernard</u>	
	1455 gross	1780 gross	2768 gross	3682 gross	
	£20250 new	£27000 new	£28600 new	£43250 new	
	£316 1/64	£422 1/64	£447 1/64	£676 1/64	<u>average</u>
1882	21.5				21.5
1883	12.0	8.3			10.2
1884	5.7	3.3			4.5
1885	3.8	3.3			3.6
1886	6.3	2.8			4.6
1887	11.1	12.5			11.8
1888	17.7	19.9			18.8
1889	15.2	17.1			16.2
1890	4.4	8.1			6.3
1891	0.9	-			0.45
1892	-	lost	4.5		4.5
1893	-		3.4		3.4
1894	sold		12.3		12.3
1895			8.7		8.7
1896			10.7		10.7
1897			14.8		14.8
1898			21.3		21.3
1899			14.3		14.3
1900			16.8	11.8	14.3
1901			9.2	6.2	7.7
1902			2.9	3.1	3.0
1903			end of accounts	4.7	4.7
1904				2.5	2.5
1905				4.7	4.7
1906				5.0	5.0
				end of accounts	
					average
					9.2

Note: Total paid in dividends to shareholders: Source: See note 41

£27968

£36928

£33984

£16512



TABLE 12:

BUNKERING COSTS PER YEAR AVERAGE, BASED ON THE PRICE OF COAL PER TON

	<u>Everilda</u>	<u>Gwendoline</u>	<u>Eric</u>	<u>Bernard</u>	<u>Average</u>	<u>*% Fluctuations</u>
1884	11s 6d	11s 6d			11s 6d	69.7
1885	10s 6d	11s 0d			10s 9d	65.2
1886	10s 0d	9s 6d			9s 9d	59.1
1887	9s 6d	9s 0d			9s 3d	56.1
1888	10s 0d	9s 6d			9s 9d	59.1
1889	13s 0d	13s 0d			13s 0d	78.8
1890	14s 6d	14s 6d			14s 6d	87.9
1891	14s 6d	16s 0d			15s 3d	92.4
1892	12s 6d		11s 0d		11s 9d	71.2
1893	9s 6d		8s 0d		8s 9d	53.0
1894			9s 0d		9s 0d	54.5
1895			7s 6d		7s 6d	45.5
1896			7s 0d		7s 0d	42.4
1897			7s 6d		7s 6d	45.5
1898			11s 0d		11s 0d	66.6
1899			9s 0d		9s 0d	54.5
1900			15s 0d	18s 0d	16s 6d	100.0
1901			13s 6d	13s 6d	13s 6d	81.8
1902			10s 6d	10s 6d	10s 6d	63.6
1903				10s 0d	10s 0d	60.6
1904				10s 0d	10s 0d	60.6
1905				9s 0d	9s 0d	54.5
1906				10s 0d	10s 0d	60.6

Note: \* Percentage index of prices, based on 1900 = 100.0%  
See Accounts and Papers, P.P., 1801-1903, (Cd.2337), Vol. II,  
British and Foreign Trade Memoranda, Statistics and Charts, p.71.

Source: See note 41

## CHAPTER FIVE: THE EMPLOYMENT OF WHITBY SHIPPING 1700-1914

## SECTION ONE: INTRODUCTION

Until now, this discussion of the shipping of the port of Whitby in the eighteenth, nineteenth and early twentieth centuries has concentrated on the building and ownership of sailing vessels and of steamships. From a consideration of the ships themselves this study moves to the second of its three main themes: the employment and activities of Whitby-owned vessels, and the trade of the port.

Before inquiring into the operation of these vessels in particular trades it is important to identify the broad pattern of the activities of Whitby ships in terms of the principal cargoes carried, ports of call and main trading routes. The proportion of Whitby-owned tonnage principally engaged in the coasting trade compared with the ships trading foreign, the numbers of vessels employed as colliers, whalers or fishing vessels, and the extent of Whitby shipping in the Baltic, and in the North American or Australian emigrant trades, all require consideration in examining the deployment of the tonnage owned at this port. A further factor to be taken into account was the advent of war, particularly in the eighteenth and early nineteenth centuries. Changes in the pattern of the employment of Whitby shipping over time, and the extent of flexibility in the operation of vessels, according to fluctuations in profitability in the carriage of various commodities, are additional points for analysis.

Looking at the employment of Whitby-owned vessels is one aspect of this study; it is also important to consider the trading activities of the port of Whitby itself, in terms of the entrances and clearances of tonnage. The trade of Whitby was an entirely different phenomenon from the trade of Whitby ships. The importance of Whitby as a trading port may be

compared with its role as a focus for shipowning and shipbuilding, and the extent to which Whitby as a port served the trading activities of its vessels, in providing commodities for export and a market for imports, requires analysis. It is relevant in this context to enquire whether or not the port of Whitby was commercially thriving in its own right, or if it principally served Whitby-owned tonnage by providing repair facilities, provisions and crews, and a place for laying up.

Attempts to answer these and other questions have been inevitably restricted by the nature of source material and evidence available. Ideally, it would be useful to pinpoint the activities of all Whitby owned vessels at one moment in time, including those laid up, under repair or making a voyage in ballast as well as with cargoes and use this for the basis of the study, but this is not possible for much of this period. Building up a picture of the quantities of cargo carried also presents problems, bearing in mind the variations in the tonnage of vessels in particular trades and in number of voyages per year.

The statutory registers of shipping,<sup>1</sup> which have provided the basis for the discussion in the preceding chapters, give very little indication of the employment of the vessels that they recorded. To a limited extent the tonnage of a vessel gives an idea of her activities, in so far that a 250-350 ton ship may well be employed as a collier or Baltic trader, whilst a vessel of under a hundred tons could be a local coaster, and the owner or builder of a vessel may specialise in a particular activity but this source provides no firm evidence of deployment.

Lloyd's publications, since the beginnings of Lloyd's List in the 1730's have become traditionally a source for the activities of British and foreign vessels. Yet they have limitations as well as advantages. The Underwriters' registers, or 'Green Books' show intended voyages only, and

give no information of deployment after 1870.<sup>2</sup> Lloyd's Weekly Shipping Index, alphabetically arranged according to the name of each vessel, is invaluable in showing details of ports of call and the length of voyages, but includes only ocean-going vessels, gives no details of cargoes, and began only in 1880.<sup>3</sup> The Whitby local newspaper, the Whitby Gazette, published similar information each week in its columns from 1873 onwards, relating to the voyages of Whitby-owned steamships. It is probable that this was largely derived from Lloyd's publications. Lloyd's Confidential Index adds to these details with lists of the fleets of individual owners. A general indication of the area of voyaging of Whitby vessels after the 1860's may be gained through the name of the master, in Lloyd's Captains Registers, which list the vessels commanded by each master.<sup>4</sup> Lloyd's Survey Reports also mention the destined voyages of vessels surveyed, but unfortunately few survive for Whitby.<sup>5</sup>

Information gathered for the use of the customs authorities may also be employed in analysing voyage patterns. The data of number and tonnage of vessels and number of men who served in them recorded as owned at Whitby from 1772 to 1786 were subdivided into vessels 'that traded to and from foreign parts, coastwise or were employed as fishing vessels, Smacks &c.'<sup>6</sup> The reliability of information as early as this is open to doubt and only fifteen years are covered. A register of ships 'licenced under the Regulations established by the Honourable Board's Order dated 6 February 1808' has survived amongst the Board to Collector and Collector to Board Letter Books of the port of Whitby,<sup>7</sup> which covers the period from 1808 to 1838. With information of the tonnage, master and owner and estimated value of each vessel, the register describes her 'employment' within the broad areas of whaling, the Baltic, Fishing, Coasting, Foreign and British North America. Although useful, this information is again

imprecise and restricted in time scale. The Custom House Bills of Entry,<sup>8</sup> also produced by the customs authorities, is one of the few sources providing details of cargoes. Published only for the main outports by the nineteenth century, no separate Bills exist for the port of Whitby, but information of the cargoes of Whitby vessels entering the port of London, for example, may be analysed.

Another source describing Whitby owned vessels in connection with the port of London are the 'Seamen's Sixpence Returns', recording the payment of sixpence per man per month towards the expenses of Greenwich Hospital, which also describe 'from whence arrived, or of what trade' for each vessel.<sup>9</sup> This source is of particular value in this context, describing Whitby owned vessels entering the Thames from 1725 to 1830. The 'Agreements and Account of Crew' documents, also referred to as the Crew Lists were primarily kept for information relating to the crew rather than the voyages of each year or half year in the case of the home trades, yet are similarly valuable.<sup>10</sup> These and the preceding Muster Rolls provide a relatively complete guide to the voyages of vessels of the British Empire from the 1860's onwards but the enormous physical extent of these documents has precluded from consideration all but a representative sample. Occasionally the crew agreements refer to the cargoes carried, and the necessity of obtaining consular stamps on each agreement ensures that all ports of call were listed with the date of arrival, which may be checked against information listed in Lloyd's Weekly Shipping Index.

Whitby vessels entering other ports may be traced in the Colonial Office returns of shipping entered and cleared, and the ports of Jamaica and Nova Scotia have been examined for such information, but insufficient details were discovered for the purposes of this study. Although the statutory registers do not generally provide details concerning the

voyages of vessels, a misinterpretation of the 1786 Act led the Registrars of Shipping at the ports of Liverpool, Chepstow and Bideford to record vessels entering the port in addition to those owned there, and the 'Liverpool Other Port Registers' are especially useful for details of Whitby owned tonnage entering Liverpool between 1786 and 1803. The discussions of eighteenth and nineteenth century shipbuilding in Chapters One and Three include such sources in attempting to discover Whitby-built vessels which never appeared on the Whitby register.

It is useful, in a discussion of patterns of voyages, to examine the operations of one company or shipping partnership in detail, more closely to consider 'the business of shipowning'. An example of such a source is the collection of documents recording the activities of the shipowners and shipbuilders John and Robert Barry.<sup>11</sup> Detailed voyage accounts, with an analysis of cargoes, ports of loading and discharge with a breakdown of disbursements and income, survive only occasionally. Examples pertaining to the port of Whitby are the accounts of the Hannah from 1715 to 1718,<sup>12</sup> the Morton House from 1726-8<sup>13</sup> and a series of vessels commanded by John Coats of Whitby between the 1790's and 1820's.<sup>14</sup> Detailed accounts of the voyages of steamships owned by the International Line of Whitby are preserved for a series of years, mainly in the period of the mid 1890's and then 1912-4.<sup>15</sup> All these vessels were engaged in the coal trade, coastwise and foreign, so they are discussed more fully in Section Two of this chapter. A further and remarkable series of accounts of four ships built at Whitby and briefly owned there, before joining the fleet of steamships managed by Turnbull Brothers of Cardiff, has been loaned from a private collection and has been analysed in Chapter Four.

In considering the trade of the port of Whitby, the Port Books are most useful for the eighteenth century period,<sup>16</sup> followed by those details

of goods imported which survive amongst the port's letter books.<sup>17</sup>

Lloyd's List has been used to analyse entrances and clearances of the port for selected years,<sup>18</sup> and the customs returns of British ports as a whole provide information of commodities imported and exported in the late nineteenth century.<sup>19</sup> Published Parliamentary returns from the Annual Statement of Navigation and Shipping give a complete picture from the mid nineteenth century onwards of entrances and clearances at the port of Whitby in the coastwise, foreign and colonial trades.<sup>20</sup>

An interpretation of these sources and a discussion of the main patterns of the employment of Whitby shipping is most conveniently presented in three sections - Whitby sailing ships, Whitby steamers, and the trade of the port itself. A broadly chronological approach, to take in an analysis of the changes over time, has been adopted.

Firstly, Table 1 shows an analysis of information derived from the 'Seamen's Sixpence' Returns, describing the extent of the sample taken, which excludes only the years 1754-75, 1778-92 and 1816-28 in the period 1725 to 1830 and showing the trades of these vessels. The sample shows an overall increase in the average tonnage of vessels, but this decreases during the Napoleonic Wars, possibly explained by the exclusion of many vessels in the Transport Service absent for long periods, which were usually among the largest vessels. It may be seen from Table 1 that the coal trade reached its highest point in terms of the number of entrances of vessels in that trade in the decade 1725 to 1735. By the late 1720's over 80% of Whitby-owned vessels were engaged in the coal trade, although the voyages of the Hannah of 1715-8 show higher profits than the Morton House in 1726-8. Local traders were less common after the 1730's whilst a steady but relatively small proportion of Whitby owned vessels plied in the coasting trades of other British ports. The overall trend discernible

in this table is a great increase in vessels in the Baltic and Scandinavian trades, probably carrying timber for shipbuilding, as seen in the Barry Letter Books. Meanwhile vessels employed in foreign trades increased, while there was an overall decline of colliers. Table 1b also reflects the effects of the Napoleonic Baltic blockade, when the number of vessels entered from that trade fell from 25 in 1807 to 2 in 1808.

The 'Seamen's Sixpence' Returns are concerned with vessels entering the Thames only and their reliability has often been questioned. Rodger, in examining James Cook's first three ships, found several discrepancies, in variations in the spelling of the names of the master and ship, and in number of crew and tonnage.<sup>21</sup> This relatively large levy, which was exacted from merchant seamen to finance a mainly naval institution, inevitably suffered considerable evasion, and certainly excluded local fishing vessels.<sup>22</sup>

Table 2 is based on vessels in the foreign and coasting trade owned at Whitby between 1772 and 1786 as collected by the customs authorities. Table 2a shows that a relatively small proportion of Whitby owned vessels traded foreign, and formed a very small part of all British vessels in the foreign trade. It seems likely that vessels trading to the Baltic were included in the coastwise returns, shown in Table 2b. In the majority of years included in this source, vessels in the coasting trade accounted for more than half of all vessels owned at Whitby in this period, whereas nationally this was under forty per cent. Whitby ships made a considerable contribution to the national coasting fleet - four times as many as formed part of Britain's foreign going tonnage. However, the increase in this period of Whitby vessels in the foreign trade is much greater than in coasting, which remained fairly static. This source is relatively complete when looking at all Whitby owned vessels in this period;



the 1786 figure may be checked against the statutory registers. Only in two years, 1776 and 1778, does the tonnage of vessels trading foreign exceed that in the coastwise trade, possibly linked with the effects of the American wars. Up to ten per cent of the Whitby owned fleet was engaged in fishing, but nationally this activity occupied less than six per cent of merchant vessels.

Table 3 shows the results of an analysis of a list of vessels licenced between 1808 and 1838, which totalled 514 ships of an aggregate tonnage of 79,617. An annual summary of this does not match shipping newly registered at the port as seen in Chapters Two and Three, but if incomplete in recording all vessels registered, this source lists each ship's usual employment. In terms of tonnage, the foreign trade was most important but by number, nearly half of all vessels recorded in this period traded coastwise. If Baltic traders are included in the latter category, with those vessels engaged in both fishing and coasting, the proportions would be similar as in Table 2. Towards the mid nineteenth century the bulk of Whitby shipping was primarily concerned with short sea trading, coastwise and Baltic.<sup>23</sup>

Table 4 summarises an analysis of a sample from the London Bills of Entry, which includes Whitby registered vessels entering London, Liverpool, Bristol and Hull from abroad. A daily publication produced by the customs for the convenience of the mercantile community, the Bills are 'a source which has been surprisingly neglected by both economic and business historians'.<sup>24</sup> Of the 79 Whitby registered vessels recorded in 1839 (including repeated voyages) the majority were entering from the Baltic and Scandinavia or from British North America. Shipbuilding materials accounted for 127 cargoes out of a total of 235 carried by Whitby ships entering London in 1839. This trade in the carriage of timber and shipbuilding supplies was thus not necessarily intended for Whitby shipbuilders,

but possibly began with the need to import timber to the home port. Other cargoes carried by Whitby-owned vessels this year included cotton, hides, sugar, barley, and tallow. The bulk of non-shipbuilding commodities carried were principally grain. A comparison with Appendices 2 and 4 shows the relatively limited traffic of the port of Whitby itself and thus explains the entry of Whitby owned vessels into other ports, particularly London, as a market for goods carried.

Another indication of the employment of Whitby registered vessels in the mid nineteenth century is shown in Table 5. Those vessels owned at the port have been extracted from a list of all ships surveyed at Whitby between 1834 and 1856 and their intended voyages summarised. Of these mainly newly-built ships the majority - 137 out of 218 - were destined for coastal voyages after being surveyed by Lloyd's. This generally concurs with other sources for this period, and shows Whitby owned vessels engaged in the coasting trade as a higher proportion amongst all Whitby owned tonnage, than a picture of the employment of British shipping as a whole would suggest.

A further general impression of the employment of Whitby shipping before the technological change of the late nineteenth century may be gained from an analysis of the Underwriters' or 'Green Books' for selected years, as seen in Table 6. Table 6a shows the pattern of intended voyages in terms of the number and tons of vessels, and as a percentage. The significant proportion of vessels serving as transports is clearly evident, a point further discussed in Section Five of this Chapter. The strategic problems in the Baltic just before the end of the Napoleonic Wars forcing vessels into the foreign trade help explain the changes between the 1780 and 1814 results. The 1780 figures here are somewhat at odds with the Customs 17 figures in Table 2 unless Baltic traders are included with coasters. By 1870, with steam vessels taking an increasing share of world

trade, sailing ship owners generally turned to long haul trades where bunkering stations for steamers were comparatively rare. Table 6b shows a more detailed breakdown of the 1850 figures. The average tonnage of vessels in the American trades was particularly high, possibly suggesting the trade in emigrants, further discussed in Section Four of this chapter.

Table 7 is based on the careers of 208 masters born in Whitby and serving on vessels at sea between 1868 and 1873. The majority of vessels concerned were owned at Whitby and few steamships were included. This analysis can give no accurate impression of the pattern of activity of Whitby owned vessels in this period but it does suggest the importance of the coasting trade and the Baltic as areas of voyaging to the majority of Whitby-born and largely Whitby-based masters.

The significance of these two trades in the sources considered is accentuated by the fact that considerably more voyages per year were completed than in the case of the foreign trades. An analysis of the Crew Agreements in Table 8 shows that on average 14 voyages per year were achieved by local traders, 10 by coastwise vessels, 7 by ships trading in the Baltic and in France and only two in the foreign trades per year.

The voyages of Whitby owned steamships are more completely documented. Table 9, from the Crew Agreements, shows an analysis of sixty steamers from the 1870's to 1914, which made a total of 285 voyages. The usual ports of departure were South Shields, Cardiff, Sunderland, Barry, Newport or Penarth. Nearly sixty-five per cent of these voyages began at these ports, loading coal, which was discharged mainly at Port Said, Constantinople, Alexandria or the South American ports. Return freights

were obtained at Rotterdam, Cronstadt, Hamburg, Dunkirk, Antwerp, or the Black Sea ports of Sulina or Taganrog with grain, together with cotton and general cargoes from the New England ports. Discharging ports were mainly coal trade ports in readiness for an outward cargo for the next voyage, or points for further distribution for the goods imported, such as London, Bristol or Hull.

Appendix 1 considers the movements of two Whitby steamships in 1900. 1900, as seen in the case of the Bernard in Chapter Four, was a year of high profits. The Thomas Turnbull voyaged principally between the British coal ports, New England and Italian ports, whilst the Dunsley sailed to and from the Black Sea ports and the Mediterranean from Barry, Sunderland and Cardiff. A freight market report for this year refers to a 'vast trade' and 'high profits' and that North American freights were high, with improving Black Sea rates. There was nearly a 'carrying panic' with high outward rates.<sup>25</sup> With the advent of the steamship, the pattern of employment of vessels was more closely determined by the state of the freight market, a result of greater speed and improved communications. By the late nineteenth century the majority of Whitby steamers traded exclusively in the foreign and Baltic trades, whilst an increasing proportion of coastwise trade was carried by the railways.

This picture is confirmed by a study of the details of steamer movements published regularly in the Whitby Gazette, which was presumably printed for the benefit of local shipowners and for the relatives of seafarers. In 1873-4 the majority of voyages were to the Black Sea, Baltic and German ports and to India, and by the end of the period in question voyages to Bilbao and Lisbon, to South America and the Far East supplemented the previously traditional ports of call. Whitby-owned sailing ships by the end of this period were relatively few and of small

tonnage, mainly confined to local trades. Large, foreign-going sailing ships at the turn of the century were never popular among Whitby ship-owners, a point discussed in Chapters Three and Four.

The trade of the port of Whitby itself did not necessarily reflect the activities of the vessels owned there. The gap between the traffic of the port, and the tonnage registered at Whitby, according to their respective importance and prosperity, widened to an increasing extent throughout this period. Table 10 shows shipments of goods to and from Whitby as recorded in the port books of the port.<sup>26</sup> The coastwise trade of Whitby in 1790 has been selected for detailed study. Table 10a shows that the export of local produce and re-export of imported goods was primarily to London, followed by Newcastle and Hull, and goods arriving were mainly from Sunderland, Hull, Newcastle and Stockton. The varying productivity in terms of voyages per year of vessels plying in Whitby's coasting trade in 1790 is shown in Table 10b. The Elizabeth, Anthony Lowes master, entered Whitby with imports 28 times in 1790. The imbalance of vessels entering with goods compared with those clearing from the port reflects the limited exportable produce from the area with the absence of a hinterland like Hull's for example, inevitably necessitated many outward voyages in ballast. The Elizabeth cannot be identified even once in the list of vessels clearing from Whitby in 1790. The commodities imported and exported are shown in tables 10c and 10d respectively. Coal was brought to Whitby for the manufacture of alum and the domestic market, and other imports provisioned Whitby-owned vessels with foodstuffs and raw materials for shipbuilding and repair. The most significant dutiable exports from the port in 1790 were alum, sailcloth and whale and fish products, with some re-export of wines and spirits. Whitby butter was supplied to His Majesty's Navy and locally cured hams were also in demand in London. But the main feature of the port in this

period is Whitby's large trade deficit, which accentuated its commercial and geographical isolation. Appendix 2 shows an analysis of the trade of Whitby taken from selected years of Lloyd's List. Very few vessels clearing from Whitby besides whalers are mentioned at all, and the greatest number of vessels entering and clearing in a year was 72 in 1787. It would appear that the majority of imports were shipbuilding materials and 'naval stores', with the large incidence of vessels from Scandinavia, the Baltic, Russia and North German ports. Whitby's shipbuilding industry consumed imports out of all proportion to those required by the local population.

Quantities of goods entering Whitby, to describe further the trade of the port, are listed in returns included in the Port Letter Books. Appendix 3 shows a return of 1803 which enumerates goods entering the port from 1790 to 1793 and from 1800 to 1802. The entries 'Deals', 'Lathwood', 'Spars', 'Staves', 'Oak plank', 'Handspikes', 'Balks', 'Treenails' and 'Anchor stocks' refer to shipbuilding imports, as do the mentions of iron, tar, pitch, hemp and tow. The few remaining articles imported were linen, firewood and spirits.

Appendix 4 shows the articles imported into Whitby for selected years at the end of the period here considered. The very small quantities involved show that the consumer goods required by the local population were probably brought by rail and the arrival of a ship carrying ice from Norway and timber from Scandinavia entering Whitby harbour must have been a comparatively rare sight. In a period when up to a hundred or more large steamships were owned at the port, the value of imports at Whitby each year was rarely over £5,000.

Finally, Table 11 and Graphs 1 to 5 show an analysis of the trade of Whitby between 1841 and 1913, as taken from each annual return in the

Statement of Shipping and Navigation published in the Parliamentary Papers. It includes vessels entering and clearing, with cargoes and in ballast, of British tonnage in Whitby's coasting trade and British and foreign vessels, of those trading foreign and colonial from Whitby.

Graph 1, sailing vessels entering and clearing from Whitby in the coastwise trade, shows a huge discrepancy before the mid 1870's between vessels inwards and outwards. The previous figures possibly exclude ballast voyages which were later included, because the possibility of a local export commodity or manufacture suddenly becoming available in 1873 and continuing thereafter seems unlikely. The data on steam tonnage inwards and outwards (shown in Graphs 2 and 3) matches almost exactly, so it would seem that this is a record of tonnage only and bears no relation to cargoes. It is clear, however, that even in the peak years of steamship owning at Whitby, the entrances and clearances of steamers at the port were minimal and Table 11a shows that they were generally small vessels. Possibly many entered the port to take advantage of the repair facilities offered by Thomas Turnbull and Son in the Whitehall Shipyard. The cargoes and ballast voyages are included in Table 11b and Graphs 4 and 5, thus there is no obvious explanation for the differences between the figures, unless ballast voyages were included only after the mid 1890's. However, these totals represent such limited traffic at the port to be almost statistically insignificant.

In summarising this introductory consideration of the activities and patterns of employment of Whitby owned ships and the nature of the business of the port itself, a series of broad trends emerge. The early eighteenth century was dominated by the coal trade, Whitby shipping joining the fleet of colliers that plied between the coal ports of the Tyne and Tees and the Metropolis. The mid eighteenth century, a period of expansion in shipbuilding at Whitby, saw an increasing involvement

of Whitby owned vessels in the Baltic and Scandinavian trades in a search for further supplies of timber. The end of the eighteenth century saw a widening in range and scope of the employment of Whitby ships, with the wartime demand for transports, the opening of the whaling trade combined with the peak in production of Whitby built vessels requiring increased timber supplies. The early nineteenth century, as far as Whitby shipping was concerned, was dominated by the needs of the Transport Board, which was regarded as a source of large and regular income for the shipowner. The post-war depression witnessed a decline in Whitby shipbuilding and shipowning which was accompanied by an increased dependence on the coastwise trade. By the end of the nineteenth century only the very few large Whitby sailing barques still traded foreign and to the Baltic whilst Whitby steamships entered the coal trade, firstly coastwise then increasingly further afield. By the end of the period under consideration, through the ownership of steamships of up to 5,000 tons each, the shipping industry of Whitby had reached its peak and declined, becoming virtually extinct after the First World War. The overriding importance of the existence in large quantities of a bulk commodity, coupled with a steady demand, in creating a need for extensive shipping tonnage becomes clear in considering the role of the coal trade in the employment of Whitby shipping, from eighteenth century collier cat to twentieth century steam tramp.



## REFERENCES: CHAPTER FIVE, SECTION ONE

1. Reg. Ship.
2. N.M.M.
3. N.M.M. and Guildhall Library
4. Guildhall Library
5. Repository of the N.M.M.
6. P.R.O. CUST 17 / 1-9
7. P.R.O. CUST 90 / 76
8. Custom House, London
9. PRO ADM 68 / 194-218
10. Consulted in the archive of the Maritime History Group, Memorial University of Newfoundland. Ten per cent samples are also in the keeping of the P.R.O. and N.M.M.
11. In the keeping of the Wh. Lit. & Phil.
12. Wh. Lit. & Phil.
13. P.R.O. HCA 13-88, 15-52. Originally examined by Ralph Davis and among his papers left to University College London.
14. N.M.M., MS 39/81. Account Book of John Coats of Whitby 1807-1820.
15. Wh. Lit. & Phil.
16. P.R.O. E 190 / 209/9 to 290/3, 1701 to 1790
17. P.R.O. CUST 90 / 10
18. N.M.M.
19. P.R.O. C 23/1, 23/22, 25/10, 23/44, 23/70, 23/87, 25/21
20. Accounts and Papers, Annual Statement of Navigation and Shipping, P.P., 1841 to 1913, in annual volumes 1842-1914
21. N.A.M. Rodger, 'Some practical Problems arising from the study of the Receiver of Sixpences Ledgers', Mariner's Mirror 62, (1976), p.223
22. An Act of 1712, (10 Anne c.17) exempted fishermen and small boatmen, pauper apprentices under 18 and the crews of Thames hoys. For an estimate of the extent of evasion from the payment of seamen's sixpences, see Chapter 3 of Conrad H. Dixon, 'Seamen and the Law. An Examination of the Impact of Legislation on the British Merchant Seaman's Lot, 1588-1918'. Unpublished Ph.D. thesis, University of London
23. 'To what trade is the port of Whitby principally confined at present ? - We have no great trade to Whitby itself, but ships belonging to the port trade to various parts of the world; but I think, of late, we have had fewer ships in foreign trade than we used to have; they are more particularly employed in the coal trade and the Baltic and American timber trade'. Evidence of Gideon Smales, Select Committee on British Shipping, P.P., 1844, VIII, (545.), q.1400

24. David M. Williams, 'Liverpool Merchants and the Cotton Trade 1820-1850' in ed. J.R. Harris, Liverpool and Merseyside, (Liverpool, 1969)
25. E.A.V. Angier, Fifty Years' Freights 1869-1919, (London, 1920). Freight market report for 1900.
26. P.R.O. E 190 290/3 'The Port Books record shipments from villages that have become great ports and from great ports that have become mere villages'. T.S. Willan, The English Coasting Trade 1600-1750 (Manchester, 1938), p. xiv. Further discussions are to be found in J.H. Andrews, 'Two Problems in the Interpretation of the Port Books', Economic History Review, IX 2nd Series (1956-7), pp.119-122, in Neville Williams, 'The London Port Books', Transactions of the London and Middlesex Archaeological Society, 18 Pt.1 (1955) and in D. Trevor Williams, 'The Maritime Trade of the Swansea Bay Ports with the Channel Islands from the records of the Port Books of 1709-1719' in the keeping of La Societe Guernesiaise, The Guille-Alles Library, Transactions of 1953, pp.270-285

TABLE 1a:

WHITBY-REGISTERED VESSELS. SAMPLE TAKEN FROM 1725-1830 PERIOD INCLUDING REPEATED VOYAGES. NUMBER AND TONNAGE OF VESSELS ENTERING LONDON

<u>Year</u>	<u>No.</u>	<u>Tons</u>	<u>Average</u>
1725	52	7560	145
1726	49	6420	131
1727	50	6060	121
1728	133	26210	197
1729	177	38410	217
1730	115	22650	197
1731	136	29760	219
1732	71	14170	200
1733	56	11060	198
1734	62	15410	249
1735	47	10760	229
1736	44	10330	235
1737	41	9550	233
1738	40	9700	243
1739	34	9660	284
1740	22	6200	282
1741	38	10050	264
1742	40	10620	266
1743	51	15390	302
1744	29	6960	240
1745	17	5550	326
1746	42	12840	306
1747	37	11250	304
1748	59	17510	298
1749	96	28990	302
1750	79	22960	291
1751	58	17961	310
1752	86	26480	308
1753	96	29100	303
1754	75	22030	294
-			
1776	118	32780	278
1777	119	34057	286
-			
1793	140	39477	282
1794	96	27395	285
1795	65	18599	286
1796	114	32341	284
1797	72	21921	304
1798	73	21165	290
1799	75	22345	298
1800	73	20554	282
1801	88	24960	284
1802	128	37339	292
1803	87	25752	296
1804	94	26389	281
1805	65	16864	259
1806	91	25911	285
1807	39	8971	230
1808	18	4102	228

TABLE 1a: (contd.)

214

<u>Year</u>	<u>No.</u>	<u>Tons</u>	<u>Average</u>
1809	23	6891	300
1810	18	5538	308
1811	19	5081	267
1812	23	7303	318
1813	23	5770	251
1814	40	10487	262
1815	42	13023	310
-			
1828	58	14068	243
1829	74	15287	207
1830	21	4918	234

Source: PRO ADM 68 / 194-218  
Seamen's Sixpence Accounts

.....

TABLE 1b:

WHITBY-REGISTERED VESSELS: ANALYSIS OF 'FROM WHENCE ARRIVED'  
PORT OF DEPARTURE FOR LONDON: NO. ENTRANCES OF VESSELS

<u>Year</u>	<u>N.E.Coal ports</u>	<u>Whitby</u>	<u>Other UK ports</u>	<u>Baltic Scand.</u>	<u>Americas &amp; Canada</u>	<u>Foreign</u>
1725	32	6	3	8	2	2
1726	29	8	7	4	1	-
1727	31	8	4	5	-	3
1728	114	16	1	2	-	-
1729	153	7	6	6	-	5
1730	61	13	14	14	4	9
1731	107	6	7	9	4	3
1732	22	6	9	26	4	4
1733	17	9	3	19	7	1
1734	13	3	2	41	2	1
1735	11	2	3	18	-	13
1736	10	1	2	26	-	5
1737	8	-	3	28	-	2
1738	7	-	1	29	-	3
1739	7	1	-	23	-	3
1740	4	-	-	18	-	-
1741	2	-	-	36	-	-
1742	1	1	1	9	-	28
1743	3	-	-	41	-	7
1744	3	1	1	12	-	12
1745	10	-	1	6	-	-
1746	18	-	6	3	3	12
1747	3	-	2	10	13	9
1748	3	-	1	35	13	7
1749	8	1	8	40	10	29
1750	1	-	-	63	7	8
1751	3	-	-	46	5	4
1752	2	1	4	74	5	-
1753	2	-	1	84	3	6
1754	1	-	-	66	2	27
-						
1776	1	-	3	91	8	15

TABLE 1b: (contd.)

<u>Year</u>	<u>Transports</u>	<u>N.E.Coal ports</u>	<u>Whitby</u>	<u>Other UK ports</u>	<u>Baltic Scand.</u>	<u>Americas &amp; Canada</u>	<u>Foreign</u>
1777	7	-	-	1	81	26	11
-							
1793		1	-	1	123	-	15
1794		1	-	2	82	1	10
1795		2	-	4	46	2	11
1796		3	-	7	69	-	35
1797		1	-	2	45	3	21
1798		1	1	1	53	3	14
1799		-	-	1	54	-	20
1800		2	-	1	53	5	12
1801	2	-	-	6	67	-	15
1802		-	-	2	85	-	41
1803		3	1	1	64	6	12
1804		2	-	2	75	1	14
1805		-	-	1	54	1	9
1806	33	2	-	20	36	3	30
1807	2	2	-	4	25	-	8
1808	4	4	-	1	2	-	11
1809		-	1	5	1	2	14
1810	1	-	-	3	-	4	11
1811	3	-	1	3	1	6	8
1812	3	-	-	6	-	3	14
1813		2	-	2	8	1	10
1814	1	1	1	8	12	-	18
1815	9	3	-	19	6	-	14
-							
1828		3	-	5	20	8	22
1829		2	1	9	37	8	17
1830		1	1	2	9	1	7
Totals		723	97	212	2000	177	642
Transports	65						

Source: P.R.O. ADM 68/194-218  
Seamen's Sixpence Accounts

TABLE 2a;

## WHITBY-OWNED VESSELS ENGAGED IN THE FOREIGN TRADE

<u>Year</u>	<u>Whitby-owned</u>			<u>Whitby</u>	<u>Whitby</u>	<u>Foreign</u>
	<u>No.</u>	<u>Tons</u>	<u>Men</u>	<u>% of G.B. Total</u>	<u>Foreign Trade % Total Wh.</u>	<u>Trade GB % Total GB</u>
1772	14	2965	260	0.9	25.4	58.1
1773	17	3735	328	0.9	28.0	58.7
1774	17	4146	404	1.1	29.0	58.0
1775	25	5879	676	1.4	42.1	59.5
1776	24	6120	676	1.5	46.0	57.3
1777	36	7406	684	1.9	45.3	56.5
1778	25	5876	618	1.5	46.8	55.2
1779	18	4473	554	1.3	39.5	53.2
1780	16	3549	417	1.1	29.7	50.6
1781	14	3313	355	1.0	31.0	51.0
1782	12	2891	315	1.0	27.1	48.5

TABLE 2a: (contd.)

Year	Whitby-owned			Whitby	Whitby	Foreign
	No.	Tons	Men	% of G.B. Total	Foreign Trade % Total Wh.	Trade GB % Total GB
1783	22	3768	347	1.0	30.9	54.8
1784	24	5280	560	1.1	30.6	60.0
1785	33	6343	707	1.2	45.2	61.1
1786	33	7205	840	1.5	44.9	61.9
			Average	1.2%	36.1%	56.3%

Source: P.R.O. CUST 17 / 1-9

.....

TABLE 2b:

## WHITBY-OWNED VESSELS ENGAGED IN THE COASTING TRADE

Year	Whitby-owned			Whitby	Whitby	Coasting
	No.	Tons	Men	% of GB Total	Coasting % Total Wh.	Trade GB % Total GB
1772	68	7499	421	3.4	64.3	38.0
1773	76	8379	475	3.5	62.8	36.0
1774	82	9163	538	3.7	63.9	36.3
1775	71	7000	429	2.9	50.2	34.6
1776	65	6155	372	2.4	45.9	36.5
1777	72	7925	475	3.0	48.5	37.6
1778	67	5690	364	2.1	45.3	38.9
1779	73	5870	401	2.1	51.8	41.4
1780	77	7420	464	2.7	62.0	43.9
1781	76	6380	398	2.3	59.7	43.9
1782	80	6783	431	2.4	63.6	46.3
1783	78	7440	458	2.8	61.0	40.3
1784	94	11390	635	3.9	65.5	35.6
1785	87	7890	491	2.7	50.5	34.0
1786	89	8120	512	3.1	50.6	33.3
			Average	2.9%	56.4%	38.4%

Source: P.R.O. CUST 17 / 1-9

.....

TABLE 3:

## SHIPS' LICENCES 1808-1838. EMPLOYMENT OF VESSELS LICENCED

Trade	No.	Tons	Average	Tons %
Coasting	237	18424	78	23
Fishing/Coast.	59	3459	59	4
Whaling	2	556	278	0.7
Holland/Baltic	38	6912	182	9
France	1	56	56	0.07
Ireland	8	529	66	0.7
Russia	1	260	260	0.3
West Indies	4	1505	376	2
Brit. N. America	7	1924	275	2
Foreign	157	45992	293	58.23
TOTAL	514	79617	Average-155	100

TABLE 3: (contd.)

Source: P.R.O. CUST. 90 / 76

Note: 'Whitby. An Account of all ships and vessels which have been licenced under the Regulations established by the Hon. Board's Order dated 6 Feb. 1808--commencing 21 Feb. 1808'.

The original Board's order cannot be traced as the surviving Whitby Board to Collector Letter Books begin only in 1820. Similar licences survive for Truro (1847-1873) and the Scilly Isles (1832-1852). After the 1807 Act against smuggling, owners had to obtain a licence defining the area within which their ships were to trade and attest that they would not involve themselves in smuggling.

TABLE 4:

WHITBY OWNED VESSELS ENTERING LONDON, LIVERPOOL, BRISTOL, HULL, SAMPLE OF 117 ENTRANCES, TOTAL TONNAGE 28,604. 1839, 1842, 1847

<u>Area of voyaging</u>	<u>No. of entrances</u>	<u>Summary of cargo</u>
Baltic & White Sea	63	Tallow, flax, hemp, iron, wheat, deals, lathwood, oats, linseed
Black Sea	3	Wheat, wool, boards
United States	4	Cotton, pitch pine planks, paint, indigo, horns
Canada	19	Deals, staves, lathwood, oak, elm, pine, hardwood
South America	4	Tallow, hides, skins, guano
Channel Islands	4	Broken granite
Mediterranean	5	Wine, skins, straw, hemp, cork, dried fruit, nuts
India	3	Sugar, hides, saltpetre, flour, horns, oil, dyes
Others	12	Cotton, hides, sugar, wheat, barley, ashells, tea

Source: Custom House Bills of Entry,  
Custom House, London

TABLE 5:

DESTINED VOYAGES OF WHITBY-OWNED VESSELS SURVEYED BY LLOYD'S, 1834-56

<u>Intended destination/trade</u>	<u>Number of ships</u>
London	18
Coal trade	31
Coastwise	21
Newcastle	8
Hull	3
Shields	16
Hartlepool	16

TABLE 5: (contd.)

<u>Intended destination/trade</u>	<u>Number of ships</u>
Tees	25
Whitby trader	1
Goole	1
Middlesbrough	1
Seaham	3
St. Petersburg	13
Stettin	1
Baltic	27
Dantzic	2
Memel	1
Archangel	4
Black Sea	1
Antwerp	1
Genoa	1
Mauritius	1
Constantinople	1
Canada	19
Whaling	2
	218

Source: Lloyd's Survey Reports, Whitby, N.M.M.

Note: Given the paucity of locally-generated export traffic, vessels surveyed at Whitby would necessarily proceed from thence in ballast to another port to load. The voyages to the Baltic ports and Canada may well have been made via another British port to load an outward cargo. The ultimate destination of an intended voyage seems to have been given rather than the next port of call for a cargo.

.....

TABLE 6a:

AN ANALYSIS OF WHITBY VESSELS (BUILT AT WHITBY 1780, 1814, OWNED AT WHITBY 1850, 1870) TO IDENTIFY THEIR INTENDED VOYAGES

<u>Trade</u>	<u>1780</u>		<u>1814</u>		<u>1850</u>		<u>1870</u>	
	<u>No.</u>	<u>Tons</u>	<u>No.</u>	<u>Tons</u>	<u>No.</u>	<u>Tons</u>	<u>No.</u>	<u>Tons</u>
Whaling	7	2230 (3.4%)	8	2924 (3.6%)	--	--	--	--
Transports	55	20580 (31.3%)	73	25493 (31.4%)	--	--	--	--
Baltic	71	26400 (40.2%)	37	7478 (9.2%)	41	8054 (23.5%)	35	8799 (34.8%)
Coastal	22	5680 (8.6%)	49	8947 (11.0%)	101	18355 (53.5%)	13	3982 (15.7%)
Foreign	33	10785 (16.5%)	127	36251 (44.8%)	27	7896 (23.0%)	35	12515 (49.5%)
Totals	188	65675	294	81093	169	34305	83	25296
Av. tons	349		276		203		305	

Source: Underwriters' 'Green Books' and Lloyd's Register, N.M.M.



TABLE 6a: (contd.)

Note: It must be emphasised that these were intended voyages only and not the record of completed voyages.

.....

TABLE 6b:

DETAILED BREAKDOWN OF INTENDED VOYAGES OF WHITBY-REGISTERED SAILING VESSELS, 1850

<u>Trade</u>	<u>No.</u>	<u>Tons</u>	<u>Average tons</u>
Coal trade	33	6200	188
Whitby coasters	50	7992	160
London coasters	12	3058	255
Other ports' coasters	5	905	181
'Baltic'	36	6982	194
Hamburg	1	264	264
St. Petersburg	1	220	220
Odessa	2	471	236
Dantzig	1	187	187
Irish Trade	1	250	250
Canada	5	1792	358
N. America	4	1284	321
S. America	3	1423	474
France	2	427	214
Asia/Far East	2	545	273
W. Indies	1	223	223
Mediterranean	8	1881	235
Foreign (others)	2	321	161
<b>Total</b>	<b>169</b>	<b>34305</b>	<b>203</b>

Source: Lloyd's Register, 1850, N.M.M.

.....

TABLE 7:

ANALYSIS OF THE VOYAGES DURING THE CAREERS OF 208 MASTERS BORN AT WHITBY, 1868-1873

<u>Area of voyaging</u>	<u>No. of voyages by Whitby masters</u>	
	<u>Number</u>	<u>%</u>
Coasting	155	24
Baltic	150	22
Mediterranean	99	15
France, Portugal, Spain	64	10
East Indies	44	7
West Indies	33	5
North America	51	8
South America	14	2
Australia	14	2
Nova Scotia	10	1.8
Denmark	1	0.2
United States	19	3
	<u>654</u>	<u>100</u>

Source: Lloyd's Captains Register, Guildhall Library, MS 18567, Vols. 1-15

TABLE 8:

AN ANALYSIS OF A SAMPLE OF VOYAGES OF WHITBY-REGISTERED VESSELS, 1863-1914

<u>Category</u>	<u>Sample studied</u>			<u>No. voyages</u>
	<u>No.</u>	<u>Tons</u>	<u>Average</u>	<u>p.a.</u>
Whitby Traders	13	544	42	14
Coastwise (colliers)	27	4259	158	10
Baltic and France	35	6335	181	7
Foreign Trade	7	3599	514	2

Source: Agreements and Account of Crew 1863-1914  
 .....

TABLE 9a:

ANALYSIS OF THE VOYAGES OF WHITBY STEAMSHIPS: USUAL PORT OF DEPARTURE ON OUTWARD VOYAGES, 1870-1914

<u>Port</u>	<u>Number</u>	<u>%</u>
N. & S. Shields	60	21.0
Sunderland	26	9.1
W. Hartlepool	9	3.2
Rest of England & Scotland	58	20.4
London	12	4.2
Barry	15	5.3
Cardiff	61	21.4
Newport	15	5.3
Penarth	14	4.9
Port Talbot	1	0.4
Ireland	4	1.4
Europe	10	3.4

Source: Crew Agreements, analysis of 60 vessels, 285 voyages  
 .....

TABLE 9b:

ANALYSIS OF THE VOYAGES OF WHITBY STEAMSHIPS: FIRST PORT OF CALL AFTER DEPARTURE: ARRIVALS ON OUTWARD VOYAGE 1870-1914

<u>Port</u>	<u>Number</u>	<u>%</u>
Port Said	30	10.5
Malta	16	5.6
Constantinople	13	4.6
Alexandria	6	2.1
Cape Verde	7	2.4
Buenos Aires	10	3.5
Rio de Janeiro	5	1.8
Other S. America	11	3.8
Black Sea	22	7.7
Baltic	25	8.8
Italy	18	6.3
United States	9	3.2
France	17	6.0

TABLE 9b: (contd.)

<u>Port</u>	<u>Number</u>	<u>%</u>
British ports	64	22.5
Others	32	11.2
	(285)	(100)

Source: Crew Agreements, analysis of 60 vessels, 285 voyages

.....

TABLE 9c;

ANALYSIS OF THE VOYAGES OF WHITBY STEAMSHIPS: LAST PORT OF CALL BEFORE ARRIVAL AT PORT OF DISCHARGE - SOURCE OF RETURN FREIGHTS, 1870-1914

<u>Port</u>	<u>Number</u>	<u>%</u>
Rotterdam	10	4.2
Hamburg	16	6.8
Antwerp	11	4.6
Amsterdam	5	2.1
Cronstadt	4	1.7
Soulina	19	8.0
Odessa	4	1.7
Taganrog	10	4.2
Other Baltic	11	4.6
Other Black Sea	4	1.7
British ports	69	29.1
South America	15	6.3
United States and Canada	9	3.8
Constantinople	4	1.7
Bombay	4	1.7
Italy	5	2.1
France	12	5.1
Alexandria	5	2.1
Others	20	8.5
	(237)	

('48' made no subsequent port of call)

Source: Crew Agreements, analysis of 60 vessels, 285 voyages

.....

TABLE 10a:

ANALYSIS OF SHIPMENTS TO AND FROM WHITBY IN COASTWISE TRADE 1790: DESTINATIONS AND FROM WHERE CLEARED

<u>Port</u>	<u>Shipments to</u> <u>(Exports)</u>	<u>Shipments from</u> <u>(Imports)</u>
Hartlepool	2	1
London	78	28
Newcastle	37	54
Hull	23	64
Stockton	7	42
Sunderland	8	337
Bristol	1	-

TABLE 10a: (contd.)

<u>Port</u>	<u>Shipments to (Exports)</u>	<u>Shipments from (Imports)</u>
Leith	1	7
Scarboro'	1	4
Berwick	2	1
Bo'ness	1	1
Arundel	-	7
Blackney	5	5
Wells	-	1
Blyth	-	3
Rye	-	2
Dunbar	-	2
Newhaven	-	6
Inverkeithing	-	2
Bridlington	-	1
Sandwich	-	2
Blythnook	-	10
Alloa	-	1
Maldon	-	1
Borrowstones	-	2
Liverpool	-	2
Wisbech	-	2
Aberdeen	-	1
Yarmouth	-	1
Total	<u>161</u>	<u>590</u>

Source: Port Books P.R.O. E 190 (see note 16)

TABLE 10b:

## FURTHER ANALYSIS OF THE PORT BOOKS 1790

<u>No. of voyages</u>	<u>Coastwise exports - No. voyages of vessels</u>	
	<u>Ship</u>	<u>Master</u>
3	Constant Ann	Robt. Jones
1	Happy Return	John Riswick
3	Alice	Robt. Anderson
4	Peak	Zachary Granger
12	Endeavour	John Jackson
8	Neptune	Wm. Whilden
5	Flying Fish	Joseph Patton
9	Violet	Robt. Jackson
4	Hound	Robt. Heseltine
8	Pomona	John Mead
5	Constantine	John Hudson
1	Resolution	Wm. Skud
6	Good Design	Martin Pearson
5	Pomona	John Dalton
3	Betsie	Wm. Bedlington
5	Elizabeth	John Ayre
1	Favourite	Henry Lowes
5	Constance	John Price
1	Livitt	Chris. Pearson
5	Diligence	Alex. Bogue
1	Ann	John Swan

TABLE 10b (contd.)

<u>No. of voyages</u>	<u>Ship</u>	<u>Master</u>
1	Happy Return	John Aire
1	Mary	Thomas Readshaw
4	Shoreham	John Bradley
4	Eclipse	Wm. Frankland
2	Bay Packet	Wm. Stile
3	Midsummer	Wm. Andus
4	Lark	Jas. Clark
1	Herald	Robt. Hunter
6	Elizabeth	John Birdnell
3	Active	Robt. Andus
1	Friendship	Joseph Patton
1	Tryall	John Ayre
1	Success	Robt. Jackson
7	Lively	Robt. Midd
1	Leah	Andrew Harrison
2	Cupid	Wm. Rayntry
5	Providence	Robt. Dalton
1	Providence	Wm. Rimins
3	Providence	Geo. Campbell
2	Peggy	Thos. Warton
1	Elizabeth	Hen. Lawson
1	Mulgrove	W. Andus
1	Elizabeth	John Price
1	Emma	John Knaggs
2	Good Intent	Tobias Douthwaite
1	Mary and Ann	Thos. Callender
2	Trial	Jas. Dixon
2	Endeavour	Hen. Bennison
1	Betsey	Zach. Granger
1	Rapid	John Heseltine

51 ships

161 clearances - 3.2 per vessel

---

Source: P.R.O. E/190  
Port Books, Whitby

<u>Coastwise imports - no. of voyages of vessels</u>		
8	Neptune	Wm. Wheldon
4	Elizabeth	Robt. Gelding
14	Diligence	Alex. Bogue
2	Ann	Nath. Avitt
23	Mulgrave	Wm. Andus
10	Providence	Geo. Campbell
2	Mary	Thomas Readshaw
1	Dove	Anthony Pounder
7	Good Intent	Wm. Carter
2	Pomona	John Mead
4	Lively	Robt. Mead
10	Providence	Robt. Dalton
3	Liberty	Geo. Gildendale
9	Heckington	Robt. Baxter

TABLE 10b; (contd.)

<u>No. of voyages</u>	<u>Coastwise Imports - no. of voyages of vessels</u>	
	<u>Ship</u>	<u>Master</u>
8	Happy Return	John Ayre
28	Elizabeth	Anthony Cowes
22	Constantine	John Hudson
1	Fortune	Jos. Walls
3	Lark	Jos. Patton
13	Sally	Paul English
6	Commerce	John Price
8	Elizabeth	John Ayre
2	Elizabeth	John Beadnell
2	Reward	Wm. Atkinson
14	Endeavour	John Jackson
2	Dart	Benjamin Tindall
9	Pomona	John Dalton
1	Squirrel	Wm. Harvey
1	Exchange	Jos. Windham
1	Neptune	Wm. Reid
5	Active	Robt. Anderson
4	Resolution	Wm. Reed
2	Desire	Lawson Fleek
1	Clara	Robt. Bridson
23	Shoreham	John Bradley
17	Hound	Robt. Heseltine
1	Alexander	Stephen Lydsfor
14	Good Design	Martin Pearson
3	Peak	Zachary Granger
3	Flora	Joshua Graham
13	Constant Ann	Robt. Tozes
6	Experiment	Wm. Cook
16	Betsey	Wm. Redlington
1	Unity	Wm. Matheson
4	Flying Fish	Jos. Patton
4	Polly	John Walton
3	Mark	Sam Gillet
6	Hope	Thos. Merchant
16	Cupid	Wm. Rowntree
1	Thetis	Thos. Edmund
6	2 Brothers	John Cooper
2	John and Mary	John Granger
9	Endeavour	Hen. Bennison
1	Pomona	Wm. Hewison
1	Francis	Thos. Curry
3	Truelove	Robt. Bouendes
4	Trial	John Boulton
5	Emma	John Knaggs
3	Phoenix	Anthony Ridley
1	Jane	John Ainsworth
19	Peggy (Stockton)	Thos. Walton
1	Cleveland	Thos. Robinson
19	Mary Ann	Thos. Calender
24	Fox	Wm. Willson
6	Industry	David Ernson
2	Endeavour	John Corner
1	Jason	Wm. Staft
3	Ann	John Seaton
3	Active	Andrew Hart

TABLE 10b; (contd.)

<u>No. of voyages</u>	<u>Coastwise Imports - no. of voyages of vessels</u>	<u>Master</u>
	<u>Ship</u>	
5	Thos. & Mary	John Robinson
6	Bay Packet	Wm. Estill
3	Fortune	Jos. Walls
3	Newport	Wm. Appleton
16	Blessing	Thos. Estill
1	Venus	Patrick Hay
16	Endeavour	Richard Jellson
4	Friendship	Thos. Duncan
1	Neptune	Thos. Moggitt
1	Stephen	Zach. Staniland
16	Violet	Robt. Jackson
2	Rose	Robt. Barker
5	Henry	Zachariah Granger
1	Laurel	Rich. Hudson
1	Nancy	Thos. Saul
4	Lark	Jos. Covitt
1	Encouragement	Rich. Walker
2	Mary	Rich. Cobb
2	Skelton Castle	Jos. Brown
6	Peak	Andrew Harrison
1	Good Design	Jos. Carnaby
1	Friends Adventure	Wm. Tate
1	Experiment	Wm. Mills
1	Prince	John Granger
1	Midsummer	Chris. Brown
4	Good Intent	Tobias Donthwaite
1	Friends Glory	Geo. Marshall
1	Theo. & James	Luke Abram
1	Speedwell	Simon Robinson
1	Delight	Isaac Mason
1	Sally	Matt Trattles
1	2 Brothers (Yarmouth)	Jos. Brown
1	4 Brothers	Jn. Unthank
1	Good Intent	Abram Coal
1	Brotherly Love	Jacob Brown
1	Friends	John Mason
1	3 Brothers	Ed. Wood
1	3 Brothers	Isaac Hepelton
1	Brothers	Jn. Clark
1	Countryman (Yarmouth)	Jos. Lepingwall
2	Trial	Jos. Dixon
1	Fanny	Geo. Grey
1	Eclipse	Wm. Frankland
1	Nancy (Hull)	Jos. Wright
2	Olive Branch	Robt. Bell
1	Abigail	Jos. Stuthand
1	Prosperous (Hull)	Wm. Crabtree
1	Friends Goodwill	Jn. Swift
1	Vigilant	Joshua Ashton
2	2 Sisters	Jos. Meaks
1	Adventure	John Thorley
3	August	Peter Irwin
1	Concord	John Moss
1	William & Ann	Jn. Laddington
4	Lark	Robt. Patton

TABLE 10b; (contd.)

<u>No. of voyages</u>	<u>Coastwise Imports - no. of voyages of vessels</u>	
	<u>Ship</u>	<u>Master</u>
2	Experience	Wm. Cousin
1	Seaflower	Robt. Reston
1	Princess Royal	Wm. Reston
1	John & Mary	Wm. Moorson
1	Thos. & Hannah	
1	Freedom	Thos. Wills
1	Hilda	Jos. Watts
1	Denwell	Wm. Soulby
	Maria	Jackson Hilden

133 ships

627 entries

4.7 per vessel

---

Source: See Note 16

.....

TABLE 10c;

## ANALYSIS OF COASTWISE IMPORTS INTO WHITBY in 1790

<u>Commodity</u>	<u>Measure</u>	<u>Quantity</u>
Coal	chaldrons	8693
Empty casks	number	475
Wrought & cast iron	tons	371
Wrought & cast iron	cwt.	184
Iron bars	number	1336
Tobacco	lbs.	5581
Tobacco	cwt	3
Seamen's chests	number	247
Linseed oil	casks	7
Linseed oil	tons	4
Linseed oil	barrels	7
Ground wheat	sacks	269
Ground wheat	lbs	562
Ground wheat	bushels	302
Oak timber	tons	2495
Oak timber	loads	522
Rope	tons	20
Rope	cwt	237
Cordage	tons	117
Cordage	cwt	89
Glass	cases	32
Glass	boxes	29
Glass	casks	27
Soap	tons	12
Soap	cwt	470
Soap	lbs	17279
Soap	firkins	98
Tobacco pipes	gross	216
Tobacco pipe clay	tons	96
Soapers ashes	tons	867
Soapers ashes	cwt	97
British spirits	galls.	1204
British spirits	casks	3



TABLE 10c;(contd.)

<u>Commodity</u>	<u>Measure</u>	<u>Quantity</u>
Biscuit bread	bags	190
Biscuit bread	tons	13
Biscuit bread	cwt	11
Kelp	tons	685
Beef and pork	casks	25
Anchors	number	57
Books	parcels	5
Wheat	qrts.	678
Wheat	lbs.	4526
Wheat	bushels	1964
Sugar	tons	232
Sugar	cwt	399
Sugar	loaves	347
Tea	lbs.	31376
Beer	firkins	7
Beer	barrels	31
Beer	galls.	354
Beer	casks	51
Linen	rolls	500
Linen	boxes	269
Linen	yards	1900
Linen	ells	1519
Rum	galls.	3483
Rum	casks	14
Molasses	casks	111
Currants and raisins	cwt	37
Currants and raisins	casks	62
Currants and raisins	lbs.	42
Clothes	boxes	87
Coffee	lbs.	1210
Lignum vitae	tons	17
Lignum vitae	cwt.	11
Oakum	tons	7
Oakum	cwt	40
Seed	sacks	48
Washing machines	number	8
Pepper	cwt.	7
Pepper	lbs.	32
Pepper	bags	3
Split pease	lbs	1559
Split pease	sacks	12
Split pease	bushels	152
Stationery	parcels	40
Hops	cwt.	75
Hops	sacks	37
Deals	number	520
Lemons	chests	175
Earthenware	crates	193
Earthenware	pieces	1308
Logwood	cwt	10
Brandy	galls	3223
Rape oil	casks	6
Fruit	casks	5

TABLE 10c; (contd.)

<u>Commodity</u>	<u>Measure</u>	<u>Quantity</u>
Fruit	bushels	14
Bedding	chests	85
Oars	number	50
Hemp	tons	17
Hemp	cwt.	1859
Hemp	bundles	110
Hides and skins	number	6122
Flagstones	doz.	65
Salt	tons	120
Mahogany	tons	22
Barley	cwt	39
Barley	lbs	9228
Foreign wines	galls	8880
Butter	firkins	13
Butter	cwt.	19
Bricks	number	17205
Herrings	barrels	15
Malt	lbs	202
Malt	bushels	102
Pitch	barrels	43
Candles	lbs	470
Candles	doz	86
Cocoa	lbs	66
Rice	lbs	112
Rice	cwt	32
Rice	barrels	28
Flour	sacks	18
Pantiles	number	59500
Cheese	tons	3
Cheese	cwt	78
Flax	cwt	3341
Flax	bobbins	822
Flax	tons	2
Tar	barrels	322
Oak plank	loads	382
Oak plank	feet	600
Canvas (Hessian)	ells	2297
Bran	sacks	70

Unquantified: fuller's earth, nuts, tools, fire policies, candy, sweets, pimento, lead, shot, ironmonger's ware, apothecaries' ware, lampblack, varnish, lead, vinegar, wood hoops, mustard, gingerbread, haberdashery, hats, ship chandlery, figs, furniture, yards, masts, alum plates, lead, chocolate.

---

Source: Port Books E 190 290/3

TABLE 10d:

## ANALYSIS OF COASTWISE EXPORTS FROM WHITBY IN 1790

<u>Commodity</u>	<u>Measure</u>	<u>Quantity</u>
Alum	tons	3475
Sailcloth	bolts	6068
Red port wine	galls.	2850
White port wine	galls.	870
Other wine	bottles	585
Geneva	casks (3 $\frac{1}{2}$ galls.)	837
Brandy	galls.	1390
Skins and hides	number	4369
Candles	lbs.	16635
Candles	casks	44
Malt	bags	13
Bacon	sides	73
Bacon	lbs.	366
Hams	number	203
Hams	casks	14
Hams	tons	90
Butter	firkins	1716
Butter	lbs.	3256
Timber	tons	102
Timber	loads	25
Timber	quarters	65
Tongues	number	18
Beef and pork	casks	294
Pigs	number	130
Pease	quarters	30
Oats	quarters	4277
Anchors	number	17
Flour	sacks	11
Flour	casks	8
Tobacco	chests	1
Wheat	tons	12
Wheat	bushels	10
Biscuit	bags	106
Biscuit	tons	3
Biscuit	cwt.	12
Biscuit	casks	23
Biscuit	firkins	3
Old sails	number	9
Seamen's chests	number	90
Oatmeal	tons	4
New sails	number	51
Tar	barrels	12
Household goods	parcels	57
Household goods	loads	23
Household goods	boxes	108
Ale	barrels	4
Old iron	tons	26
Old iron	casks	31
Wheat	quarters	142
Rape oil	quarters	88
Stone	tons	54
Cordage	feet	22
Cordage	yards	82
Cordage	tons	12
Cordage	cwt	144

TABLE 10d: (contd.)

<u>Commodity</u>	<u>Measure</u>	<u>Quantity</u>
Copper (old)	casks	2
Rope	casks	46
Pitch and hemp	barrels	10
Sleepers and pit props	number	16860
Cordage	coils	3
Hams	number	273
Hams	tons	24
Hams	boxes	7
Soap	tons	40
Rags	casks	36
Malt	bags	15
Guns	number	112
Guns	chests	1
Flax	bobbins	368
Deals	number	12
Masts	number	42
Train (whale) oil	galls	216
Whale oil	tons	271
Seal skins	doz.	393
Whale bones	number	429
Whale fins	cwt.	174
Whale fins	tons	25
Dried cod and ling	tons	27
Dried cod and ling	bundles	24
Dried cod and ling	cwt	23
Dried fish	number	140
Dried fish	barrels	6
Dried fish	casks	11
Pickled fish	casks	3

Unquantified goods: barks, oatmeal, paper, oats, tallow, salt fish, linen, paint, pianos, empty casks, rammers, sponges, ship's boats, plate china, pocket handkerchiefs, nails

---

Source: Port Books E 190 290/3

.....

TABLE 11a:

NUMBER AND TONNAGE OF VESSELS ENTERED AND CLEARED TO AND FROM WHITBY COASTWISE, 1841-1913. BRITISH VESSELS. NET TONS

<u>Year</u>	<u>Sailing vessels</u>				<u>Steam vessels</u>			
	<u>Inwards</u>		<u>Outwards</u>		<u>Inwards</u>		<u>Outwards</u>	
	<u>No.</u>	<u>tons</u>	<u>No.</u>	<u>tons</u>	<u>No.</u>	<u>tons</u>	<u>No.</u>	<u>tons</u>
1841	547	25543	162	8663	78	3510	79	3555
1842	567	26186	173	10483	87	3915	85	3825
1843	597	27969	194	10858	87	3915	85	3825
1844	662	28395	286	14108	1	45	1	45
1845	718	31429	189	9794	84	4476	84	4418

TABLE 11a: (contd.)

Year	<u>Sailing vessels</u>				<u>Steam vessels</u>			
	<u>Inwards</u>		<u>Outwards</u>		<u>Inwards</u>		<u>Outwards</u>	
	<u>No.</u>	<u>tons</u>	<u>No.</u>	<u>tons</u>	<u>No.</u>	<u>tons</u>	<u>No.</u>	<u>tons</u>
1846	708	31907	184	9067	78	3510	78	3510
1847	696	30307	168	8275	75	3375	76	3420
1848	594	26785	147	7288	73	3285	23	3285
1849	624	27253	165	7965	29	1305	31	1395
1850	625	27256	168	8437	47	2115	46	2070
1851	623	28015	157	7903	48	2160	51	2295
1852	764	33715	129	7136	39	1610	45	1762
1853	718	29815	120	6198	6	367	17	313
1854	685	29869	127	6895	--		--	
1855	677	29035	99	5445	--		--	
1856	725	29814	101	4955	--		--	
1857	779	31813	125	5748	6	172	1	16
1858	734	30697	134	6158	2	40	19	516
1859	712	27797	121	5483	14	275	--	
1860	752	30785	121	5830	49	980	2	40
1861	675	28195	85	4296	63	1485	1	20
1862	725	29931	109	5087	107	4367	11	991
1863	788	32580	138	6280	121	5582	4	424
1864	603	24963	81	4315	42	752	--	
1865	534	23310	80	4207	42	847	29	527
1866	438	21642	66	4067	27	490	29	527
1867	376	16735	44	2255	8	152	1	21
1868	411	18736	52	2929	--		--	
1869	406	17891	20	1490	3	53	--	
1870	411	19051	30	2017	4	99	--	
1871	450	19775	23	1420	29	3957	1	154
1872	338	13600	18	989	32	4414	--	
1873	557	59564	605	64003	393	61614	391	62649
1874	572	62616	575	62958	465	69641	467	72431
1875	558	54627	557	55013	410	54595	413	57987
1876	516	48451	519	51639	403	65945	368	57387
1877	493	42528	499	44155	427	67919	392	60270
1878	448	44687	445	49853	327	54823	287	59979
1879	487	42562	496	44359	376	66563	350	61339
1880	543	57500	557	59075	348	66466	345	63986
1881	586	59882	590	62473	341	62817	336	61529
1882	611	56937	602	56635	427	72337	395	71107
1883	590	59300	609	61490	428	76653	426	76279
1884	480	54657	476	55676	426	81348	415	78888
1885	279	23925	276	23434	260	49340	256	48815
1886	217	20059	217	20833	155	26914	154	27671
1887	309	32514	328	34186	220	40038	217	39657
1888	343	39854	351	41262	300	54392	298	54179
1889	304	40544	315	41934	232	40519	227	39954
1890	280	37656	287	37815	282	52689	284	53295
1891	234	28552	242	29283	196	30892	197	31038
1892	264	40545	270	41571	307	50033	307	50033
1893	261	36434	266	36810	397	71778	397	71778
1894	233	26403	237	27161	225	33922	225	33922
1895	253	35147	260	35938	325	53931	324	53766
1896	272	37883	271	38123	435	68451	432	67968
1897	372	74061	362	72293	349	55140	340	53838

TABLE 11a: (contd.)

Year	<u>Sailing vessels</u>				<u>Steam vessels</u>			
	<u>Inwards</u>		<u>Outwards</u>		<u>Inwards</u>		<u>Outwards</u>	
	<u>No.</u>	<u>tons</u>	<u>No.</u>	<u>tons</u>	<u>No.</u>	<u>tons</u>	<u>No.</u>	<u>tons</u>
1898	287	53020	281	53102	365	57798	347	55292
1899	268	52267	267	50118	300	52571	301	51118
1900	171	27569	166	27526	303	50907	294	49385
1901	264	48066	265	48654	403	71331	400	70997
1902	383	67045	386	67673	363	64520	356	63421
1903	306	57124	300	57208	390	68893	386	68363
1904	360	66400	359	66398	305	51911	295	50167
1905	382	71443	382	71314	306	51292	294	49344
1906	480	102538	481	103054	335	57212	325	55582
1907	303	60583	305	61010	346	88236	341	57543
1908	303	60853	305	61100	347	58235	341	57405
1909	372	76482	376	76925	385	65362	383	65189
1910	261	52512	260	52474	598	104663	592	101330
1911	272	53973	269	53399	622	109577	617	108864
1912	224	43988	223	43872	493	85638	491	85249
1913	209	42419	204	41531	551	96110	550	95878

Source: British Parliamentary Papers, Annual Statement of Navigation and Shipping each year from 1842 to 1914.

TABLE 11b:

NUMBER AND TONNAGE OF VESSELS ENTERED AND CLEARED TO AND FROM WHITBY IN THE FOREIGN AND COLONIAL TRADES - BRITISH AND FOREIGN VESSELS, SAILING AND STEAM, CARGOES AND BALLAST, 1841-1913. NET TONS

Table removed due to third party copyright

Table removed due to third party copyright

## APPENDIX 1

VOYAGES OF 2 SELECTED WHITBY REGISTERED STEAM VESSELS, TAKEN FROM LLOYD'S  
WEEKLY SHIPPING INDEX 1900

Thomas Turnbull

Palermo 14 Dec -- New York on 8 Jan.  
New York 20 Jan -- Tyne  
Off Wight 8 Feb.  
On Tyne 10 Feb.  
Tyne 24 Feb -- Sarona  
Passed Sagres 5 Mar.  
Arr. Sarona 10 Mar.  
Sarona 17 Mar -- Girgenti Arr. 19 Mar.  
Girgenti -- Palermo Arr. 25 Mar.  
Palermo 31 Mar -- New York At Lib. 4 Apr.  
Arr. New York 23 Apr.  
New York 4 May -- Manchester  
Arr. Manchester 21 May  
Manchester 28 May -- Cardiff arr. 30 May  
Cardiff 7 June -- Palermo  
Passed Lundy 7 June  
Arr. Palermo 17 June  
Licata -- Messina Arr. 2 July  
Palermo 8 July -- New York  
Sailed Gibraltar 13 July  
Arr. New York 31 July  
4 Aug. New York -- Philadelphia arr. 7 Aug.  
Philadelphia -- Cork

Dunsley

Arr. Gibraltar 4 June  
Portishead Dock arr. 11 June  
For Barry  
Barry 27 June -- Venice  
Passed Gibraltar 2 July  
Venice 16 July -- Guling  
Passed Dardanelles 23 July  
Passed Sagres 8 August  
Guling 28 July -- Bristol arr. 14 August  
Bristol -- Cardiff Arr. 24 August  
Barry 28 August -- Venice  
Passed Barry Island 8 Sept.  
Venice arr. 23 Sept.  
Venice 29 Sept. -- Constantinople  
Taganrog arr. 8 Oct.  
Taganrog 19 Oct. -- Dunkirk  
Passed Dardanelles 28 Oct.  
Passed Octavos 6 Nov.  
Taganrog 19 Oct. -- Dunkirk arr. 11 Nov.  
Passed Prawle 22 Nov.  
Dunkirk 21 Nov. - Barry arr. 23 Nov.  
Barry 29 Nov. -- Venice  
Passed Sagres 6 Dec.



## APPENDIX 1 (contd.)

Arr. Venice 15 Dec.  
 Venice 21 Dec. -- Kustendje  
 Passed Dardanelles 27 Dec.

.....

## APPENDIX 2

AN ANALYSIS OF THE ENTRANCES AND CLEARANCES OF THE PORT OF WHITBY TAKEN  
 FROM SELECTED YEARS OF LLOYD'S LIST: 1776, 1787, 1799, 1817, 1826

<u>Year</u>	<u>No. vessels</u> ( <u>incl. repeated voys.</u> )	<u>E.F.</u> <u>Entered from/Cleared to</u>	<u>C.T.</u>
1776	7	E.F. Greenland, Davis St., Stockholm, St. Petersburg	
1787	72	E.F. Gottenburg, Memel, Christiana, Danzig, Riga, Greenland, Davis Straits, Onega, Archangel, Baltic, Norway	C.T. Davis Straits, Greenland, Amsterdam, Memel, Riga
1799	25	E.F. Stockholm, Cuxhaven, Memel, Elsinor, Gefle, Greenland, Riga, Dantzig, Davis Straits, Baltic, Archangel, Petersburg	
1817	54	E.F. Belfast, Rotterdam, Havre, Gottenburg, Liebau, Memel, Riga, Christiana, Greenland, Petersburg, America, Archangel, Davis Straits, Hamburg, Miramichi, Quebec, Holland, Ipswich, Antwerp	C.T. London, Maldon, Riga
1826	23	E.F. Pillau, Copenhagen, Miramichi, Riga, Richebucto, St. John N.B., Archangel, St. Petersburg, Davis Straits, Danzig, Caen, Baltic	

## APPENDIX 3

## COMMODITIES IMPORTED INTO WHITBY 1790-3 AND 1800-2

## Geneva

Fir timber from 8 to 12 inches square  
 Masts above 12 inches diameter  
 Masts from 8 to 12 inches diameter  
 Masts from 6 to 8 inches diameter  
 Deals above 7 inches wide, 8 to 20 feet long  
 Deals above 7 inches wide, above 20 feet long  
 Deal ends about 7 inches wide, under 8 ft. long  
 Lathwood under 5 feet long  
 Lathwood above 5 feet long  
 Spars from 4 to 6 inches diameter  
 Spars under 22 feet long  
 Spars above 22 feet long  
 Wainscot boards  
 Staves from 60 to 70 feet long  
 Oak plank 2 inches thick or upwards  
 Handspikes under 7 feet long  
 Handspikes above 7 feet long  
 Oars  
 Offers under 5 inches square, under 24' long  
 Barks 5" to 8" square, above 24 feet long  
 Firewood  
 Buck timber  
 Batons 8'-20' long  
 Clapboards not above 5 feet long  
 Staves 36" to 50" long  
 Elm timber  
 Anchor stocks  
 Treenails  
 Oak knees under 5" square  
 Oak knees above 5" square  
 Oak timber  
 Parling boards under and above 7' long  
 Baton ends under 8' long  
 Wainscot logs  
 Pound wood under 8' square  
 Oak boards under 2" thick  
 Iron  
 Wine  
 Tar  
 Pitch  
 Whale fins  
 Brandy  
 Cork  
 Hemp  
 Tow  
 Linen from 22½" to 31½" broad, and 36" to 45"  
 Towelling not above 22½" broad  
 Whale oil  
 Damask table cloths  
 Old iron

## APPENDIX 4

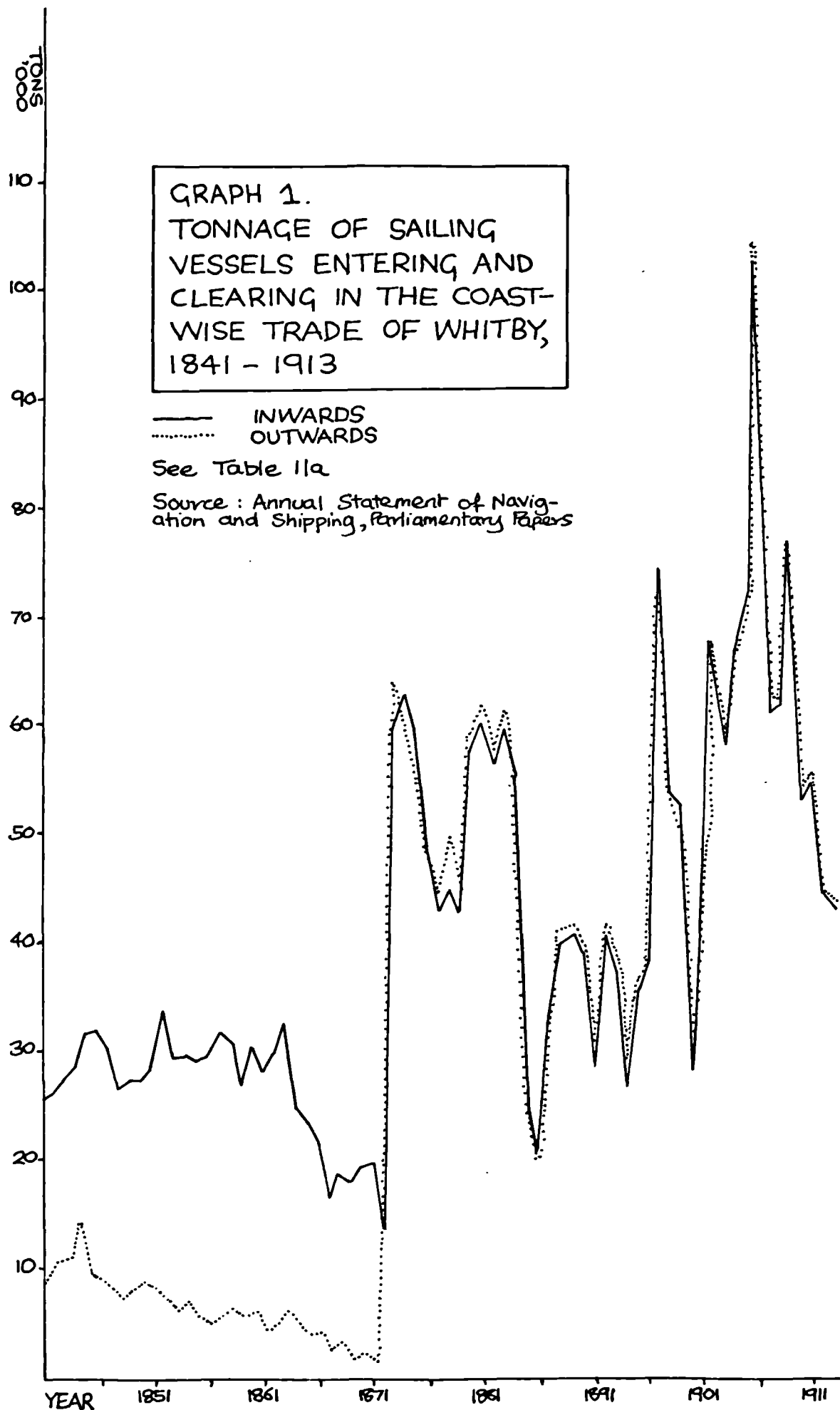
## ARTICLES IMPORTED INTO WHITBY 1873, 1887, 1888, 1889, 1891, 1893, 1899

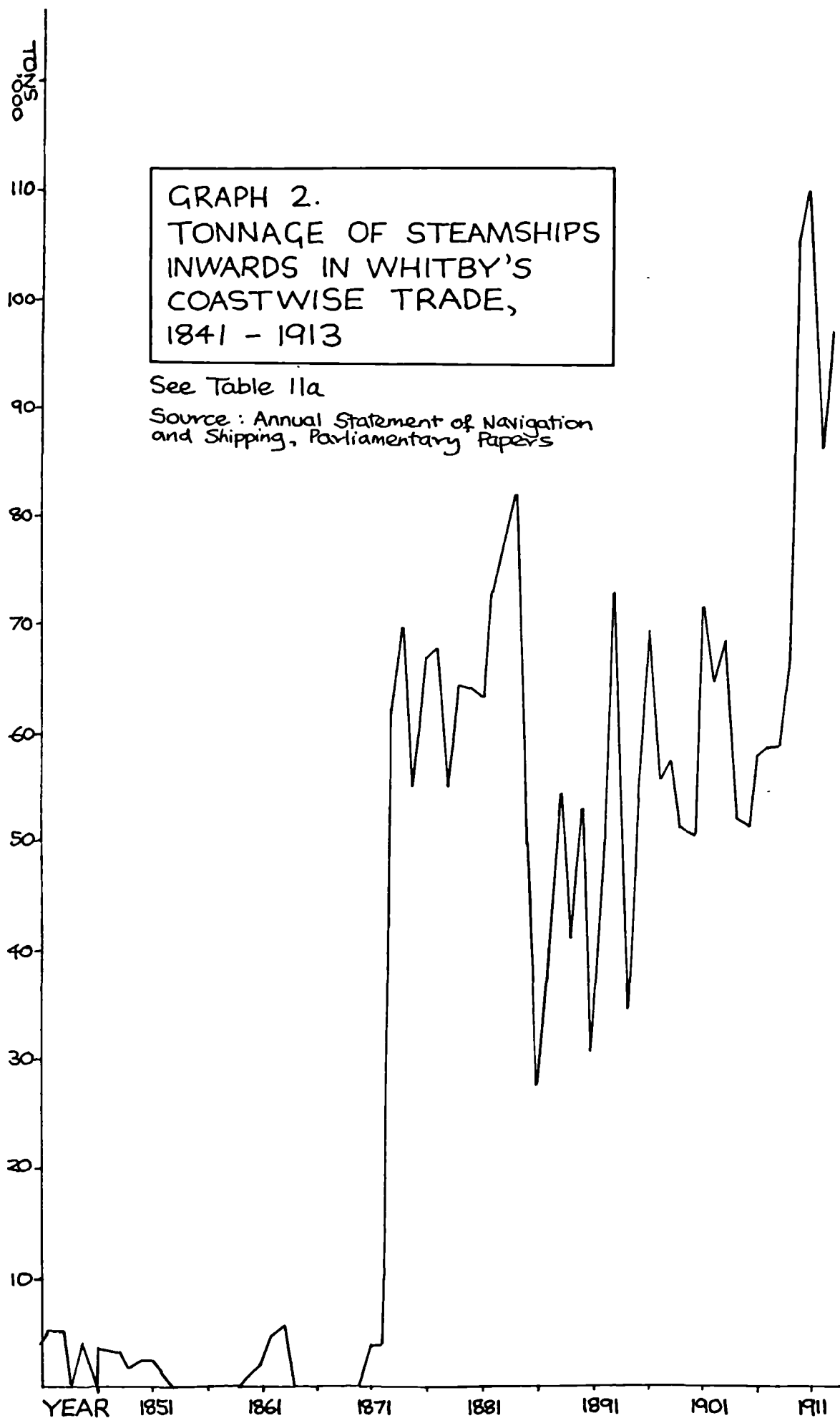
<u>Year</u>	<u>Articles imported</u>	<u>Quantity</u>	<u>Value</u>
<u>1873</u>	Ice from Norway	45 tons	?
(Cust	Iron ore from Spain	200 tons	?
23/1)	Pig iron from Sweden	100 tons	?
	Bars - Russia, Sweden	7124 tons	£1215
		<u>Total</u>	£2726
	Potatoes - Germany	3010 cwt.	£669
	Holland	40 cwt.	£9
	Hewn fir - Sweden	247 loads	?
	Sawn fir - Sweden	476 loads	£1815
	Sawn fir - Norway	88 loads	£230
	Sawn wood - Sweden	21 loads	?
(duti-	Preserved ginger	1 load	
able)	Tea	3 loads	
	Total value of imports into Whitby, 1873		£7840
<u>1887</u>	Dye stuffs, bark - Sweden	1450 cwts	£290
(Cust	Dye stuffs, bark - Norway	1300 cwt	£195
23/22)	Ice - Norway	191 tons	£114
	Ice - Norway	111 tons	£71
	Sawn fir - Sweden	195 loads	£428
	Sawn fir - Sweden	404 loads	£872
	Sawn fir - Sweden	174 loads	£392
	General wood - Sweden	11 loads	£23
	General wood - Sweden	2 loads	£2
	General wood - Sweden	8 loads	£17
	Total value of imports into Whitby, 1887		£2404
<u>1888</u>	Ice	225 tons	£145
(Cust	Hewn fir	1 load	£3
25/10)	Sawn fir	1470 loads	£3150
	Sawn unenum.	68 loads	£73
	Staves	6 loads	£10
	Total value of imports into Whitby, 1888		£3381
<u>1889</u>	Dye stuffs, bark - Sweden	1320 cwt.	£198
(Cust	Ice - Norway	260 tons	£260
23/44)	Ice - Norway	40 tons	£40
	Hewn fir, Sweden	7 loads	£19
	Sawn fir, Russia	287 loads	£715
	Sawn fir, Russia	319 loads	£797
	Sawn fir, Russia	319 loads	£780
	Fir - Sweden	216 loads	£595
	Fir - sweden	232 loads	£642
	Fir - Sweden	275 loads	£738
	Fir - Norway	323 loads	£712
	Total value of imports into Whitby, 1889		£5416

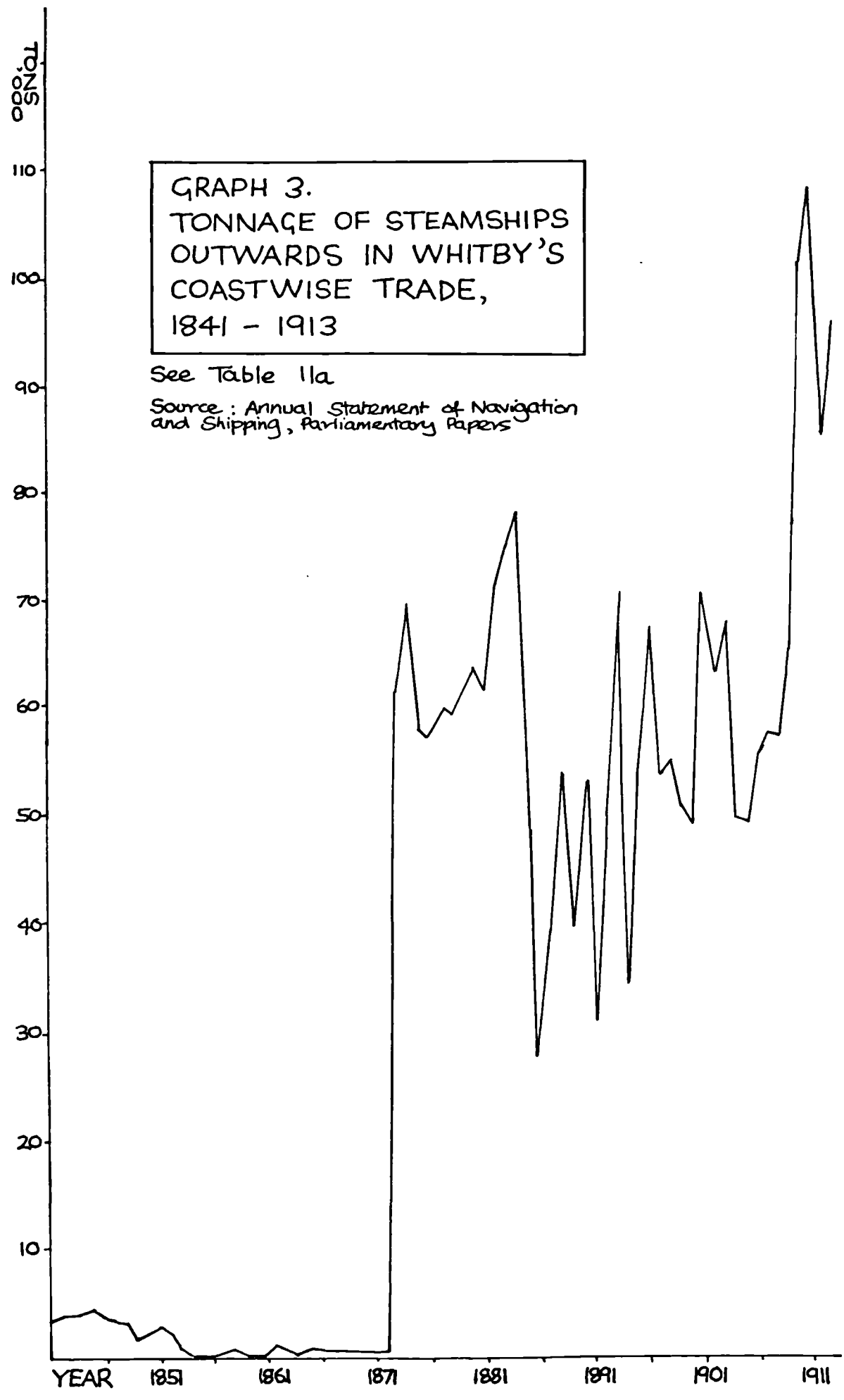
## APPENDIX 4 (contd.)

	<u>Articles imported</u>	<u>Quantity</u>	<u>Value</u>
<u>1891</u>	Ice from Norway	100 tons	£65
(Cust	Ice from Norway	150 tons	£98
23/70)	Sawn fir - Sweden	271 loads	£567
	Sawn fir - Sweden	479 loads	£1097
	Sawn fir - Sweden	6 loads	£3
Total value of imports into Whitby 1891			<u>£1830</u>
<u>1893</u>	Dye stuffs, bark - Sweden	1440 cwt	£216
(Cust	Ice from Norway	149 tons	£98
23/87)	Hewn fir - Norway	8 loads	£23
	Sawn fir - Sweden	641 loads	£1609
	Fir from Norway	703 loads	£959
	Wood stores from Norway	101 loads	£151
Total value of imports into Whitby 1893			<u>£3056</u>
<u>1899</u>	Sawn fir	8 loads	£8
(Cust	Sawn fir	1228 loads	£3247
25/21)			
(Cust	Hewn fir - Norway	8 loads	£8
23/94)	Sawn fir - Sweden	623 loads	£1749
	Sawn fir - Norway	596 loads	£1498
Total value of imports into Whitby 1899			<u>£6510</u>

Source: Taken from PRO Cust 23/1, 23/22, 25/10, 23/44, 23/70, 23/87, 25/21 respectively.



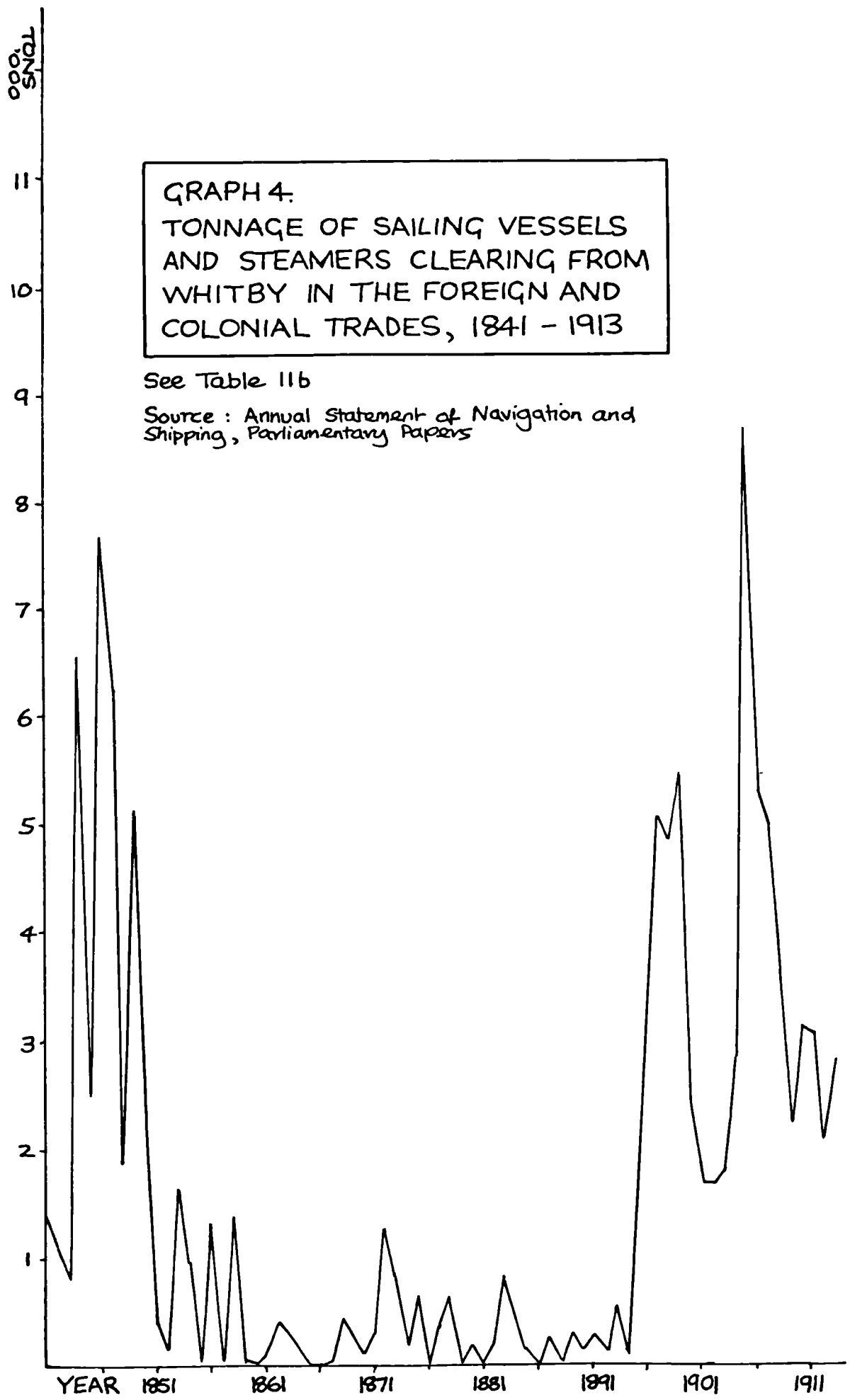




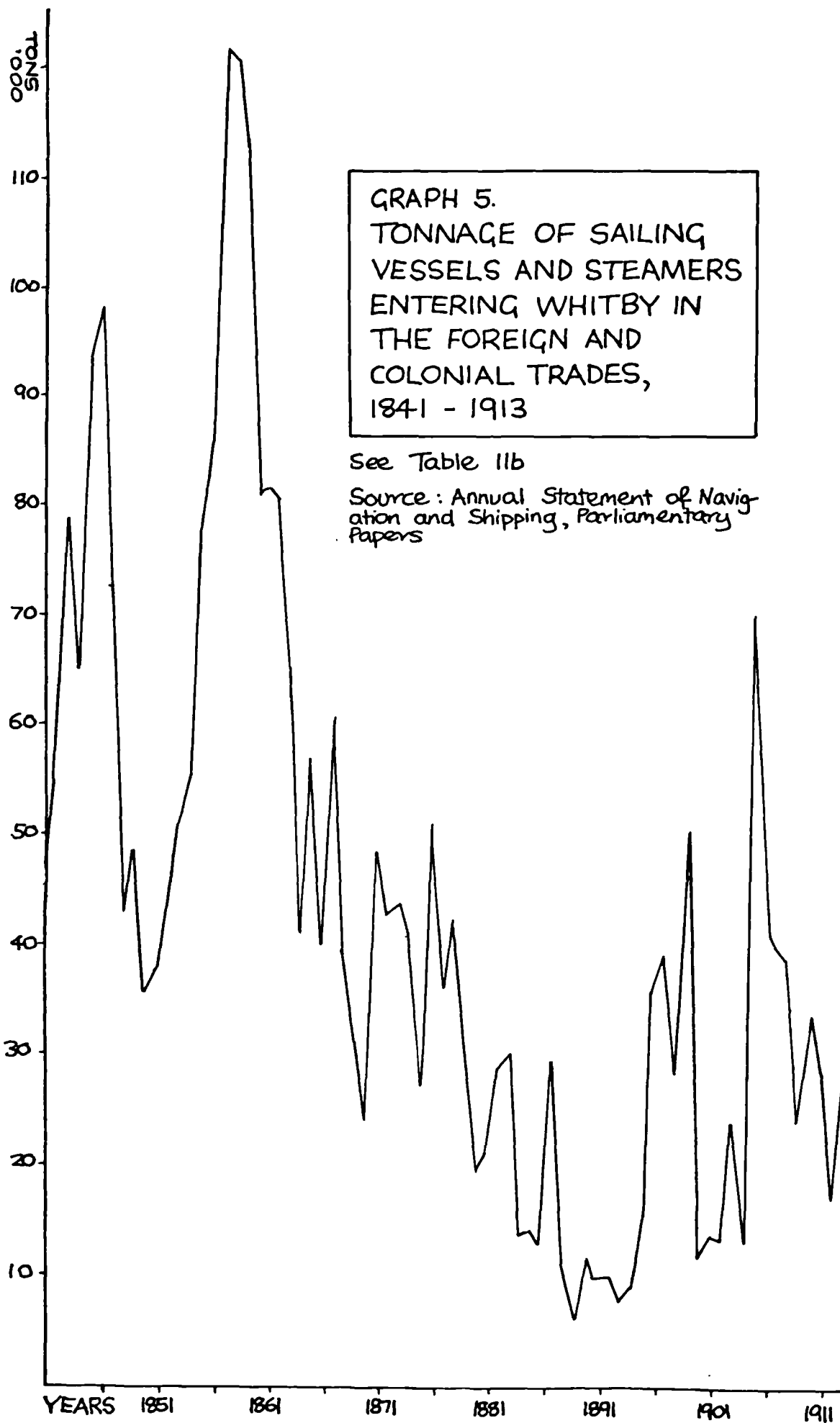
GRAPH 3.  
TONNAGE OF STEAMSHIPS  
OUTWARDS IN WHITBY'S  
COASTWISE TRADE,  
1841 - 1913

See Table 11a

Source : Annual Statement of Navigation  
and Shipping, Parliamentary Papers







## CHAPTER FIVE: THE EMPLOYMENT OF WHITBY SHIPPING 1700-1914

## SECTION TWO: THE COAL TRADE

'The best sun we have is made of Newcastle coal'.

Horace Walpole, 15th June 1768<sub>1</sub>

In 1701 it has been estimated that 400,000 London chaldrons of coal reached the Metropolis from the Tyne;<sup>2</sup> by 1801 nearly two million tons of coal per year was shipped from the north east ports coastwise, of which about three-quarters was imported into London.<sup>3</sup> In a table previously discussed in Chapters One and Two, of 'shippes using the Coale Trade at Newcastle in the yeares 1702, 1703 and 1704', Whitby contributed 98 vessels, carrying 6385 Newcastle chaldrons, second only to London and Yarmouth.<sup>4</sup> Thus the early significance of Whitby as a port supplying vessels for the Tyne-Thames coal trade is apparent. The question of the origins of the involvement of Whitby ships in the coal trade remains, together with the problem of the profitability of Whitby colliers, to be considered here through a study of the trading accounts of representative vessels.

In an analysis of the beginnings of collier ownership at Whitby it is notable that contemporary local historians emphasise the importance of the manufacture of alum as a source of demand for coal shipments.<sup>5</sup> Thus, it may be asked if the role of Whitby ships in the coal-carrying trade from the north east ports to London occurred before or after the import of coal into the port for its own use. The importance of Whitby ships in the coal trade may have stemmed from a local demand for coal in manufacturing and domestic consumption, with a development of interest in shipping resulting from this. Or the rise of collier owning may have been the consequence of improvements

to the port facilities and the concomitant growth of shipowning and shipbuilding requiring a convenient bulk cargo for shipment.

The alum industry was undoubtedly important in the origins of the building and owning of vessels for the coal trade. Charlton, writing in 1779 goes so far as to say that the alum trade in Whitby 'raised us out of obscurity, made us acquainted with navigation, and has rendered us of such consequence as a maritime town, that our ships and sailors are now sent to visit the most remote parts of the world. . .'. Charlton here ignores other factors influencing the rise of shipping at the port, but alum, a mineral used in dyeing and tanning, required disproportionately large quantities of coal, a commodity which was not available in the immediate environs of Whitby. Thus, at the beginning of the seventeenth century when the first alum works were being established around Guisborough, coal was 'an article till then but little known on our part of the coast'. Charlton considered that, to fulfil the need for vessels in the vicinity to supply the alum works with coal mined from far afield, Whitby was ideal in having a harbour and 'a number of fishermen, who having been long enured to the sea, might easily be rendered good sailors'. These fishermen, writes Charlton, realising the potential profits, bought a few small vessels by the second decade of the seventeenth century and Charlton implies that they entered into yearly agreements with the owners of the alum works, supplying them with fixed quantities of coal. These vessels originally ventured only to Newcastle and Sunderland for coal, but gradually the owners saw further possibilities of profit in exporting the processed alum, which took them to London. They sailed to London with fish and butter as well as alum and 'they returned home freighted with merchandise for Whitby'.<sup>6</sup>

This explanation, that Whitby shipping, especially its colliers, developed from early seventeenth century origins, from fishermen looking

for extra profits by supplying the alum industry with coal, is open to criticism. The few small vessels in a local trade were in considerable contrast with the hundreds of vessels in the London coal trade owned and built in Whitby by the eighteenth century. Young, writing in 1817, also pointed to the beginnings of alum workings as instrumental in the increase of shipping at Whitby but remarked that even in 1676, when the production of alum was well established, there were only 76 vessels owned at the port, all of insignificant tonnage except for two flyboats.<sup>7</sup>

The importance and survival of the alum trade from Whitby continued until the mid nineteenth century. Young refers to the export of alum in 1700 as 1232 tons, in 1800 as 180 tons and in 1815 as 305 tons.<sup>8</sup> The Port Books for Whitby, as seen in the first section of this chapter, suggest a higher figure for the end of the eighteenth century,<sup>9</sup> indicating that alum was initially an important trade, but its ability to sustain and employ a considerable quantity of tonnage is open to question. It has been suggested that by the late eighteenth century the alum works in the Whitby area produced 6000 tons per year when only 3000 tons could be sold. The trade became uneconomic: it cost nearly £10,000 to begin alum extraction and the highest price obtainable was only £13 per ton, whilst the cost of manufacture exceeded £14 per ton.<sup>10</sup> The importance of the alum industry to this study is that alum manufacture first brought the port of Whitby into contact with the coal trade. Coal imports for the alum works, however, only slightly exceeded that required for domestic consumption within the town.<sup>11</sup> The alum industry introduced the concept of the shipment of coal from the north east ports to Whitby but not directly to the phenomenon of Whitby ships carrying coal from the coal ports to London in an activity remote from the business of the port itself.

Finch discusses the concept of a small port, denied natural resources or the position to be the outlet for a wealthy hinterland, serving the

needs of 'a more happily provided neighbour'.<sup>12</sup> This may be seen as a particularly apt description of Whitby. Although the alum trade was significant, it was not necessarily the main impetus behind the development of vessels for the coal trade at Whitby. The demand for coal at the Metropolis and the quantity imported has been referred to; the 1702 Act for the improvement of the harbour and piers of the port enabled Whitby shipping, in terms of tonnage built and owned, to contribute to this trade more fully. This Act provided funds by imposing a duty of a farthing per chaldron on all vessels loading coal at the North East ports except those from Yarmouth. Charlton admits the importance of this factor when he remarked that 'since the first introduction of shipping at Whitby, the town has been continually on the increase; but that increase was almost imperceptible, while the harbour was bad and without piers. No sooner were these erected, and the haven made convenient and commodious, by the removing of all obstructions, than Whitby grew apace both in the number of its shipping and inhabitants, so that it is more than doubled within the space of these forty years last past. . .'.<sup>13</sup> Young considers that it was not until the second quarter of the eighteenth century that vessels of a significant tonnage were built and owned at the port, suggesting that the improvements to the harbour were of more moment to the local shipping industry than the earlier interests in the alum trade.<sup>14</sup>

The criterion that the increase in tonnage of individual vessels indicates the growth of a shipping industry thus points to the minimal importance of the alum trade in the rise of collier ownership at Whitby. The vessels engaged in the alum trade were generally of a limited burthen. 80 tons was the average quoted in the first edition of Camden's Britannia,<sup>15</sup> whilst the vessels belonging to Whitby and plying between Newcastle and London in the coal trade in the early eighteenth century were more commonly

between 200 and 400 tons. Whitby ships in this trade from August 1738 to March 1744, for example, averaged 308.3 tons.<sup>16</sup> It may thus be suggested that the expansion of shipbuilding and shipowning at the port which began in the seventeenth century with the advent of alum extraction could not have continued without the improvements to the port itself with the 1702 Act, which enabled larger ships to be built, repaired and moored.

A further case helps to throw light on the question of collier ownership at the port and the role of the alum trade in the origins of this activity. The career of Thomas Turnbull of Whitehall, whose family became the most important shipbuilders, and shipowners of considerable standing, in Whitby at the end of the period in question, furnishes such an example. Before he entered shipowning and long before he embarked on his shipbuilding ventures, Thomas Turnbull met William Hunton, an alum manufacturer of Lofthouse.<sup>17</sup> Hunton was responsible for the arranging of shipments of coal and potash to the alum works in addition to the export of the finished product, which was usually shipped to London. In 1817, Thomas Turnbull, who was a clockmaker by trade, with his brother John, a mast and block maker, joined William Hunton in purchasing the sloop Yarm of 78 tons, built at Stockton in 1802. Between July and December of 1817 this vessel carried 145 tons of alum from the beach at Lofthouse and carried seven cargoes of small coals from Hartlepool, Stockton and Sunderland, totalling 169 Winchester chaldrons. The owners received a freight from Lord Dundas, the alum works owner, of 14s per chaldron, or £118 6s 0d.

The Turnbulls and Hunton next purchased, in 1824, the brig Rambler of 239 tons, built at Newcastle in 1789, a typical collier brig which operated between Newcastle and London in the coal trade. 1840 saw the launch of the first vessel built by the Turnbulls in their Larpool yard, the Alpha, also destined for the coal trade. The first steamship launched

by the Turnbulls was a steam collier, the Whitehall in 1871, which made her maiden voyage from Newcastle with coal.<sup>18</sup> The early influence of the alum trade on the future coal trade business of a shipowning and shipbuilding enterprise is thus apparent. The alum trade was in decline by the early nineteenth century but was used as a useful trade for partners to enter shipowning. The alum trade afforded an introduction into the shipowning business but was abandoned when the profits derived from it enabled the partners to exploit the enlarged scope and long term prospects of the London coal trade.

The imports of coal into Whitby itself became insignificant after the decline of the alum workings. Approximately 10,000 tons of coal were imported into Whitby in 1827, compared with nearly two million tons entering the port of London that year.<sup>19</sup> With the disappearance of the alum industry at Whitby there was very little industrial demand for coal at the port, and the domestic market matched the limited local population. Its hinterland was confined to barren moorland: the nearest large settlements of Middlesbrough and Scarborough were ports in their own right.

The development of Whitby and its shipping in relation to the coal trade may be compared with the experience of other ports. Liverpool, for example, in direct contrast with Whitby, had an important internal demand for coal supplies. The development of the salt trade would not have been possible but for continued imports of coal, which was also required for the iron foundries and glass-making industry.<sup>20</sup> Like the alum trade in Whitby, the salt trade in Liverpool first encouraged the ownership of coal carrying vessels at the port. With the opening of the Leeds-Liverpool canal, the port could import enough coal to leave an exportable surplus. Coal became a traditional export of Liverpool, as the canal improved the accessibility

of the products of local collieries. Exports of coal were principally destined for Ireland and the American colonies.<sup>21</sup> The coal trade at Liverpool thus was associated with the industries of the port itself, not as in the case of Whitby where colliers came and went from the port principally in ballast, with Whitby then acting as a source of supply of ships and men for the coal trade.

Hull was another coal trade port in contrast with Whitby. Hull imported only 2000 chaldrons in 1706, in vessels from the north east ports, but became a coal exporting port by the mid eighteenth century when Hull required coal for its own ironmongery industries.<sup>22</sup> Blyth is an example of a port with surrounding collieries and where extensive docks were built in the 1860's expressly to provide facilities for a collier fleet.<sup>23</sup> Records of colliers using Blyth with their cargoes survive for the years 1755 to 1767 and 1795-9 showing its traditions of involvement in the coal trade aided by nearby resources.<sup>24</sup>

Newcastle, one of the primary ports in the coal trade, owed its prominence without doubt to the many coal seams at the mouth of the Tyne, which were shallow, easily exploited and conveniently near the river for shipment. By the 1860's over four million tons of coal were exported from the Tyne and its registered tonnage was second only to London.<sup>25</sup> Even in the seventeenth century, up to 16,000 Newcastle chaldrons were shipped overseas annually from the port alone.<sup>26</sup> Newcastle also exported locomotive and marine engines, iron in various forms of manufacture, chemicals and lead, and thus had a considerable internal demand for coal supplies.<sup>27</sup> Aggregate shipments of coal from Newcastle from 1801 to 1850 show it to be by far the most important port in this trade, exporting over 32 million tons in the decade 1841 to 1850 inclusive.<sup>28</sup>

North and South Shields also enjoyed an internal demand for coal with their gas works and became distinct ports, separate from Newcastle, in 1848.<sup>29</sup>



Their proximity to collieries, with coal staithes and drops, with nearby Jarrow docks, ensured the continued importance of these ports in the coal trade.<sup>30</sup> North Shields exported over a million tons in the decade 1841 to 1850.<sup>31</sup> The port of Seaton Sluice, in further comparison with Whitby, was a completely artificial harbour, built solely for the coal trade out of solid rock, designed for the shipment of coal from Hartley, Seaton Delaval and the adjoining collieries.<sup>32</sup>

Sunderland as a port competed with Newcastle in coal shipments, affording some protection to London consumers in terms of prices.<sup>33</sup> It became a particularly important shipbuilding port and its glass-making industry was also supported by the local abundance of coal. A nineteenth century observer gives an illuminating description:

On approaching the bridge [the Wear Iron Bridge] beneath which the moderate-sized collier sails without lowering her topmast. . . it was decisive enough that we were now in the region of coal. Houses, windows, walls, pillars, posts, and posterns, were all more or less veiled in what may be delicately designated as black crape. Even the human countenance seemed to partake of it; you shall see a score of carbonated physiognomies. . .<sup>34</sup>

By 1850 Sunderland was exporting more than two million tons of coal per year coastwise.<sup>35</sup> As early as 1678 more than 54,000 Newcastle chaldrons were shipped in the coasting trade from this port.<sup>36</sup>

Seaham harbour, like Seaton Sluice, was an artificial inlet formed specifically for the shipment of coal, by the Marquis of Londonderry in 1831, for the use of the adjacent collieries. East and West Hartlepool docks were owned by rival companies for the shipment of local coal for most of the nineteenth century. Stockton was the scene of many blast furnaces by the mid nineteenth century, aided by its interest in the coal trade, and Middlesbrough was established specifically by the railway interest with a staith 450 yards long, and with a floating dock where vessels could be loaded at all states of the tide.<sup>37</sup>

In considering other ports in the coal trade it is clear that many of them derived their importance in this activity from nearby collieries and coal seams, like Blyth, Newcastle, North and South Shields and other ports of the north east coast surrounding the Great Northern Coalfield, intersected by the rivers Tyne, Wear and Tees. Other ports became engaged in the coal trade due to an internal demand for coal for their own industries and for the industries of their hinterlands, like Liverpool, Hull and Stockton. In many cases these two factors in the growth of a port in the coal trade occurred together. Whitby however, enjoyed none of these advantages. Whitby's interests in the coal trade, with the initial impetus from the alum industry, developed through the skills of its shipbuilders and the enterprise of its shipowners in supplying ships for the great Tyne-Thames coal trade. At the beginning of the eighteenth century ships dominating the coal trade tended to hail from ports outside the main coalfield area, like Whitby, and Scarborough, Yarmouth and London.<sup>38</sup> The chief centres for east coast colliers in 1702 were, in order of importance, Yarmouth, London, Whitby, Ipswich, Newcastle, King's Lynn, Scarborough, Ramsgate and Sunderland.<sup>39</sup> A possible explanation could be that in the ports near the coalfields much investment went towards the development of new pits and collieries but investors at ports such as Whitby, lacking these opportunities, concentrated on their shipping industries. By the nineteenth century many of these ports had declined when coal trade ports developed their own collier fleets, with the exception of Whitby, where the coal carrying trade thrived, sustained by its role as an object for local investment and by the quality and popularity of locally-built colliers. A contemporary local historian, writing in 1779, shows the importance of this activity to Whitby by this period: 'We have 251 ships belonging to the port of Whitby, the greatest part of which are always employed in the coal trade'.<sup>40</sup>

A measure of the success of Whitby ships in the coal trade is made possible through a detailed study of accounts of individual vessels. The earliest and most complete series of voyage accounts of a Whitby-owned collier deserve particular attention. From a volume described as 'the account book of the firm of Chapman and Co. from 1677 for circa 100 years' the basic details of the Hannah, her building costs, and the disbursements and income of 33 voyages between 1715 and 1718 are systematically set out.<sup>41</sup> The account book clearly shows the list of payments of dividends to shareholders which provides the name of the master, Peter Barker. After the 1718 account it is declared: 'we who naines are here underwritten being part-owners of the ship Hannah where as of Peter Barker is now master. . .'. Four of the 1718 voyages list the wages paid to each member of crew: there were thirteen in each case. Her tonnage is not given, but it can be worked out by calculation from her cargo capacity. Of thirty-two voyages in the coal trade, the average shipment was 230 chaldrons and three vats. Thus 230.75 chaldrons (four vats making up a chaldron) divided by eight (the number of Newcastle chaldrons in a keel)<sup>42</sup> makes nearly twenty-nine keels. This figure must be modified by the consideration that the Hannah's coal accounts were in London chaldrons, so that each lading (Newcastle measure) would be double the number in London chaldrons.<sup>43</sup> Thus the Hannah's capacity would be assessed as fifteen keels. In papers left by John Brockbank of Lancaster, he refers to '100 tons register was equal to 6 keels of coals at Newcastle, to 7½ keels at Whitby, and to 8 keels at Stockton'.<sup>44</sup> This suggests that the tonnage of the vessel in question was about 200 tons.<sup>45</sup>

Graph 1 shows the profits and losses of the Hannah for each voyage, and in the years 1715 and 1716, the earnings appear only trifling. The vessel had cost £1,678 9s 3d, and in the fifth voyage of 1715, she earned only 4s 1d. In the second and seventh voyage of 1716, losses of

£7 16s 8d and £4 15s 6d respectively were incurred. In 1717 and 1718, however, earnings rose considerably, to make an overall profit for the four years of £750 10s 3d. The famine of fuel in 1709 with the freezing of the Thames and the Tyne,<sup>46</sup> was followed by increased duties on water-borne coal in 1711;<sup>47</sup> 1711 also saw a decline of the woollen trade as a consequence of financial crisis, which may have influenced the profits which could be earned in the coal trade. 1715 saw the peace of Utrecht; the war of the Spanish Succession had exercised a depressing influence on trade, and a long stagnation of the import trade and deficit finance continued after the war was over.<sup>48</sup>

This was obviously a period of unfavourable economic circumstances but that in itself does not adequately explain how the profits made by the Hannah varied so much. What specific components of the income and expenditure of the vessel had most influence on whether the voyage was a success or a failure? The first item of expenditure was the purchase of coal at one of the north-east coal ports - Newcastle, Sunderland or Shields in this case. The difference between pit-head prices and those at the dockside is not known for this period but it is clear that the price was relatively inelastic: in these accounts it varied only between 12s and 16s per chaldron. The price of coal at the north-east ports was low in comparison with its value at the Thames. Taking the price of coal at loading as a percentage of its price in London, there is only a range of between 24.9% and 34.7% with an average of 28.9%, as seen in Table 1.

The wages of the seamen tended to be an effect of fluctuations in profitability rather than a cause of them. Seamen's wages were often reduced in hard times as a convenient economy measure. Table 2a shows that the wages paid out to the crew of the Hannah reached an all-time low in 1716 with the losses and only small profits achieved. The highest wages paid were in early 1718, a wartime year which generated

exceptional profits. The master received, at this time, £8, the mate and carpenter shared £7 15s, five men were paid £13 10s and four boys received £5 15s between them per voyage, summarised in Table 2o.

The cost of provisions can be seen to vary in the same way, and this was also influenced by the length of the voyage. Speed of passage was very much in the interests of men paid by the voyage. The items of food were probably bought in bulk and in advance - this is in fact shown by the account book. These expenses were small compared with the total charges, mainly because the crew lived on peas, bread and beer and they salted their own beef. Only the master partook of such delicacies as butter. The price of wheat per bushel fell between 1715 and 1718 from 6s 3d per bushel to 4s 6d, but this had insufficient influence on the victualling bill to affect profitability.<sup>49</sup>

The account book also refers to expenditure on ballasting summarised in Table 4: 'for heaving ballist' and such items as '2 keel dues for ballist'. These charges showed considerable variation - between 15s and nearly £5. But the trend of ballasting charges runs against the pattern of profitability as seen in the first graph: ballasting was cheaper in 1715-6 than 1717-8. Obviously most of this expense was the cost of labour rather than the material itself. The system of dock labour on the Thames and on the Tyne precluded the crew from carrying out this task, or the trimming of coals, because these were always listed as separate items of expenditure in the accounts. Ballasting was a significant cost, because the Hannah probably sailed from Whitby to the coal ports at the beginning of the season in ballast, then sailed with her cargo to London and returned to the North in ballast. Only once was a small quantity of lead carried too, and there is no evidence of carriage of a return cargo back to the North. The master may have brought back some items on his own account which he would probably not declare. There is nothing to suggest that the

vessel often returned to Whitby, except for repairs and laying up over the winter.

Another consideration in the running expenses of the Hannah was the levy of port charges in the North East, which varied considerably. The Custom House charges at Shields, for example, were often over £13 per voyage whilst those at Sunderland were always less than £3.<sup>50</sup> There is no obvious pattern in the port of shipment chosen, but this decision may have been affected by legislation and combinations in the coal trade. The reasons why the cargo of the Hannah was loaded at Sunderland rather than the Tyne or elsewhere are by no means clear. But it seems likely that relative prices of coal at the loading ports, charges and delays would have been potent factors. The bill of the crimp or undertaker, the middleman who supplied the coal-heavers to discharge the cargo, was always high and the main item amongst the 'Charges in London'. However, these varied very little: between £113 10s 0d and £127 13s 6d as seen in Table 6. This was based on the number of chaldrons to be discharged which also varied comparatively little.

Finally, in considering variables affecting profitability in the coal trade, it is important to consider the seasonal nature of the demand and supply of this commodity summarised in Table 7. Ice could seal up the Thames - in the early months of 1739 coal could be bought in London for 25s. a chaldron, but in the following January the price was seventy shillings. Bad weather holding up vessels would restrict supply and raise the price. On 5th May 1782 Horace Walpole wrote of 'an east wind that has half-starved London; as a fleet of colliers cannot get in. Coals were sold yesterday at seven guineas a chaldron'.<sup>51</sup> Seasonality obviously did affect the Hannah because she only traded between March and October. It was the custom, especially on the treacherous north-east coast, to 'lie-up'

during the winter months. At a later date Mr. George Milburn, the Lloyd's agent at Whitby, was to assert that the insurance clubs would not take a risk between 20 December and 1 March without a considerably enhanced premium.<sup>52</sup> There is no evidence to suggest whether or not the Hannah was insured, but the owners obviously realised the increased risk of voyaging in winter. There were so many vessels laid up in Whitby in the winter that 'you could have walked across them from one side of the harbour to the other'.<sup>53</sup> However, for the purposes of this analysis seasonality as such does not seem to have been a major influence upon profit. There is a tendency for the highest profits of the year to be made towards October, as in 1715-6, but in 1717 the largest profits were made in June and July and in 1718 in March.

This analysis of factors affecting profitability points to the most important variable and the one which demonstrates the relationships governing the financial outcome of trading. This is seen in the second graph which shows the price at which coal was sold in the London market. In the voyages where profits were low or losses incurred, then the selling price of coal was also low. Prices of coal were much higher in 1717-8, and thus profits too were high. The price of coal in London was vital to whether or not the voyage was a success because this was the only income the vessel received. It has been seen that rarely was any other cargo carried and the frequent mention of ballasting charges in the accounts suggest that no return cargo was shipped northwards. A short run of accounts such as this is insufficient to tell us whether the Hannah was, throughout her life, a profitable vessel but it is possible to compare her experience with other colliers.

A.F. Humble's paper also shows that the success of a voyage in the coal trade was dependent on a good price for coal in London.<sup>54</sup> He writes of particularly poor voyages when no purchaser could be found and the coal

had to be mortgaged, and when the price obtained was only 20s 6d per chaldron. However, the profits of this vessel were more influenced by costs of provisions and wages than those of the Hannah which rose steeply when the Seven Years' War broke out. In a period of relative peace the running costs of vessels were less elastic, so that the price of coal in London exercised a powerful influence on the profits made from a voyage. Humble considers that his vessel was not very profitable. After sixteen voyages the dividend on a one sixty-fourth share was £1 1s 4d.<sup>55</sup> After the first two years of trading of the Hannah, or eighteen voyages, the dividend was £2 10s. Ralph Davis has considered detailed accounts of four vessels,<sup>56</sup> including the collier Diligence, which was found to be generally unprofitable. She operated in the Whitehaven to Dublin coal trade, entirely different from the trade between the north-east ports and London, because there was only a small margin between the price of coal at either end of the trade. Again it can be seen that a good selling price for the cargo, especially for coal, carried homogeneously, was vital for paying the expenses of the voyage, if not to make a profit. Willan's study of the coal trade deals with great emphasis with the price of coal in the Metropolis.<sup>57</sup> It has thus been argued that on the whole the Hannah was relatively profitable, being fortunate in obtaining good coal prices in a comparatively peaceful period. Her shareholders made a reasonable profit: a one sixty-fourth share bought in 1715 for £36 4s 6d would have earned its owner £9 by 1718. The shareholder could expect, if profits were maintained, to receive in dividends the value of his original investment by 1730. In that situation, the vessel would take 7.63 years to pay for herself. With a 25% return on investment over four years the shareholder was thus receiving 6.25% per annum. In 1711, the first successful English state lottery was launched, with tickets of £100 each. The effect of this was to raise interest rates to give a minimum



yield of 6 $\frac{1}{2}$ %.<sup>58</sup> This was obviously regarded as a reasonable return, so that, considering the opportunities for investment available to people in the early eighteenth century, the Hannah was a vessel in which it was well worth investing.

A further series of accounts exist for the period 1726-8, of a Whitby-built collier called the Morton House, John Coultas, Master.<sup>59</sup> There is no evidence to suggest that this vessel was owned at Whitby, but an analysis of her accounts are included here to show that by the second quarter of the eighteenth century the price of coal at the London market had fallen whilst the purchasing price in the North East had risen, which resulted in a reduction in profitability. These accounts cast doubt upon the premise upheld by Ralph Davis that 'in the days of sail, the cost of sea transport was principally the cost of feeding and paying the crew'. The accounts of the Matthew and Thomas for 1781 and 1782 are shown in Table 9, another Whitby collier which in this instance enjoyed higher profits, possibly as a result of the outbreak of hostilities with America.<sup>60</sup> Shipowners with vessels in the coal trade were outspoken in defending their interests and preventing 'unfair competition' and the unbridled power of the fitters at Newcastle, voicing complaints at the frequent meetings of the 'Committee of Whitby Shipowners for the better Regulation of the Coal Trade'. In 1787, the amount of money collected at Whitby towards defraying the expenses of an intended act of parliament for improvements in the regulation of the coal trade, levied at a rate of 1s 6d per keel on 101 vessels owned by 72 shipowners, raised £151 4s 6d. Despite their complaints, a high level of profitability is shown, by the raising of such a sum. In the same period, 1787 to 1800, over £68 was subscribed 'for preserving a correct and impartial register book of shipping', nearly £70 for the relief of poor sailors, a further £121 5s 6d for the

coal trade act, £120 15s for the relief of families of seamen detained in Russia, and in 1798, towards the Government's war effort, £470 was collected from Whitby collier owners.<sup>61</sup>

In considering the early nineteenth century, examples of Whitby ships in the coal trade in this period include the Benjamin and Mary of 328 tons, built in Newcastle in 1782 and the Esk of 297 tons, built at Whitby in 1790, both commanded by John Coats of Whitby in the period 1807 to 1820, who recorded detailed accounts.<sup>62</sup> Unfortunately the main item of expenditure, the purchase of coal, was omitted from these accounts, and the prices received at London were not recorded, so an analysis of profits per voyage is not possible. Yet it does show, for example, that wages were much higher in the coal trade in the early nineteenth century. In 1718 the mate and carpenter of the Hannah received £7 15s per voyage between them, but in 1811 the mate and the carpenter of the Esk were paid £10 15s each per voyage. Victualling was also more expensive during the wartime period. Costs for food were only £3 in the Hannah's first voyage in 1715, whilst the Esk on a coal voyage in 1812 incurred £20 3s 1d for liquor, beef, potatoes and greens, soft bread and the butcher's and grocer's bill. This outlay partly covered the next voyage, when victualling costs were reduced to £4 5s, but these are sums far in excess of peacetime costs. Despite increased expenses, which included the purchase of protections and enhanced insurance premiums, recent research suggests that wartime colliers could make large profits, of an annual return on capital of as much as 91.5%.<sup>63</sup> In this instance the rapid resale of vessels in times of high prices per ton added significantly to profits, together with the inflated price of coal at London when many colliers abandoned the coal trade for the regular and high profits of the transport service.

Detailed accounts of individual voyages in the coal trade in the mid nineteenth century have not survived in the case of vessels owned at Whitby, but it is possible to gain an impression of the profitability of

colliers in this period from the spate of parliamentary publications recording the results of enquiries and select committees which appeared. Concern was expressed that coals were loaded by weight and delivered by measure, resulting in variations in the delivery of coal from different ports, especially with varying specific gravities and degrees of wetness and dryness.<sup>64</sup> The incentive to break up coal to produce a greater measure for the same weight was therefore strong. The supply of coals to London were subjected to continued attempts at unification, including the practice known as the Limitation of the Vend. 1835, the first year of 'the Rotation System' - 'by which a regular supply of coals comes to market and the great fluctuations in prices are avoided', saw variations broadly between £1 4s 3d and 19s 3d whilst the Hannah accounts include prices at London of between £1 1s 6d and £1 8s 9d, almost twice the range of fluctuations.<sup>65</sup> Complaints were made that 'if it were not for the Regulation of the Vend, the quantities produced in many collieries might be greatly increased, and the cost of production considerably decreased. . .<sup>f</sup>

However, the middle decades of the nineteenth century saw the peak in the ownership of sailing tonnage at Whitby and,<sup>67</sup> if it may be suggested that many of these vessels were engaged in the coastwise coal trade, this activity must have continued to hold out prospects of profit.

According to quantities carried, the advent of the steamship at Whitby resulted in the peak of the port's involvement in the coal trade. Chapter Four has indicated the advantages enjoyed by the steamer in this trade and the example of the steamships owned by Turnbull Brothers of Cardiff reveals the importance of coal as an outward cargo. This is further shown in the voyages of steamships owned by the International Line of Whitby.<sup>68</sup> Of 15 ships, completing a total of 78 voyages, the tons of coal carried as cargo and bunkers have been recorded revealing a consumption of this fuel, by the place of export and by the vessels themselves, out of all proportion with previous quantities carried. The coal trade then became

fully international, rather than primarily coastwise, an aspect of this trade which was facing increased competition from the railways. The fifteen ships listed in Table 10 carried, in the seven years of 1895-8 and 1912-4, 266,425 tons of coal as cargo, and 53,701 tons as bunkers. These vessels traded from the British ports of Middlesbrough, Cardiff, Barry and Penarth, carrying coal to Bombay, Port Said, Batoum, Calcutta, Pensacola, Galveston, Pernambuco, Montevideo and Malta, making between three and five complete voyages in a year. The increased operating costs incurred by steamers in comparison with sailing vessels meant that a return cargo was essential, and wheat, maize, cotton and general cargoes were brought back to the U.K. and Continent.

The advantages over sailing colliers were considerable, as argued by Edward Ellis Allen as early as 1855, when the first experiments were being made in the employment of steam colliers for distant coaling stations.<sup>69</sup> By establishing bunkering points overseas, steamers could refuel on voyage, without purchasing foreign coal, which was often more expensive and of inferior quality. The export of coal to the Mediterranean, Near and Far East and the United States became the staple trade of the steam tramp of the late nineteenth and early twentieth centuries. In the period 1852-4, over three million tons of coal was brought to London by sea, but over four million was brought by rail and canal to the Metropolis.<sup>70</sup> Thus the coal trade by sea, forced out of its traditional coastwise activity, found higher profits and opportunities for expansion overseas. Assured of a bulk outward cargo from the Tyne ports and South Wales, Whitby shipowners invested in steam colliers as they had in sailing colliers.

This chapter has concentrated primarily on the origins of the shipment of coal by Whitby-owned ships, and the voyages of eighteenth century colliers, because of the attention given to steamships in the coal trade in Chapter Four: coal was the staple commodity carried by the steam tonnage owned at Whitby. Yet it must be emphasised that the shipment

of coal was never the sole occupation of a vessel, throughout the period of this study: the Hannah also traded to Norway, and the Benjamin and Mary sailed to Plymouth, Memel, St. Petersburg, Elsinore, Prince Edward Island and Quebec, together with a period as a transport, in addition to her coal trade voyages. Whitby steamships carried coal outwards but brought grain, cotton and general cargoes home. It is thus important to consider the coal trade in the context of other modes of employment of merchant shipping, especially as it may be suggested that overall, profits were minimal and vessels remained in the trade by virtue of their relatively low running costs. The advent of the coal-carrying tramp steamer enabled far larger cargoes to be transported but the coal trade could not be relied upon for steady profits.

Of the contribution of Whitby colliers in the coal trade generally, in comparison with other ports, it is clear from the table quoted by Brand of vessels in the coal trade in the early eighteenth century that Whitby vessels played a major role in the shipment of coal nationally. Sailing tonnage registered at Whitby was at its height in the mid-nineteenth century, but by this period many other ports supplied shipping for the coal trade. By the late nineteenth and early twentieth centuries, the amounts of coal carried by Whitby owned tonnage exceeded previous periods but in relation to the large quantities carried coastwise and foreign from the U.K. before the First World War, Whitby's contribution was slight. However, this appears none the less remarkable in the context of the port of Whitby itself, where local consumption, as seen in Table 11, remained insignificant.

## REFERENCES: CHAPTER FIVE, SECTION TWO

1. Horace Walpole, quoted in R. Finch, Coals from Newcastle, (Lavenham, 1973), p.67
2. T.S. Ashton and J. Sykes, The Coal Industry, (Manchester, 1929), Appendix E, pp.249-251. Eight Newcastle chaldrons equalled one keel, as did fifteen London chaldrons, or twenty-one tons
3. Report of the Commission relating to Coal in the United Kingdom, P.P., 1871, XVIII, (c. 435.), Appendix 28
4. J. Brand, The History and Antiquities of the Town and County of the Town of Newcastle on Tyne, (London, 1789), p.677. London contributed 168 vessels of 11230 chaldrons and Great Yarmouth 211 ships of 13272 chaldrons. That shipbuilding in Ipswich, Great Yarmouth, Newcastle, Bristol, London and Whitby was stimulated by an increase in the coal trade, is referred to by J.U. Nef, The Rise of the British Coal Industry, (London, 1932), II, p.174
5. Rev. George Young, A History of Whitby, etc..., (Whitby, 1817) and Lionel Charlton, The History of Whitby, etc..., (York, 1779)
6. Charlton, Whitby, pp.307-8. Coal seams near to Whitby were found at Danby, Blakey and Rudland, but these were thin and inferior compared with those near the Tyne. Danby pits employed up to fifty workers only, producing a maximum of 300 bushels a day, for sale at the pit head only for 4d. per bushel. Coals were dug out of the cliffs at Hawsker Bottoms but these seams were hardly worth working. Young, Whitby, p.818. In the early seventeenth century, more than £150 had been spent in one year (1613-4) in a futile search for coal near the Yorkshire alum deposits, Nef, British Coal Industry, p.227
7. Young, p.545
8. Young, p.561
9. P.R.O. E 190 / 209/9 to 290/3, 1701-1790
10. Charlton, p.360
11. Young, p.561. 500 Newcastle chaldrons were imported for 'Mr. Conyers alum works' at Whitby in 1677-8. Nef, p.210 n.
12. Finch, Coals from Newcastle, p.76
13. Charlton, p.342
14. Young, p.548
15. Charlton, p.326
16. P.R.O. ADM 68 / 197, Seamen's Sixpence Returns
17. Anne and Russell Long, A Shipping Venture: Turnbull Scott and Company, 1872-1972, (London, 1974), pp.9-10
18. Long, A Shipping Venture, pp.13, 15-16, 26-27
19. C. on Coal in the U.K., P.P., 1871, XVIII, (c.435), Appendix 56
20. F.E. Hyde, Liverpool and the Mersey: an economic history of a port, 1700-1970, (Newton Abbot, 1971), p.28
21. Hyde, Liverpool, p.30
22. Gordon Jackson, The Trade and Shipping of Eighteenth Century Hull, (Hull, 1975), p.34

23. W. Fordyce, A History of Coal, Coke and Coal Fields, etc..., (London, 1860), p.61
24. W.R. Sullivan, Blyth in the Eighteenth Century, (Newcastle, 1971), p.6
25. Fordyce, History of Coal, p.59
26. Nef, Appendix D, Table III, p.389, 1680. Imports of coal into Whitby totalled only 14,427 Newcastle chaldrons for the whole period 1597 to 1679, Nef, p.383
27. Fordyce, p.59
28. C. on Coal in the U.K., P.P., 1871, XVIII, (c.435), Appendix 32
29. Fordyce, p.61
30. Fordyce, p.61
31. C. on Coal in the U.K., P.P., 1871, XVIII, (c.435), Appendix 32
32. Fordyce, p.61
33. Finch, p.78
34. Fordyce, p.61
35. C. on Coal in the U.K., P.P., 1871, XVIII, (c.435), Appendix 29
36. Nef, Appendix D, Table II, p.389
37. Fordyce, p.62
38. Brand, Newcastle, p.677
39. Nef, p.27 n.5
40. Charlton, p.359
41. Wh. Lit. & Phil. Mention of these accounts appears only in Robert Tate Gaskin, The Old Seaport of Whitby, (Whitby, 1909), pp.244-7
42. Fordyce, p.60, and see The Shipowner's Manual, and Seafaring Man's Assistant: or an epitome of the laws and regulations relative to the shipowner and merchant, etc..., (Newcastle, 1804), p.93
43. Edward Hughes, North Country Life in the Eighteenth Century: the North East, 1700-1750, (London, 1952), p.205 n.
44. W. Salisbury, 'Early Tonnage Measurement in England. Part V: Colliers, Deadweight and Displacement Tonnage', Mariner's Mirror, 54 (1968), p.73
45. Seven other voyages of the Hannah between 1728 and 1731 have been traced in the Seamen's Sixpence Accounts, P.R.O. ADM 68 / 195. Details of the vessel are the same, except the crew is referred to as ten rather than thirteen men; probably the master under-declared the number of crew to reduce the Seamen's Sixpence payments. Apprentices under eighteen were exempted. See Ralph Davis, 'Seamen's Sixpences: an index of commercial activity', Economica, XXIII new series (1956)
46. T.S. Ashton, Economic Fluctuations in England, 1700-1800, (Oxford, 1959), p.35
47. Ashton, Economic Fluctuations, p.28
48. Ashton, Economic Fluctuations, pp.57-8, 67
49. See Table 3
50. See Table 5

51. Ashton, Economic Fluctuations, p.5
52. Richard Weatherill, The Ancient Port of Whitby and its Shipping, (Whitby, 1908), p.21
53. Weatherill, Whitby, p.23
54. A.F. Humble, 'An Old Whitby Collier', Mariner's Mirror, 61 (1975), pp.51-60
55. Humble, 'Whitby Collier', pp.52, 58-9
56. Ralph Davis, The Rise of the English Shipping Industry in the Seventeenth Century, (London, 1962), pp.338-362
57. T.S. Willan, The English Coasting Trade, 1600-1750, (Manchester, 1938), pp.55-68
58. John Carswell, The South Sea Bubble, (London, 1960), pp.51-2
59. P.R.O. HCA 13-88, 15-52. See Table 8
60. B.L., Coal Trade Tracts, (1787), 8244, Appendix I
61. P.R.O. CUST 90 / 74. No further evidence of the outcome of this attempt to establish an alternative register has been discovered.
62. N.M.M. MS 39 / 81, and Underwriters' 'Green Book' of 1807-18
63. Simon Ville, 'Wages, Prices and Profitability in the Shipping Industry during the Napoleonic Wars', Journal of Transport History, I (1981), pp.39-52
64. Report of the Select Committee on the State of the Coal Trade, P.P., 1830, VIII, (663.), evidence of Sir Cuthbert Sharp, p.23, and J. Buddle, p.28
65. Report of the Select Committee on the State of the Coal Trade, P.P., 1836, XI, (522.), Appendix 51
66. S.C. on the State of the Coal Trade, P.P., 1836, XI, (522.), q. 166, evidence of Mr. Brandling
67. See Chapter Three
68. Wh. Lit. & Phil. See Table 10
69. Edward Ellis Allen, 'On the Comparative Cost of Transit by Steam and Sailing Colliers, and on the different modes of ballasting', Transactions of the Institution of Civil Engineers, (1855), p.337
70. Allen, 'Steam and Sailing Colliers', p.345, and Report of the Select Committee on Coal, P.P., 1873, X, (313.), Appendix I. Coal brought to London by railway and canal in 1873 was 5,007,504 tons whilst only 2,548,918 tons were carried by sea.



TABLE 1:

## ANALYSIS OF PRICE OF COAL PER VOYAGE ON THE TYNE COMPARED WITH THE PRICE AT LONDON

Year	Voyage No.	NE/London %	Price in NE			London price		
			£	s	d	£	s	d
1715	1	29.8	73	-	-	245	5	-
	2	28.1	73	-	-	259	8	-
	3	29.1	73	-	-	250	10	-
	4	29.3	75	-	-	255	11	-
	5	29.5	73	-	-	247	7	3
	6	27.7	72	16	8	262	17	-
	7	-	-	-	-	-	-	-
	8	27.7	73	-	-	263	3	1
1716	1	26.1	68	2	8	260	19	6
	2	31.1	76	-	-	244	3	-
	3	29.9	76	-	-	254	4	3
	4	29.7	76	-	-	255	12	-
	5	34.7	91	12	-	264	7	-
	6	35.2	90	18	-	258	2	-
	7	30.7	71	12	-	233	-	-
	8	32.3	82	-	-	254	-	-
	9	32.1	83	6	8	259	5	6
	10	29.2	81	16	8	280	8	-
1717	1	26.2	77	6	8	295	6	-
	2	26.6	80	12	6	303	6	6
	3	28.5	88	3	6	309	11	3
	4	28.6	91	12	-	320	16	-
	5	26.9	82	13	4	307	12	-
	6	26.7	82	-	-	307	11	8
	7	25.6	73	10	8	286	18	-
1718	1	24.9	81	16	8	328	8	6
	2	26.3	82	-	-	311	8	-
	3	25.5	70	6	-	276	-	-
	4	27.6	90	11	-	328	6	-
	5	26.4	82	-	-	310	6	-
	6	26.7	81	18	4	306	6	-
	7	27.1	82	-	-	302	11	-
	8	27.4	82	-	-	299	7	-
	Av.	28.5%						

Note: Prices of coal in the N.E. ports include keel dues, after voyage 1 1716 referred to as 'the fitters bill'.

Source: Chapman Accounts, Hannah, 1715-8, Wh. Lit. & Phil.

TABLE 2a:

WAGES IN THE COAL TRADE COMPARED WITH PROFITS. HANNAH, 1715-18

<u>Year</u>	<u>Voyage No.</u>	<u>Wage bill</u>			<u>Profits</u>		
		<u>£</u>	<u>s</u>	<u>d</u>	<u>£</u>	<u>s</u>	<u>d</u>
1715	1	24			3	10	3
	2	24			8	5	8
	3	24			1	17	2
	4	24			1	16	9
	5	24			-	4	1
	6	23			7	10	9
	7	--			-	-	-
	8	23			16	9	8
1716	1	23			4	19	6
	2	23			7	16	8*
	3	22			11	6	5
	4	22			4	5	0
	5	22			7	1	9
	6	22			13	6	9
	7	22			4	1	6*
	8	22			3	7	11
	9	21			16	13	4
	10	22			30	15	4
1717	1	30			32	11	8
	2	30			36	17	6
	3	30			46	5	9
	4	30			47	17	2
	5	31			29	15	6
	6	30			42	13	7
	7	30			42	11	9
1718	1	35			59	8	11
	2	35			29	4	5
	3	35			34	1	5
	4	34			49	17	10
	5	34			42	7	4
	6	34			25	10	8
	7	34			36	11	7
	8	33	10		44	10	0

---

Source: Hannah accounts, Wh. Lit. & Phil.

\* Losses

TABLE 2b:

ANALYSIS OF WAGES IN THE COAL TRADE: BREAKDOWN OF WAGES TO INDIVIDUALS, 1718  
HANNAH OF WHITBYFirst voyage 28.iii.1718 - 14.iv.1718

Master	£8	-	-
Mate and carpenter	7	15	-
To five men	12	10	-
To one man more	1	-	-
To four lads	5	15	-
Total	£35	-	-

Second voyage 6.v.1718 - 26.v.1718

Master	£8	-	-
Mate and carpenter	7	15	-
Five men	12	15	-
One man more	1	-	-
Four lads	5	10	-
Total	£35	-	-

Third voyage 2.vi.1718 - 18.vi.1718

Master	£8	-	-
Mate and carpenter	7	15	-
Five men	12	15	-
One man more	1	-	-
Four lads	5	10	-
Total	£35	-	-

Fourth voyage 1.vii.1718 - 10.vii.1718

Master	£8	-	-
Mate and carpenter	7	10	-
Five men	12	10	-
One man	1	-	-
Four lads	5	-	-
Total	£34	-	-

---

Source: Chapman Papers, Wh. Lit. & Phil.

.....

TABLE 3:

VICTUALLING EXPENSES IN THE COAL TRADE. HANNAH OF WHITBY 1715-18

<u>Year</u>	<u>Voyage No.</u>	<u>Expenses (N.E.)</u>	<u>London</u>
1715	1	£2 9 0	£2 11 1
	2	6 13 10	1 2 6
	3	2 17 6	15 0
	4	3 5 8	1 4 4
	5	1 9 6	2 19 6
	6	5 9 3	4 2 10
	7	10 19 6	5 15 0
	8	2 10 0	8 3 7

TABLE 3: (contd.)

Year	Voyage No.	Expenses (N.E.)			London		
		£1	16	3	£2	12	7
1716	1						
	2	5	9	4	4	4	6
	3	2	11	7	3	9	0
	4	5	2	10	1	14	0
	5	4	2	3	4	6	9
	6	1	1	9	-	-	-
	7	8	6	0		13	0
	8	1	5	0	2	4	11
	9	5	16	4	1	4	0
	10	3	17	6	4	16	4
1717	1		13	0	4	0	10
	2	7	11	8	5	9	10
	3	3	14	6	3	7	6
	4	10	5	8	2	9	0
	5	1	18	6	14	10	0
	6	1	5	6	4	1	0
	7	2	12	3	3	0	3
1718	1	2	8	4	4	11	10
	2	4	5	0	5	0	4
	3	5	13	10	1	6	6
	4	5	11	2	2	11	3
	5	3	4	9	1	10	6
	6	5	1	10	5	2	3
	7	4	12	7	3	12	2
	8	5	0	6	5	17	3

Source: Chapman Papers, Wh. Lit. & Phil.

TABLE 4: EXPENSES ON BALLASTING IN THE COAL TRADE, HANNAH OF WHITBY 1715-18

Year	Voyage No.	Charge/Expenses		
		£2	14	6
1715	1			
	2	2	9	6
	3	4	8	6
	4	1	13	6
	5	2	8	6
	6	1	9	0
	7	-	-	-
	8	2	3	6
1716	1	2	12	0
	2	1	16	6
	3	2	6	0
	4	3	3	6
	5		15	0
	6		15	0
	7	1	17	6
	8		18	6
	9	1	7	0
	10	2	4	0

TABLE 4: (contd.)

<u>Year</u>	<u>Voyage No.</u>	<u>Charge/Expenses</u>		
1717	1	16	6	
	2	£5	8	8
	3	1	12	9
	4	16	6	
	5	1	18	6
	6	3	6	6
	7	4	4	6
1718	1	2	15	0
	2	6	14	2
	3	5	15	4
	4	6	5	6
	5	4	19	0
	6	3	19	6
	7	5	1	6
	8	3	16	0

Source: Chapman Papers, Wh. Lit. & Phil.

.....

TABLE 5:

CUSTOM HOUSE CHARGES AT THE N.E. PORTS. HANNAH OF WHITBY 1715-18

<u>Year</u>	<u>Voyage No.</u>	<u>Port</u>	<u>Charge</u>			
1715	1	Newcastle	£8	17	2	
	2	Newcastle	8	8	6	
	3	Newcastle	9	13	11	
	4	Newcastle	9	4	11	
	5	Newcastle	9	15	6	
	6	Newcastle	9	9	2	
	7	--				
	8	Newcastle	9	5	0	
1716	1	Newcastle	9	5	0	
	2	Shields	13	10	0	
	3	Shields	13	0	0	
	4	Shields	9	0	0	
	5	Sunderland	2	13	0	
	6	Sunderland	2	13	6	
	7	Shields	12	10	0	
	8	Shields	13	0	0	
	9	Shields	13	0	0	
	10	Shields	13	0	0	
1717	1	Shields	9	2	3	
	2	Shields	9	10	2	
	3	Sunderland	2	15	10	
	4	Sunderland	2	17	7	
	5	Shields	9	0	7	
	6	Shields	9	16	0	
	7	Shields	9	12	9	
1718	1	Newcastle	8	15	3	
	2	Shields	9	9	5	
	3	Newcastle	9	14	8	
	4	Sunderland	2	14	7	

TABLE 5: (contd.)

<u>Year</u>	<u>Voyage No.</u>	<u>Port</u>	<u>Charge</u>		
1718	5	Newcastle	£8	12	0
	6	Newcastle	9	8	2
	7	Newcastle	9	9	0
	8	Newcastle	9	8	6

Source: Chapman Papers, Wh. Lit. & Phil.

.....

TABLE 6:

THE BILL OF THE CRIMP OR UNDERTAKER AT LONDON IN THE COAL TRADE:  
HANNAH OF WHITBY 1715-18

<u>Year</u>	<u>Voyage No.</u>	<u>Charge</u>		
1715	1	£118	1	6
	2	124	4	6
	3	121	8	4
	4	126	8	5
	5	123	4	2
	6	127	13	6
	7	--		
	8	113	12	3
1716	1	116	9	2
	2	121	18	4
	3	117	7	6
	4	124	16	8
	5	122	13	9
	6	118	17	0
	7	113	10	0
	8	122	11	8
	9	117	15	2
	10	114	3	2
1717	1	122	6	3
	2	116	15	4
	3	125	10	11
	4	124	17	1
	5	122	15	7
	6	122	13	1
	7	107	19	2
1718	1	117	1	2
	2	122	0	0
	3	103	10	1
	4	127	1	0
	5	120	18	9
	6	120	14	8
	7	117	13	11
	8	111	1	5

Source: Chapman Papers, Wh. Lit. & Phil.

TABLE 7a:

SEASONAL FLUCTUATIONS IN PROFITS IN THE LONDON COAL TRADE. HANNAH 1715-8

<u>Month</u>	<u>1715</u>			<u>1716</u>			<u>1717</u>			<u>1718</u>		
	£	s	d	£	s	d	£	s	d	£	s	d
March	3	10	3	4	19	6	32	11	8	59	8	11
April	8	5	8	7	16	8*						
May	1	17	2	11	6	5	36	17	6	29	4	5
		1	16	9	4	5	-					
June	-	4	1	7	1	9	46	5	9	34	1	5
July	7	10	9	13	6	9	47	17	2	49	17	10
				4	1	6*				42	7	4
August				3	7	11	29	15	6	25	10	8
Sept.				16	13	4	42	13	7	36	11	7
				30	15	4						
Oct.	16	9	8				42	11	9	44	10	-

\* Losses

Source: Chapman Papers, Wh. Lit. & Phil.

TABLE 7b:

SEASONAL FLUCTUATIONS IN PRICES AT THE LONDON COAL MARKET: BASED ON PRICES PER CHALDRON. HANNAH 1715-8

<u>Month</u>	<u>1715</u>			<u>1716</u>			<u>1717</u>			<u>1718</u>		
	£	s	d	£	s	d	£	s	d	£	s	d
March	1	2	6	1	3	6	1	5	6	1	8	6
April	1	2	-	1	1	6						
May	1	2	-	1	2	9	1	7	-	1	6	9
		1	1	6	1	2	2					
June	1	1	6	1	3	-	1	6	3	1	6	9
July	1	2	6	1	3	-	1	7	-	1	7	6
				1	1	6				1	7	-
August				1	2	-	1	6	6	1	6	6
Sept.				1	3	-	1	5	9	1	6	9
				1	5	6						
Oct.	1	4	3				1	6	3	1	8	9
Nov.												

Source: Chapman Papers, Wh. Lit. & Phil.

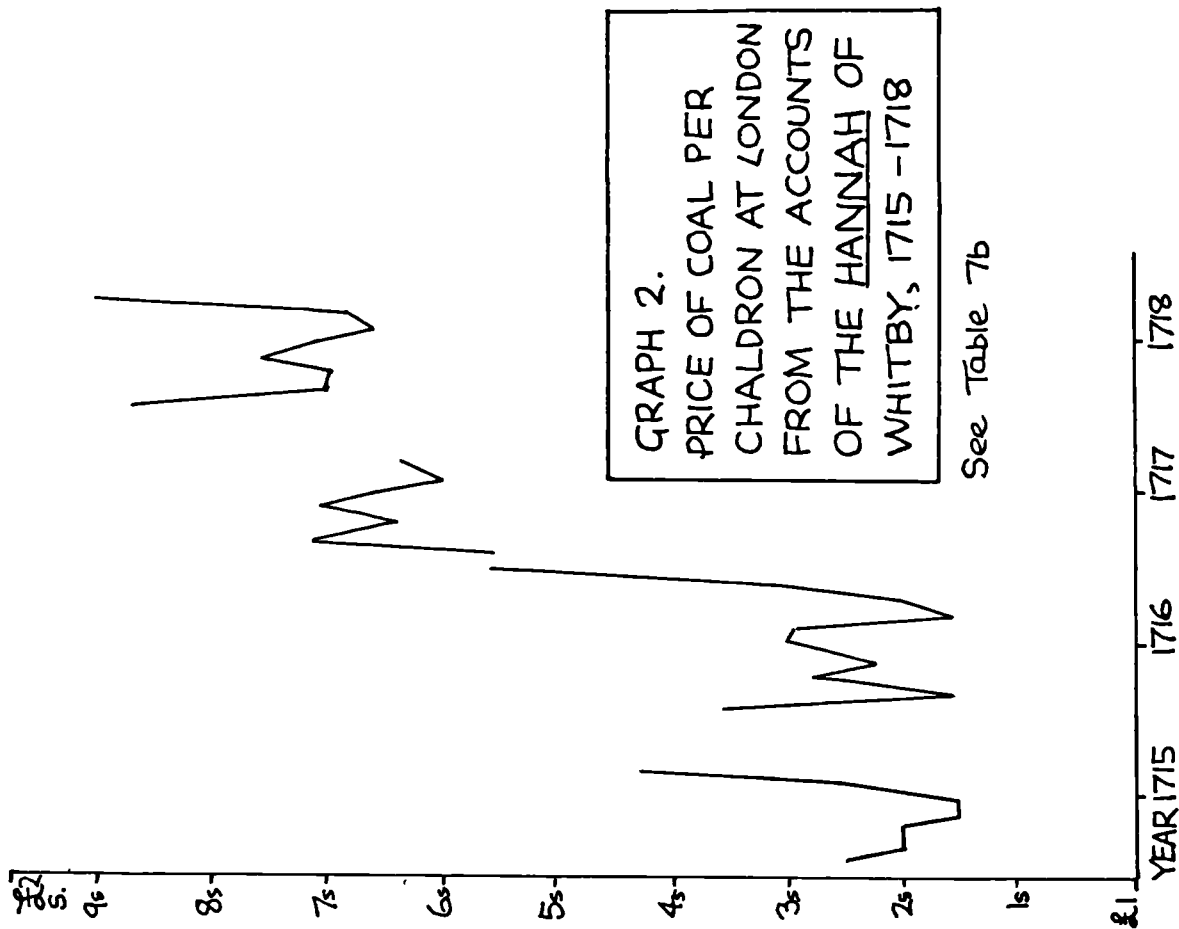
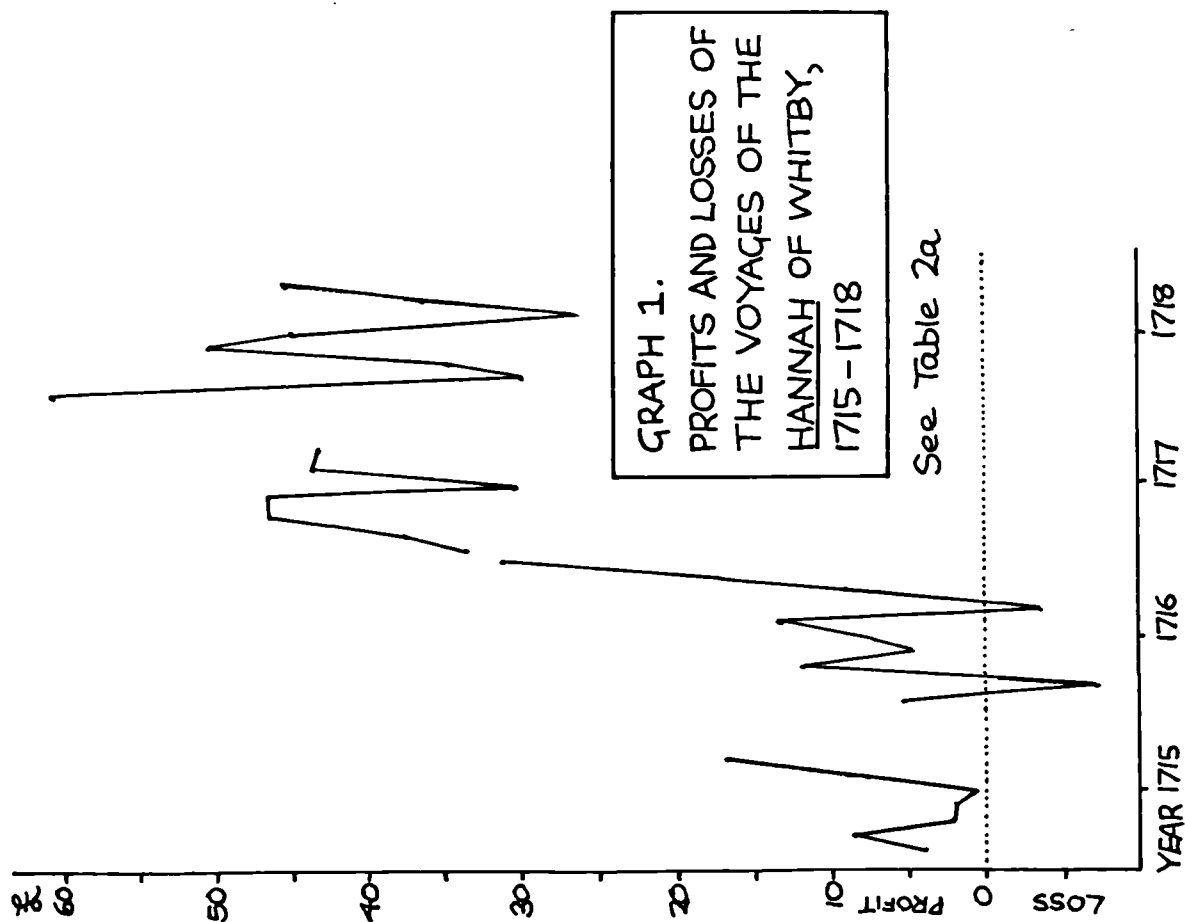




TABLE 8:

THE VOYAGES OF THE MORTON HOUSE, JOHN COULTAS, MASTER, BUILT APRIL 1726  
AT WHITBY

Voyage No. and date	Profit/Loss			Price coal	Price coal	Price NE/
				per chaldron	per chaldron	Price Lond.
				NE	London	%
1 Apr.-May 1726	£31	10	7*	14s.	24s.	58.3
2 June 1726	19	8	9	14	24	58.3
3 July 1726	14	16	11*	14	24	58.3
4 August 1726	5	5	3*	14	24	58.3
5 September 1726	8	15	0	14	24	58.3
6 September 1726	38	4	3*	14	24 9d.	56.6
7 Dec. 1726-Feb.1727	58	9	7*	14	24	58.3
8 Mar. 1727	2	18	2*	14	24	58.3
9 Apr. 1727	26	12	0*	14	23	60.9
10 May 1727	2	3	6	14	23	60.9
11 May-June 1727	4	5	11	14	23	60.9
12 June 1727	12	9	7*	14	23 6	59.6
13 July 1727	4	3	4	14	22 9	61.5
14 August 1727	1	5	4	14	22 6	62.2
15 Sept.-Oct.1727	12	11	4	14	23	60.9
16 Oct.-Nov.1727	11	11	6	12	25	48.0
17 Nov. 1727	15	3	7	12	25	48.0
18 Feb. 1728	21	3	8*	14	22	63.6

\* Loss

Source: P.R.O. HCA 13-88, 15-52

## THE VOYAGES OF THE MORTON HOUSE (contd.)

Voyage No.	Ports of call	Cost Wages			Port charges			Total costs			Wage & Vi uale Total %
		& Victuals									
		£	s	d	£	s	d	£	s	d	
1	Whitby, Shields, Sund., Lon.	83	4	4	3	5	6	358	2	7	23.2
2	Sunderland, London	42	8	0	3	5	6	321	11	5	13.2
3	Sunderland, London	51	4	0	3	5	6	345	11	11	14.6
4	Sunderland, London	50	0	6	3	5	6	333	8	3	15.0
5	Sunderland, London	46	6	0	3	5	6	315	15	11	14.7
6	Sunderland, London	45	14	0	3	5	6	352	4	6	13.0
7	Newcastle, Sund., Harwich, London	77	16	6	4	9	6	339	17	7	22.9
8	Sunderland, London	63	7	6	3	5	6	333	6	2	20.0
9	Sunderland, London	40	10	6	3	8	0	328	3	0	12.3
10	Sunderland, London	46	7	0	3	5	6	325	6	6	14.2
11	Sunderland, London	37	17	6	3	5	6	301	5	1	12.5
12	Sunderland, London	46	8	3	3	5	6	347	3	7	13.4
13	Sunderland, London	42	2	6	3	5	6	312	18	8	13.5
14	Sunderland, London	42	7	3	3	5	6	309	8	8	13.7
15	Sunderland, London	42	0	6	3	5	6	308	17	3	13.6
16	Newcastle, London	46	12	6	3	5	6	309	18	6	15.0
17	Newcastle, London	51	18	0	5	11	6	320	9	11	16.2
18	Sunderland, London	48	2	3	3	5	6	307	12	7	15.6

Note: After these voyages in the coal trade, the Morton House was employed between Rotterdam, Deal, Philadelphia and Ireland.

Source: P.R.O. HCA 13-88, 15-52

TABLE 9:

STATEMENT OF PROFIT AND LOSS OF THE SHIP MATTHEW AND THOMAS FROM FEB. 1781 TO FEB. 1783

<u>Voyage No.</u>	<u>Year</u>	<u>Profit</u> (no voyages made loss)		
1	1781	£53	10	6½
2		55	7	2½
3		36	16	6½
4		66	2	1
5		103	4	5½
6		108	9	2½
7		130	11	6
8		48	7	6½
9	1782	45	17	5
10		86	15	4
11		60	13	3
12		128	14	11
13		96	12	5½
14		84	5	8
Total		£1105	8s	1d

Source: Coal Trade Tracts, 1787, Appendix 1. See note 60  
B.L.

TABLE 10:

COAL CONSUMED AND EXPORTED BY STEAMSHIPS OWNED BY THE INTERNATIONAL LINE OF WHITBY, 1895-8 AND 1912-4

<u>Name of vessel</u> gross/net tons	<u>No.</u> voyages	<u>Dates</u>	<u>Coal cargo</u> (tons)	<u>Bunkers</u> (tons)
<u>Golden Cross</u> 3014/1944	5	1896-7	23839	7244
<u>Golden Cross</u> 3014/1944	3	1912-3	10944	3327
<u>Valentia</u> 3242/2111	3	1912-3	20670	3294
<u>Phoenicia</u> 3100/2018	1	1912	3017	1015
<u>Pretoria</u> 3700/2409	4	1912-3	21513	4795
<u>Corinthia</u> 3625/2359	5	1912-4	31723	4927
<u>Florentia</u> 3688/2338	1	1912	5101	1319
<u>Maud Hartmann</u> 1615/1007	6	1895-6	11811	2037
<u>Germania</u> 2919/1895	6	1896-8	19829	3149
<u>Northumbria</u> 2008/1243	9	1895-7	20380	4011

TABLE 10: (contd.)

<u>Name of vessel</u> gross/net tons	<u>No.</u> <u>voyages</u>	<u>Dates</u>	<u>Coal cargo</u> <u>(tons)</u>	<u>Bunkers</u> <u>(tons)</u>
<u>Cambria</u> 2035/1266	9	1895-7	21759	3958
<u>Hibernia</u> 2418/1546	6	1895-7	14086	3713
<u>Sarmatia</u> 2154/1342	7	1895-7	18108	3841
<u>Caledonia</u> 2084/1716	6	1896-8	17751	3567
<u>Cape Colonna</u> 2788/1783	6	1896-7	14164	2185
<u>Thessalia</u> 3691/2341	1	1912	11730	1319

Source: Accounts of the voyages of International Line vessels,  
Whitby Literary and Philosophical Society, Whitby Museum

.....

TABLE 11;

COAL IMPORTED INTO THE PORT OF WHITBY, 1702-3, 1709, 1790, 1827-8, 1863-4,  
1867-8

<u>Year</u>	<u>Quantity of coal</u>	
1702 <sup>1</sup>	2913 )	
1703	1105 )	Newcastle
1709	2515 )	chaldrons
1790	8693 )	
1827 <sup>2</sup>	10105 )	
1828	9472 )	Tons
1863 $\frac{1}{2}$ yr <sup>3</sup>	5587 )	
1864 $\frac{1}{2}$ yr	6276 )	Tons
1867 <sup>4</sup>	15982 )	
1868	16818 )	Tons

Source: 1. PRO E 190 Whitby Port Books  
2. P.P., 1871, XVIII, Appendix, Table No. 56 (see note 3).  
3. Whitby Gazette, 15 April 1865  
4. P.P., 1871, XVIII, Appendix, Table No. 56

CHAPTER FIVE: THE EMPLOYMENT OF WHITBY SHIPPING 1700-1914  
SECTION THREE: WHALING

It has been written of the Greenlandman that 'his ship sailed away, carrying no cargo, bound to no port; her destination a wild and desolate region of thick-ribbed ice. . .'<sup>1</sup> Despite the differences between whaling and the coastwise and foreign carrying trades, Whitby owned vessels voyaged in the Northern Whale Fisheries in considerable numbers between 1753 and 1837. The reasons why Whitby shipowners entered this new area of activity, and the varying fortunes of the trade leading to their eventual withdrawal further shows the overall flexibility of deployment of eighteenth and nineteenth century merchant shipping, as seen in the case of the port of Whitby. The degree of typicality of Whitby in the whaling trade is shown in comparison with other ports, and a consideration of whaling on a national scale reveals the contribution of the port of Whitby in this sector of British commerce. The impact of the involvement of Whitby shipping in the hunting of whales off Greenland and the Davis Straits was also not without effect on the port of Whitby itself: not only on its shipowners and shipbuilders, but on the local merchanting, trading and seafaring population.

The entry of British merchant shipping into the whaling trade was influenced by the success of the Dutch. The existence of skilled and experienced whale-fishers was essential when Whitby, and other ports, first sent ships whaling. Young, writing in 1817, described how, in the 'early stage of the Greenland trade, harpooners and other officers were procured from Holland, as our sailors were then unacquainted with whale-fishing'.<sup>2</sup> A direct incentive to the prospective whaler-owner was the 20s per ton bounty introduced in 1733, which rose to 30s per ton in 1740 and 40s per ton in 1749.<sup>3</sup> Ships sent from Hull and London were among the first to take advantage of this encouragement, and their imports of whale oil

and bone led to a reduction in the imports of these commodities from America and 'foreign parts'.<sup>4</sup> 1753 was a year of expansion in the whaling trade generally, after the announcement of the increased bounty and allowing time for the building and equipping of whalers, as an increase in vessels sailing to the whaling grounds from London and the Scottish ports was accompanied by the entry into the whaling trade by Newcastle, Liverpool and Bristol as well as Whitby.<sup>5</sup> The shipping interest of Whitby was also attracted by the success of vessels built at the port for the whaling trade of Hull and London.

The value of oil and whalebone was becoming increasingly apparent by the mid eighteenth century. Whale oil was regarded as the best lighting oil and was in considerable demand. Towns as inland as Birmingham relied upon the oil merchants of Hull for their public lighting.<sup>6</sup> As a lubricant whale oil was particularly prized. Whale oil and bone was also used as a fertilizer, in the making of nets and furniture,<sup>7</sup> and its use as gateways to fields in the locality is still evident.

The shipowners of Whitby were attracted to the whaling trade as it could be pursued in conjunction with other activities. In order to qualify for the bounty, a vessel was to sail for the whaling grounds by 10 April and stay out until the 10 August, but this allowed time for coastwise, Baltic and even transatlantic voyages.<sup>8</sup> When Whitby shipowners first sent vessels whaling, the activity was regarded as experimental, and future interest in the trade would depend on its success. Gordon Jackson has suggested that 'whale oil, like other goods, required easy access to its market, and the industry gravitated towards the major trading and shipowning ports'.<sup>9</sup> So, as a large centre for shipowning and shipbuilding in the mid nineteenth century, Whitby was following new directions in the employment of shipping commensurate with its status.

The lack of exportable bulk commodities from the environs of the port of Whitby may also have contributed to the attractions of the whale fishery for Whitby ship owners. As previously suggested, Whitby ships in the coastwise trades generally plied between other ports and returned to their home port in ballast. The whaling trade would stimulate local commerce in the need to supply provisions and equipment and would return with a commodity for export. In this respect, whaling became important to Whitby in contrast with its significance to the ports of Hull and London, for example.

Tables 1 and 2 summarise the involvement of Whitby shipping in the whaling trade and indicate the results of this enterprise. The number and tons of vessels employed in whaling from Whitby reached a peak in the years 1786 to 1789, and from the end of the Napoleonic Wars to 1825. The average tonnage of these vessels was between 250 and 400 tons, generally large coasters and colliers that were already popular among Whitby ship-owners. Voyages to Greenland exceeded those to the Davis Straits; there was a better chance of a full cargo at the latter, but the whaler was detained longer and the insurance premiums were higher.<sup>10</sup> Details of the number of whales and seals caught and the quantities of blubber, oil and bone produced are not available for the entire period of whaling from Whitby but it is clear that the two decades following the Napoleonic Wars were years of large catches.

The factors which determined the variations in the number of vessels whaling and their productivity may be seen as external forces on the whaling industry, such as the level of government subsidy, the demand for whaling products and national economic conditions, and factors within the whaling trade itself: the risks and dangers inherent in the activity, the costs it incurred and the differing methods adopted in the pursuit and catching of whales.

The influence of the whaling bounty determined the initial decision

to enter the whaling trade on the part of the majority of whaling ship-owners, especially in the case of small ports whose interest in the activity was of short duration only.<sup>11</sup> Complying with the requirements of the bounty could cause problems: especially in keeping to the dates specified. The owners of whaling ships from the port of Whitby petitioned their Lord of the Manor, Lord Mulgrave, for help in overcoming these regulations:

Experience has shewn, that this limitation may be to us, as well as to the Trade in general, at the several ports on the coast that have bar harbours, a considerable disadvantage. The time that has been found most proper for the sailing of our ships to the fisheries, and which is generally fixed upon, is, from 15 to 25 February, for Davis' Straits, and from 15 to 25 March for Greenland, but though the ships are always ready to proceed before those times, they are frequently so long detained, from the peculiarity of their situation, as to be in danger of exceeding the day limited, before they can actually put to sea. Whitby, further, having a dry harbour, the ships bound from thence to the Fisheries, are unable to get out, at any hour, but that of high water, or Spring Tides. . . and run the risk of being detailed beyond the 10 April, though they may have been completely fitted, and Laying in the harbour ready for sea three or four weeks before. . . For these reasons, we beg to solicit your Lordship's assistance in procuring. . . a clause which might be so framed, as still to entitle our ships to the Bounty, should they lie unavoidably detained beyond the day limited. . .<sup>12</sup>

The bounty requirements also laid down that a vessel may not leave the whaling grounds before 10 August unless she had already captured the equivalent of 30 tons of oil and 1½ tons of fins.<sup>13</sup> Obtaining the sufficient quantity of fins especially caused difficulties, and it was regarded as increasingly hazardous to remain in the ice beyond August. The owners also had to wait six weeks whilst the blubber was boiled to oil before the bounty was paid, despite the act directing the quantity obtained by the blubber.<sup>14</sup> The bounty Act also laid down that every whaler above 200 tons must carry four boats and 30 men.<sup>15</sup> The bounty, despite its disadvantages, undoubtedly supported the early whaling trade from Whitby and other ports, but the periods of high productivity and expansion in the trade occurred when the bounty was reduced, and finally

withdrawn in 1824. Table 3 shows that the total bounty paid out each year, when considering the British whaling trade as a whole, was comparatively limited.

The supply and demand for whaling products throughout this period may be seen in the fluctuations in the prices of whale oil and bone. Table 4 summarises these variations. The low prices of whale oil from the late 1760's to the early 1770's are explained by the large imports from America in these years, whilst in this same period fins were imported in considerable quantity from Holland.<sup>16</sup> The high price of whale oil at the end of the Napoleonic Wars probably attracted more vessels to the trade, which may have contributed to the expansion of whaling at Whitby which continued until 1825. A decline in the price of oil in the 1820's thus prevented further growth of the industry. The demand for whale bone declined by the end of the eighteenth century,<sup>17</sup> but the need for whale oil continued until replaced by more readily available oils.

One of the most important factors which influenced the fluctuations in the Whitby whaling trade as seen in Tables 1 and 2 was the incidence of war in this period and the effect of this on the deployment of merchant shipping. The abandonment of the whaling trade from Whitby entirely in the years 1763 to 1766<sup>18</sup> was the direct result of the outbreak of hostilities with France and the profits obtainable from employment in the transport service. In addition, the price of oil had also fallen in this period with the increased activities of the sperm whalers of the American colonies.<sup>19</sup> The port of Hull had also given up whaling in these years and the trade did not recover until the late 1760's.<sup>20</sup> The war with America also interrupted the progress of the whaling trade: in 1776 only 78 ships continued in this activity, but Whitby whalers exploited the lack of competition and left the trade only for three years at the end of the war, from 1781 to 1783. The period of the Napoleonic Wars saw a decrease in



the numbers of vessels whaling from Whitby and a decline in the average tonnage of whalers,<sup>21</sup> with larger vessels leaving for the promise of regular employment and high earnings in the transport service. The advent of war caused difficulties for the whaling trade as it did for all merchantmen, with raids by privateers and, despite being a protected trade, it was subject to attacks from naval vessels in attempts to press seamen. It is thus clear that the Whitby whaling trade flourished best in peacetime.

Whaling was possibly the most risky and dangerous of all the trades of merchant shipping in the eighteenth and nineteenth centuries, and the conditions that were imposed upon ships and men were endured only in the expectation of large profits. A drop in temperature of 25<sup>o</sup> in one day was not uncommon in the outward voyage to the whaling grounds, with almost intolerable discomfort to the crew, whilst the ship became enveloped in ice, her rudder having to be repeatedly freed or the vessel would be rendered immovable.<sup>22</sup> When the Resolution sent a boat out after a whale, the boat steerer was carried into the sea by the movement of the whale's tail and was rescued by his companions in a near-moribund state: 'his clothes were frozen like a casing of mail, and his hair was consolidated into a helmet of ice'.<sup>23</sup> In 1815 the James was lifted clear out of the water by the pressure of the ice,<sup>24</sup> and in 1790 the William & Ann was so damaged by the ice that she had to put back to port.<sup>25</sup> Concern for whalers stuck in the ice in 1835 was such that the Cove of Hull, built at Whitby in 1798, was sent under the command of a naval officer, Captain James Clark Ross, to the Davis Straits for their relief.<sup>26</sup> Of a total of 58 Whitby owned vessels which took part in the whaling trade between 1753 and 1837, 16 were lost in the ice, nearly 28% of the whole.<sup>27</sup>

The costs of fitting out whaling vessels each season were far in excess of expenses in other trades. The initial cost of vessels equipped

as whalers was at least £2 - £3 per ton higher than for other ships. Table 5a shows a range of prices of whaling ships of the period, and these may be compared with the estimates of merchant ship prices in the eighteenth and nineteenth centuries given in Chapters 1, 2 and 3. Wages paid to crews in the whaling trade tended also to exceed other trades, as did the scale of provisions. The wages were largely based on the success of the voyage in relation to the number of whales caught, an accurate record of which was kept and survives for the Baffin, summarised in Table 5b.

A final feature of the varying fortunes of the Whitby whaling trade was the overall rise in productivity between 1753 and 1837. In 1787, for example, 21 vessels of an aggregate tonnage of 6599 tons, with an average per ship of over 300 tons, caught only 62 whales, making 1045 tons of blubber. In 1808, however, 7 whalers of 1957 tons, a smaller average than in the late eighteenth century, caught 146 whales. In 1814, 8 Whitby whalers were successful in bringing back to port the products of 172 whales.<sup>28</sup> Charlton, writing in 1779, proudly recorded that 'Mr. Banks (one of our captains) having in ten years time brought home from thence no less than 65 fish, almost all of them sizeable'.<sup>29</sup> In 1814, however, the Resolution 291 tons, Captain Kearsley, brought home 28 whales which produced 230 tons of oil, the 'largest quantity ever imported into Whitby in any one ship, probably the greatest quantity ever brought from Greenland, by any ship of a like burthen'.<sup>30</sup>

The success of the whale fishery at its first commencement, and for many years after, bore no proportion to that of later years. In former times, a ship was reckoned well fished with four or five whales. . .but, about the year 1795, or soon after, a new era in the whale fishery began, and through the growing experience of our captains and seamen, the success of former times has been far surpassed. In ten successive voyages, beginning with 1803, the Resolution, Scoresby, obtained 249 whales, yielding 2034 tons of oil.<sup>31</sup>

This increase in productivity was not due to a decrease in vessels engaged in the fishery, as evidence suggests that the British whaling fleet as a whole was increasing in number from the early nineteenth century to the early 1820's.<sup>32</sup> The personal role of William Scoresby, whose son took command of the Resolution in 1810, must not be exaggerated, yet his, and his son's success was important in the expansion of the Whitby whaling trade generally. As the whaling trade became established, whales began to disappear from the outer reaches of the Greenland Seas, necessitating voyages further into the ice. Scoresby appreciated the need for further exploration, and in 1806 in the Greenland Seas west of Spitzbergen he reached lat. 81° 30' N, the most northerly point ever achieved at that date by a sailing vessel and only 510 miles from the Pole.<sup>33</sup>

Scoresby also was among the first to employ cheaper labour from the Orkney and Shetland Islands. This practice was to become so popular that a cove in Lerwick harbour came to be known as Whitbyman's Bight.<sup>34</sup>

On his first voyage in 1785, Scoresby was faced with open revolt from an unruly crew, and threatened to replace them with Shetlandmen, whereupon

The men came aft, hats in hand, acknowledged their misconduct and begged pardon for the same and requested permission to return back to their former station promising to behave with assiduity and attention for the future - and to this their master listened and returned with the ship to the fishing station where they struck several whales.<sup>35</sup>

Mutinies and unrest, due to the extreme conditions and the uncertainty of sighting and capturing whales, were common in the whaling trade and the personal authority of both the Scoresbys in inspiring tenacity led to an increased spirit of competition between whalers which, in the absence of a large bounty, was necessary for success. The number of whales caught in 1786-7, 62, was an increase of over 100% of any previous annual catch and owes much to the capture of 18 whales by Scoresby's ship, the Henrietta,

alone. Scoresby's success led to offers to command whalers from other ports. From 1798 to 1802 he commanded the Dundee of London, and made four voyages in the John of Greenock in 1811-14. It has been suggested that, in thirty voyages to Greenland he made a profit of £90,000, and in one voyage alone in the John the proceeds amounted to £11,000.<sup>36</sup> Table 6 summarises the accounts of the Henrietta between 1777, her year of build, to 1820, when she was sold to Aberdeen. Taken from the original account book, the overall profit, net, was calculated at £53,553 18s 3d. The total cost for the ship and outfit in 1777 was £3294 18s 9d, and subsequent repairs and refitting had cost a further £1152 10s. The final profit was assessed as 'being upwards of 1600 per centum on the whole of the first cost of the adventure'.<sup>37</sup> Was the Henrietta a typical Whitby whaler, or may her profits be regarded as exceptional? In comparison with the Volunteer, Lively, Aimwell, Resolution and Experiment in the period 1805 to 1812,<sup>38</sup> the Henrietta appears to be by no means outstanding. Of tons of oil brought back to port, the Resolution was most successful with 1679 tons in this period, compared with the Henrietta's 1209 tons. The average of these six whalers was 1037 tons of oil in the period 1805 to 1812 so the Henrietta's catch may be regarded as slightly above average but not exceptionally so. It is also clear from these accounts that in spite of its early importance in the mid eighteenth century, the reduction and withdrawal of the Bounty after 1824 made no difference to whaling profits in the long term. In the entire period of 44 years, a loss was made in only four voyages.

The accounts of the Henrietta refer to her whaling voyages only but evidence suggests that she may have entered other trades out of the whaling season. Gordon Jackson has suggested that 'a whaler which performed only its annual trip to the Arctic would have been grossly under-utilised'.<sup>39</sup> Unemployed whalers outside the whaling season provided a stock of shipping which contributed to the general expansion of trade of the 1780's and served to keep freight rates low. In the

1820's, when whalers were voyaging further north, owners complained that ships stayed out in the whaling grounds so long that they were unable to make Baltic or American voyages in the last months of the year.<sup>40</sup> The flexibility in deployment of Whitby whaling vessels is shown in an advertisement of 1798:

To be sold by private contract. Two complete Greenland ships, with their stores and fishing gear, viz. The good ship Ariel (Whitby built) burthen by King's Admeasurement 334 31/94 tons, carries 26 keels of coals and brings 420 loads and upwards of timber, or deals from the Baltic, and is in good repair; well fitted with guns, small arms and ammunition, and wants not one article either for the merchant or Greenland service, and may proceed to sea immediately. And the good ship Advice, square stern, Whitby built, 207 tons measurement, will carry 17 keels of coals, is calculated for the Baltic, Greenland, coal or coasting trade on a light draught of water, takes the ground well, shifts without ballast, sails remarkably fast, well found with all kinds of stores, and may be sent to sea at an early expense; had a thorough repair last winter at Whitby, and now lying at Hull dock.<sup>41</sup>

Whilst allowing for the rose-coloured vision of their owners, it would appear that a vessel was required to be suitable for a variety of trades to be an economic proposition in the eighteenth century. By the early nineteenth century, especially with the building of the Baffin, a purpose-built whaler, in 1820,<sup>42</sup> the voyages of vessels became more limited to a particular trade, but evidence of voyage accounts for the mid nineteenth century, as discussed in Section One of this chapter, are insufficient to clarify this point. In the period of whaling from the port of Whitby, the other trades and activities of Whitby-owned tonnage had a constant influence on whaling profits, by tempting vessels away from the whaling grounds or supplementing their earnings.

Whitby shipowners began to withdraw their vessels from the whaling trade from the mid 1820's. One reason for the collapse of the trade was the depletion of whales, which meant that whaling ships had to venture further into the ice, thus increasing the danger to ships and men, and

reducing the possibility of other voyages in other trades in the same year. The men engaged in whaling in the eighteenth and nineteenth centuries lacked an understanding of modern concepts of resource management.<sup>43</sup> Scoresby was known to have considered the need to conserve the stock of whales, by preventing the capture of immature whales, to maintain the profitability of the whaling trade, but no concerted policy on the part of whaler owners generally existed. When the whale fishery had been temporarily suspended before, evidence suggested that the whaling stocks thrived. During the war with France in the 1760's, when both Whitby and Hull abandoned the whaling trade, the increase in whales was such that they were seen stranded on the coasts of Scandinavia and northern Britain.<sup>44</sup> But in the 1820's, as in the 1780's, the overall increase in the number of ships whaling reduced the average cargo, and drove many of the vessels from the trade. The large number of ships involved in the whaling trade from Whitby in the years immediately following the Napoleonic Wars was not necessarily followed by large catches of whale oil, as seen in Tables 1 and 2. Thirteen ships entered the trade from Whitby in 1819, yet only 649 tons of oil were brought home. In 1808, however, only seven vessels left Whitby for Greenland and the Davis Straits, yet 1127 tons of oil were brought into port. In 1808, 22755 aggregate tons of whaling ships were engaged in the trade, and by 1819 this had increased to over 47000 tons. Thus the total number of ships involved in whaling had a bearing on the profitability of the trade. The total number of ships whaling reached a peak in the period 1815 to 1821 and during these years the stock of whales was reduced to such an extent that the pursuit of them became no longer economic.

Whaling from Whitby was always confined to the Northern Whale Fishery, so when this aspect of the whaling trade declined the trade was abandoned altogether. No attempt was made to pursue whales in the Antarctic, as

the shipowners of Hull and London had done. By the early 1830's, the direction of the world whaling trade shifted its emphasis to the Southern Whale Fishery. In 1832, a total of 81 ships were engaged in the Greenland trade, producing 12578 tons of oil, whilst over 800 ships pursued the sperm whale, employing 10,000 men and producing 227,960 barrels of oil, principally from the United States of America.<sup>45</sup> Few British ships entered this trade, possibly because of the greater knowledge and experience of the Americans, and the vast distance of the Southern Fishery from Britain. One of the reasons for the greater duration of the Southern Fishery lay in the nature of the sperm whale compared with its northern counterpart. The placid Right whale was caught relatively easily, so much so that it was frequently lamented that if more space had been available on a certain voyage, more oil could have been brought home. Especially when a dead whale was being flensed, a large school would be attracted to a ship.<sup>46</sup> Tales of the difficulties of capturing sperm whales are well known, not least the legendary beast described by Melville. The port of Whitby also showed little interest in the impact of the steamship on the whaling trade. In 1837 the whaler Phoenix was towed by Whitby's paddle steamer Streonshalh when driven on the scar beyond the east pier,<sup>47</sup> but this is the only recorded instance of the use of steam propulsion in this trade, and it had been entirely abandoned by the time that the steamship achieved predominant importance amongst shipping registered at Whitby.

For industrial purposes, the cost of whale products had remained high, and the substitute of coal gas, regarded as more economic, reduced the demand for whale oil.<sup>48</sup> Combined with a fall in demand for whalebone with changes in fashion,<sup>49</sup> the price of whale products fell, and by 1833 the whale fishery was described as 'a losing concern'.<sup>50</sup> The low price of rape seed oil also contributed to the decline of the fishery.<sup>51</sup> In 1844, in a retrospective view of the collapse of the whaling trade

from Whitby, it was seen as so unsuccessful that a great deal of money was lost and the trade was thus given up.<sup>52</sup>

Whaling from Whitby, perhaps more than any other trade, has to be seen in the context of the involvement of other ports in this activity. In considering the reasons why Whitby shipowners first employed their vessels in this trade, the role of the entry of ships into the whaling trade from other ports was crucial. Similarly, the total number of vessels whaling affected the catch of each ship. Whitby, like Hull and the Scottish ports, enjoyed peaks in their involvement in the whaling trade after the Napoleonic Wars, but this was not necessarily true of other ports. The highest number of whalers ever to leave Whitby in the whaling trade was 22 in 1789, which was not an exceptional year for any other port. Other ports entered shipping in the transport service and in other trades, and Whitby shipowners may have taken an opportunity to send whalers to sea when the vessels of other ports were engaged in another activity. Whaling from London reached its height in 1751-5, before Whitby had even entered the trade, when high profits could be gained in the pioneering days of the trade with large government subsidies. The years of the highest number of ships in the whale fishery from the port of Liverpool were from 1776-8 and 1790-3, years which were also important for Whitby, but Liverpool dropped out of the trade in 1823, at the beginning of the decline. Newcastle whaling also reached a peak in 1790-3 and, like Hull and the Scottish ports, was to remain in the whaling trade into the 1840's and beyond. Scottish whaling was supported by a wide spread of ownership, largely organised into joint stock companies, and survived the depressions in the trade which caused the withdrawal of other ports. The majority of ports engaged in the trade enjoyed periods of success in peacetime and few survived the fall in profitability that the 1830's brought. Of the number of vessels sent to the Northern Whale fishery over a series of



years, Whitby ranked fourth with twenty ships compared with ninety-one from London, thirty-six from Hull and twenty-one from Liverpool. By 1790, whalers from the port of Whitby maintained this position but the numbers involved were considerably reduced: thirty-three from London, twenty-two from Hull, fourteen from Liverpool and ten from Whitby. The number of vessels whaling rose again by 1814, and Whitby, with eight whalers sent to the Fishery that year, ranked third amongst British ports, behind fifty-eight Hull whalers and twenty from London. By 1822, only one port sent more whalers to Greenland: Hull, with forty ships, compared with ten from Whitby.<sup>53</sup>

The contribution of whaling from Whitby to the British whaling industry generally also requires consideration. Table 1 may be compared with national totals, and in looking at the number of ships sent to the Fishery each year, Whitby ships as a percentage of the total reached a peak in 1776 to 1780, when Whitby whalers represented between 16% and 24% of the whole. Other years when the number of whaling ships leaving Whitby exceeded ten per cent of all whalers were 1754, 1758, 1759, 1761, 1762, 1772, and 1786 to 1791.<sup>54</sup> These were also years when the whaling trade from Whitby reached its highest point in relation to the port itself. A large number of whalers left Whitby in the years following the Napoleonic Wars, but the increase in the total of all whalers nationally was such that Whitby whaling vessels represented only between six and eight per cent of the national total in this period. Whitby whaling vessels formed a low proportion of the total number of vessels whaling in 1767-8, in 1774, in 1784-5, in 1813, and from 1826 onwards whaling ships from Whitby did not exceed four per cent of the total. In the case of the latter years, Whitby whalers were few compared with the national total as the trade from Whitby had declined whilst other ports maintained vessels in this activity. On previous occasions when Whitby whalers made

only a small contribution to the national total, this reflected a slowness on the part of whaling shipowners to respond to favourable changes in the trade, and was speedily followed by higher figures. It is clear from this analysis, however, that Whitby whaling ships, representing up to a quarter of annual sailings for the fishery, contributed to the British whaling trade out of all proportion with the trade of the port and the size of its population. Ports such as Liverpool far exceeded Whitby in their port facilities and general trading activities yet failed to make a greater contribution to the British whaling trade.

A comparison between Whitby whaling and national totals also reveals that Whitby whalers were generally of above average tonnage in this trade. Of greater significance, however, is that an analysis of the performance of the major whaling ports between 1814 and 1817 shows that Whitby whalers achieved the highest catch (i.e. tons of oil) per ship, in comparison with Hull, London and the total of all English ports.<sup>55</sup> Of the average of 9.75 whalers that left Whitby each year between 1814 and 1817, the average cargo of whale oil returned to Whitby was 107.2 tons. Hull, with an average of 57.25 whalers per year, achieved an average of 91.2 tons, and London (19.25 whalers per year) only 86.1 tons per ship. The total for all ports in England engaged in the whaling trade was calculated at 98 whalers per year, with an average catch per ship of 91.4 tons of oil. Thus Whitby's contribution to the whaling trade as a whole may be seen in the exceptionally high productivity of its whalers. The large catches of Whitby whalers may have been the result of a continued interest in the Davis Straits fishery in addition to Greenland, which although costing more to equip whalers and requiring a longer period in the ice, generally met with larger catches.<sup>56</sup> The role of William Scoresby junior in Whitby whaling after 1810, his efficiency and qualities of leadership in an activity requiring a higher level of stamina, determination and

discipline than others is impossible to quantify, yet may have influenced the productivity of individual ships. Whitby whalers also had a reputation for high productivity in earlier periods. In 1776, of a total of seventy-eight vessels in the whaling trade that year from Britain, the best fished ship was the Providence of Whitby.<sup>57</sup> At 230 tons, she was among the smaller whalers but caught seven whales, including five with lamina of over six feet in length, a common definition of a large whale.

Finally, the whaling trade from Whitby may be considered in the light of the development of the port itself in this period. The contribution of the whaling trade to the traffic of the port was possibly the way in which this trade made the most impact. The exports of whale products in one year is summarised in Table 7, which accounted for a large proportion of all goods exported in that year, as discussed in Section One of this chapter.<sup>58</sup> By the beginning of the nineteenth century, Arctic whaling was almost exclusively a British concern and whale oil was exported in large quantities to the Continent. In August 1801 the Thomas & Jane sailed for Bremen from Whitby with a full cargo of oil.<sup>59</sup> Physical manifestations of the whaling trade in Whitby harbour were oil houses, where blubber was processed into oil and stored: at the peak of the trade, there were two oil houses on each side of the Esk.<sup>60</sup> Whale jaw-bones, used as archways and gateposts, became a familiar sight in the locality, together with the ornamental engraving of whale teeth, known as scrimshaw work. Whaling became a source of employment for Whitby shipping in other trades, and contributed to the rise of tonnage recorded on the Whitby register. To the shipowners of the port, whaling presented an opportunity for high profits, exceeded only by government transport work. In 1817 whaling was referred to by a local historian as 'one of the most lucrative branches of our trade'.<sup>61</sup>

Whaling at Whitby was undoubtedly welcomed by local merchants. The

outfitting of whalers, especially in regard to provisions and equipment, was very expensive, as seen in Table 5a. The profits of each voyage were remitted to the port itself, to its shipowners, seamen and merchants. It has been estimated that a whaler returning with a full cargo of oil spent approximately £3000 in the town.<sup>62</sup> The whaling trade was particularly important in the development of a large body of seamen based at Whitby, and the reputation of the port in supplying men for the mercantile and naval fleets. The highest man/ton ratios were a feature of whaling ships, when between forty and fifty seamen were carried per voyage, including many landsmen. On March 5th 1792, the Henrietta mustered her crew of forty-two men for Greenland, of which sixteen were from Whitby, seventeen from surrounding villages such as Robin Hood's Bay, and three from Hull.<sup>63</sup> The wages earned by whaling men were generally higher than in other trades but were less regular, being dependent on the number of whales caught. In 1828, an Able Seaman earned 45s per month, a Line Coiler 50s and a Boat Steerer 55s, with an extra 1s 6d for every tun of oil brought home. The Harpooner, who was usually the Second Mate or Bosun, received 6s for every tun of oil, plus his pay, and half a guinea for every fish struck. When a vessel brought home 200 tuns of oil, the First Mate earned £95, the Harpooner £70, and the master as much as £300.<sup>64</sup> In comparison with wages in the coal trade, for example, whaling voyages offered a high incentive. A large crew was needed to fulfil the Bounty requirements, and was vital at times when a large school of whales was sighted, and in the subsequent flensing of each fish. The provisions supplied to whaling men, in order to cope with the extreme conditions, were plentiful and varied, as seen in the records of daily rations kept by Samuel Standidge of Hull.<sup>65</sup>

However, Whitby's involvement in the whaling trade was not entirely to its advantage. The trade was a particularly dangerous one, as in the

case of the tragic loss of both the Esk and the Lively in 1826. A near contemporary recorded that 'the crews of both these vessels perished, with the exception of three men belonging to the Esk. By these two awful calamities 26 families in Whitby and its neighbourhood were left destitute and 80 children became orphans'.<sup>66</sup> Even though whaling men were eligible for protections in wartime, they were still liable to be pressed, and this was often the cause of great bitterness in the town. The story of the impressment of whaling men on their return from the Arctic, which took place before their waiting wives and friends on the quayside, is well known through the description by Mrs Gaskell in Sylvia's Lovers.<sup>67</sup> Whaling has been described as the exploitation of a 'common property resource' in which no 'forward linkages' were made, and thus activity in this trade did not lead to involvement in others, as the coal trade was accompanied with a return cargo and as the emigrant trade to British North America was combined with the carriage of timber.<sup>68</sup>

The importance of the whaling trade to the port of Whitby may be seen in the petition which was drawn up to argue the case for an extension of the Bounty beyond 1786. It was stated that the Bounty was needed to encourage trade, and noted that 6,600 seamen were employed in whaling, and that manufacturing was encouraged by the demand for equipment. It was especially emphasised that whaling bred tough seamen, who would be available for service in His Majesty's ships of war, and that the whaling ships themselves were also suitable for transports.<sup>69</sup> Despite similar petitions from other ports,<sup>70</sup> the Bounty was not continued, but these petitions nevertheless show that by this period the whaling trade was an important feature of the major ports of Britain.

In conclusion, the period of the whaling trade, between 1753 and 1837, witnessed the expansion of shipowning and shipbuilding at Whitby and its

growth as a maritime community. However, the importance of the coal and coastwise trades, the trading to the Baltic and government transport work must also be taken into account in an assessment of the main areas of activity and profits earned by Whitby shipping. But the involvement of Whitby ships in the whaling trade, its conditions in such contrast with other activities, further illustrates the concept of their flexibility of deployment, not only of ships, but of seamen and the capital of shipowners and shipbuilders. Through the activities of the Scoresbys, the large proportion of vessels in this trade fitting out from Whitby, and the high productivity of Whitby ships in number and size of whales caught, Whitby's contribution to the British whaling trade, especially considering its limited harbour space and small population, was remarkable.

## REFERENCES: CHAPTER FIVE, SECTION THREE

1. Robert Tate Gaskin, The Old Seaport of Whitby, (Whitby, 1909), p.254
2. Rev. George Young, History of Whitby, etc..., (Whitby, 1817), p.563
3. 6 Geo.II c.33 (1733), 13 Geo.II c.28 (1740), 22 Geo.II c.45 (1749)
4. P.R.O. CO 390/9 fo.94. 'An Account of the quantities of Train Oil and Whalefins imported into England from Foreign Parts [1726-1769]'
5. Gordon Jackson, The British Whaling Trade, (London, 1978), p.59
6. Gordon Jackson, Hull in the Eighteenth Century, (Oxford, 1972), p.157, p.163
7. Basil Lubbock, The Arctic Whalers, (Glasgow, 1937), pp.183-4
8. P.R.O. BT 6/94 fo.5
9. Jackson, Hull, p.160
10. William Scoresby Jnr., My Father, (London, 1851), pp.116-164. See also Memorials of the Sea, (London, 1835) and An Account of the Arctic Regions with a History and Description of the Northern Whale Fishery, (Edinburgh, 1820)
11. See Conrad Dixon, 'The Exeter Whale Fishery Company, 1754-1787', Mariner's Mirror, 62 (1976), pp.225-231
12. P.R.O. BT 6/93 fo. 193
13. P.R.O. BT 6/93 fo. 5
14. P.R.O. CO 390/9 fo. 86, BT 6/94 fo. 85-9
15. Gaskin, Whitby, p.255
16. P.R.O. BT 6/93 fo. 219
17. Jackson, Hull, p.178
18. Young, Whitby, p.564, Lubbock, Arctic Whalers, p.100, Jackson, Whaling, p.64
19. Lubbock, p.288
20. Jackson, Whaling, p.64
21. See Table 1
22. Gaskin, p.262
23. Scoresby Jnr., My Father, p.128
24. Lubbock, p.199
25. Lubbock, p.130
26. Richard Weatherill, The Ancient Port of Whitby and its Shipping, (Whitby, 1908), pp.380-1
27. Calculated from an index of Whitby whalers compiled from Reg.Ship. and the secondary sources listed above
28. See Tables 1 and 2
29. Lionel Charlton, The History of Whitby, etc..., (York, 1779), p.339
30. Young, p.567
31. Young, p.566, quoted in Jackson, Whaling, pp.77-8

32. P.R.O. CO 390/9 folios 86, 87, 88, 90, 92, and Accounts Relating to the Whale Fisheries, P.P., 1823, XIII, (446.), p.597
33. Weatherill, p.390
34. Gaskin, p.255
35. Wh.Lit. & Phil., Scoresby Archive Ref. 1A 16, 'Accounts of William Scoresby Sen. in the ship Henrietta 1791-1797'
36. Weatherill, p.390
37. N.M.M., AMS/35
38. Wh. Lit. & Phil., Scoresby Archive Ref. 1A 19
39. Jackson, Hull, p.177
40. Lubbock, p.256
41. Lubbock, p.148
42. Wh. Lit. & Phil. Scoresby Archive Ref. 18 4
43. I am grateful to Dr. Chesley Sanger of the Department of Geography, Memorial University of Newfoundland, for help and advice in connection with his work on Scottish whaling. See W. Vamplew, 'The Evolution of International Whaling Controls', Maritime History, 2 (1973), pp.123-39
44. Lubbock, p.100
45. Lubbock, p.288
46. Lubbock, pp.110-113
47. Gaskin, p.265. A Whitby steamer, the North Sands, 3526 tons gross became a whaler when she was sold by R. Harrowing to Chr. Salvesen & Co. of Leith
48. Jackson, Hull, p.178
49. Jackson, Hull, p.162
50. Select Committee on Manufactures, Commerce and Shipping, P.P., 1833, VI, (690.), evidence of Samuel Cooper of Syree and Cooper of Hull, qq.700-2
51. Select Committee on Seeds and Wool &c., P.P., 1816, VI, (272.), evidence of Samuel Cooper, p.183
52. Select Committee on British Shipping, P.P. 1844, VIII, (545.), evidence of Gideon Smales of Whitby, q.1389
53. See sources to Tables 1 and 2
54. See note 32
55. Jackson, Whaling, pp.88-9
56. See note 10
57. Lubbock, p.116
58. An entry in the Swansea Collector to Board Letter Book of 1836 (P.R.O. CUST 73 / 35) records the Lavinia of Whitby, Richard Brown master, the cargo of which included 16 pieces of whale fins and a part case of whale oil destined for London or Liverpool
59. Lubbock, p.159
60. Young, p.567. See Chapter Six



61. Young, p.562
62. Young, p.568
63. Wh. Lit. & Phil., Scoresby Archive Ref. 1A 16
64. Gaskin, pp.256-7
65. Jackson, Hull, p.174
66. Guide to Whitby and its Neighbourhood (Whitby, 1850), p.12
67. E. Gaskell, Sylvia's Lovers, (London, 1863)
68. See Section Four, 3, of this chapter
69. P.R.O. BT 6/93 fo. 177
70. P.R.O. BT 6/93 fos. 180, 181, 187, 191

TABLE 1:

WHITBY AND THE WHALING TRADE, 1753-1837: number and tons of Whitby-owned vessels voyaging each year to Greenland and the Davis Straits

Year	Greenland		Davis Straits		Total		Average tons
	Number	Tons	Number	Tons	Number	Tons	
1753	2	725 <sup>[a]</sup>	-	-	2	725	363
1754	4	1406 <sup>[a]</sup>	-	-	4	1406	352
1755	?		?		4	1406 <sup>[e]</sup>	352
1756	?		?		4	1406 <sup>[e]</sup>	352
1757	?		?		4	1406 <sup>[e]</sup>	352
1758	?		?		5	1656 <sup>[e]</sup>	331
1759	?		?		4	1406 <sup>[e]</sup>	352
1760	1	250 <sup>[a]</sup>	-	-	1	250	250
1761	?		?		5	1691 <sup>[e]</sup>	338
1762	?		?		4	1441	360
1763	-		-		-	-	-
1764	-		-		-	-	-
1765	-		-		-	-	-
1766	-		-		-	-	-
1767	2	535 <sup>[f]</sup>	-		2	535	268
1768	2	535 <sup>[f]</sup>	-		2	535	268
1769	?		?		4	1135 <sup>[f]</sup>	284
1770	?		?		4	1135 <sup>[f]</sup>	284
1771	?		?		4	1135 <sup>[f]</sup>	284
1772	?		?		5	1431 <sup>[e]</sup>	286
1773	?		?		5	1431 <sup>[e]</sup>	286
1774	?		?		3	730 <sup>[e]</sup>	243
1775	?		?		7	1991 <sup>[e]</sup>	284
1776	15	4570 <sup>[a]</sup>	-		15	4570	305
1777	14	3920 <sup>[a]</sup>	-		14	3920	280
1778	14	4057 <sup>[a]</sup>	-		14	4057	290
1779	14	3989 <sup>[a]</sup>	-		14	3989	285
1780	10	2823 <sup>[a]</sup>	-		10	2823	282
1781	-		-		-	-	-
1782	-		-		-	-	-
1783	-		-		-	-	-
1784	?		?		2	584 <sup>[e]</sup>	292
1785	?		?		6	1659 <sup>[e]</sup>	277
1786	20	6194 <sup>[b]</sup>	-		20	6194	310
1787	?		?		21	6599 <sup>[e]</sup>	314
1788	?		?		20	6273 <sup>[e]</sup>	314
1789	?		?		22	6967 <sup>[e]</sup>	317
1790	?		?		12 <sup>[d]</sup>	3872 <sup>[e]</sup>	323
1791	?		?		9 <sup>[d]</sup>	2664 <sup>[e]</sup>	296
1792	?		?		10 <sup>[d]</sup>	3005 <sup>[e]</sup>	301
1793	4	1026 <sup>[c]</sup>	3	1107 <sup>[c]</sup>	7	2133	305
1794	4	1026 <sup>[c]</sup>	2	734 <sup>[c]</sup>	6	1760	293
1795	3	804 <sup>[c]</sup>	1	335 <sup>[c]</sup>	4	1139	285
1796	3	804 <sup>[c]</sup>	1	335 <sup>[c]</sup>	4	1139	285
1797	3	804 <sup>[c]</sup>	1	335 <sup>[c]</sup>	4	1139	285
1798	3	804 <sup>[c]</sup>	1	335 <sup>[c]</sup>	4	1139	285
1799	3	804 <sup>[c]</sup>	1	305 <sup>[c]</sup>	4	1109	277
1800	4	1041 <sup>[c]</sup>	-		4	1041	260
1801	4	1041 <sup>[c]</sup>	-		4	1041	260
1802	6	1462 <sup>[c]</sup>	-		6	1462	244
1803	7	1753 <sup>[c]</sup>	-		7	1753	250
1804	7	1755 <sup>[c]</sup>	-		7	1755	251

TABLE 1: (contd.)

Year	Greenland		Davis Straits		Total		Average tons
	Number	Tons	Number	Tons	Number	Tons	
1805	6	1492	3	960	9	2452	272
1806	5	1332	2	625	7	1957	280
1807	5	1332	2	625	7	1957	280
1808	7	1957	-	-	7	1957	280
1809	6	1601	-	-	6	1601	267
1810	7	1957	-	-	7	1957	280
1811	6	1720	1	346	7	2066	295
1812	6	1720	1	346	7	2066	295
1813	6	2423	-	-	6	2423	404
1814	7	2077	1	346	8	2423	303
1815	8	2413	1	346	9	2759	307
1816	10	3080	1	346	11	3426	311
1817	10	3080	1	346	11	3426	311
1818	11	3450	1	346	12	3796	316
1819	13	3790	-	-	13	3790	292
1820	11	3539	-	-	11	3539	322
1821	9	2857	2	600	11	3457	314
1822	8	2190	2	670	10	2860	286
1823	7	?	3	?	10	3090	309
1824	6	?	4	?	10	3090	309
1825	6	?	3	?	9	2663	296
1826	2	?	3	?	5	1511	302
1827	1	?	2	?	3	977	326
1828	1	?	3	?	4	1341	335
1829	-	-	3	1050	3	1050	350
1830	-	-	2	686	2	686	343
1831	-	-	1	324	1	324	324
1832	-	-	1	324	1	324	324
1833	-	-	2	723	2	723	362
1834	-	-	2	723	2	723	362
1835	-	-	2	723	2	723	362
1836	-	-	2	723	2	723	362
1837	-	-	2	723	2	723	362

Sources: [a] P.R.O. BT/6 93 fos. 225-6; [b] P.R.O. BT/6 93 fo.227;  
 [c] Accounts Relating to the Whale Fisheries, P.P., 1823, XIII, (44)  
 p.597; [d] Accounts of oil and whalebone factors (see references);  
 [e] Basil Lubbock, The Arctic Whalers, (Glasgow, 1937), pp.87-295;  
 [f] Scoresby Archive Ref. 1A 19, Whitby Museum.

TABLE 2:

 WHITBY AND THE WHALING TRADE 1753-1837  
 Details of catch

Year	<u>No. whales</u>	<u>No. seals</u>	<u>Tons blubber</u>	<u>Tons oil</u>	<u>Tons and cwt bone</u>
1753	3[f]				
1754					
1755					
1756					
1757	6[f]				
1758					
1759					
1760					
1761					
1762					
1763					
1764					
1765					
1766					
1767	3[e]	3[e]		114[e]	
1768	10[e]	732[e]		166[e]	
1769	21[e]	145[e]		388[e]	
1770	4[e]	317[e]		245[e]	
1771	17[e]	229[e]		147[e]	
1772	17[e]	20[e]		459[e]	
1773	12[e]	340[e]		503[e]	
1774					
1775	19[c]				
1776					
1777					
1778					
1779	27[c]				
1780					
1781					
1782					
1783					
1784					
1785					
1786					
1787	62[d]	3035[d]	1045[d]		
1788					
1789				359[a]	
1790	30[d]	3665[a]			380 cwt[a]
1791	25[f]				
1792	28[a]	154[a]		231[a]	245 cwt[a]
1793			497[b]	-	16 ton 11 cwt[b]
1794			728[b]	-	29 ton 9 cwt[b]
1795			463[b]	-	15 ton 6 cwt[b]
1796			528[b]	-	20 ton 15 cwt[b]
1797			647[b]	-	23 ton 11 cwt[b]
1798	32[f]	531[f]	317[b]	-	10 ton 13 cwt[b]
1799			451[b]	-	13 ton 16 cwt[b]
1800			-	355[b]	15 ton 11 cwt[b]
1801	37[f]		1060[f]	342[b]	10 ton 16 cwt[b]
1802			599[b]	-	20 ton 16 cwt[b]
1803	39[c]		-	534[b]	21 ton 18 cwt[b]
1804	83[c]		-	599[b]	13 ton[b]
1805	129[c]		-	1169[b]	32 ton 17 cwt[b]
1806	61[c]	6353[f]	-	708[b]	19 ton 9 cwt[b]

TABLE 2: (contd.)

303

Year	No. whales	No. seals	Tons blubber	Tons oil	Tons and cwt bone
1807	81 [c]	-	-	815 [b]	27 ton 1 cwt [b]
1808	146 [c]	-	-	1127 [b]	31 ton 15 cwt [b]
1809	81 [c]	-	-	762 [b]	22 ton 10 cwt [b]
1810	105 [c]	-	-	946 [b]	33 ton 1 cwt [b]
1811	171 [c]	-	-	1181 [b]	35 ton 18 cwt [b]
1812	112 [c]	-	-	1021 [b]	35 ton 3 cwt [b]
1813	78 [c]	-	-	826 [b]	33 ton 11 cwt [b]
1814	172 [a]	-	-	1381 [a]	52 ton 5 cwt [b]
1815	70 [a]	-	-	791 [a]	32 ton 7 cwt [a]
1816	115 [a]	-	-	1015 [a]	42 ton 2 cwt [a]
1817	76 [a]	1850 [a]	-	914 [a]	38 ton 7 cwt [a]
1818	94 [a]	-	-	1097 [a]	40 ton 17 cwt [a]
1819	81 [a]	-	-	1649 [a]	20 ton 6 cwt [a]
1820	95 [a]	694 [a]	-	932 [a]	35 ton 4 cwt [a]
1821	99 [a]	-	-	1148 [a]	49 ton 17 cwt [a]
1822	27 [a]	-	-	477 [a]	18 ton [a]
1823	137 [a]	-	-	1178 [a]	57 ton 10 cwt [a]
1824	75 [a]	-	-	856 [a]	40 ton 17 cwt [a]
1825	19 [a]	-	-	245 [a]	- -
1826	12 [a]	-	-	166 [a]	- -
1827	27 [a]	-	-	332 [a]	18 ton 2 cwt [a]
1828	33 [a]	-	-	445 [a]	24 ton 15 cwt [a]
1829	34 [a]	-	-	357 [a]	21 ton 8 cwt [a]
1830	4 [a]	-	-	40 [a]	2 ton 15 cwt [a]
1831	9 [a]	-	-	111 [a]	6 ton 2 cwt [a]
1832	29 [a]	-	-	235 [a]	11 ton 18 cwt [a]
1833	48 [a]	-	-	459 [a]	22 ton 18 cwt [a]
1834	16 [a]	-	-	146 [a]	8 ton [a]
1835	10 [a]	-	-	147 [a]	9 ton 7 cwt [a]
1836	-	-	-	-	- -
1837	-	-	-	-	- -

- Sources:
- [a] Accounts of Oil and Whalebone Factors (see full reference)
  - [b] Accounts Relating to the Whale Fisheries, P.P. 1823 (446.)  
XIII, ms p.597
  - [c] G. Young, A History of Whitby... Whitby 1817, pp.562-9
  - [d] P.R.O. BT 6/94 f.25
  - [e] Scoresby Archive Ref. 1A 19 Whitby Museum. Years 1753-1766,  
no details
  - [f] Basil Lubbock, The Arctic Whalers, Glasgow 1937, pp.87-295

TABLE 3:

## BOUNTIES PAID TO BRITISH SHIPS IN THE NORTHERN WHALE FISHERY, 1733-1785

Year	Rate of bounty ,	Bounty (based on tons of vessel)		
		£	s	d
1733	20s	612	19	1
1734		920	13	11
1735		920	14	3
1736		612	19	3
1737		1148	7	11
1738		1431	11	9
1739		1780	10	10
1740	30s	948	7	6
1741		948	7	6
1742		948	7	6
1743		523	10	0
1744		2297	17	1½
1745		2472	19	7
1746		1024	2	6
1747		1024	2	6
1748		1024	2	6
1749		1365	10	0
1750	40s	10507	3	3
1751		16530	19	10
1752		17231	9	5
1753		27693	0	11
1754		31328	6	9
1755		45634	18	8
1756		42103	1	0
1757		34450	0	8
1758		27006	6	1
1759		19273	18	1
1760		20543	5	6
1761		19217	15	8
1762		13358	6	9
1763		18465	15	9
1764		19463	16	1
1765		18748	17	9
1766		19947	2	5
1767		24537	9	2
1768		24026	18	1
1769		24935	12	11
1770		29240	18	11
1771		27891	7	6
1772		29089	12	11
1773		31231	13	9
1774		37863	2	6
1775		54978	13	10
1776		52028	3	1
1777	30s	30942	5	3
1778		29280	8	4
1779		25294	16	1
1780		21584	12	4
1781		14379	12	4
1782	20s	21156	2	2
1783		27017	12	6

TABLE 3: (contd.)

<u>Year</u>	<u>Rate and bounty</u>	<u>Bounty</u> (based on tons of vessel)		
		<u>£</u>	<u>s</u>	<u>d</u>
1784	20s	53162	2	1
1785		84122	6	2

Source: P.R.O. CO 390/9  
f. 87, 88, 90, 92, 94  
BT 6/93 f. 277  
(the Bounty officially ended in 1824)

TABLE 4:

## PRICES OF WHALE OIL AND WHALEFINS FROM GREENLAND

<u>Year</u>	<u>Whale oil</u>	<u>Whale fins</u>
	<u>£ per tun</u> (252 galls.)	<u>£ per ton</u>
1766	22	400
1767	19 10	450
1768	19 10	400
1769	16 10	340
1770	18 10	340
1771	21	350
1772	17	340
1773	23	320
1774	21	300
1775	24	315
1776	24	300
1777	24	300
1778	22	280
1779	24	280
1780	22	280
1781	27 10	370
1782	26	300
1783	24	330
1784	24	260
1785	22	240

Source: P.R.O. BT 6/93 f.219

## PRICES OF WHALE OIL AND WHALEFINS IN THE NORTHERN WHALE FISHERY

1805	23	
1806		
1807		
1808		
1809		
1810		
1811		
1812		
	Average £37	Variation between £30-£150

TABLE 4: (contd.)

<u>Year</u>	<u>Whale oil</u>		<u>Whale fins</u>		
	<u>£ per tun</u> (252 galls.)		<u>£ per ton</u>		
1813	52-60	Average	£37		Variation between £30-£150
1814		"	"		" " "
1815	42	"	"		" " "
1816		"	"		" " "
1817	30	"	"	80	" " "

Source: G. Young, A History of Whitby etc..., (Whitby, 1817), pp.262-9

TABLE 5a:

## PRICES OF SHIPS FITTED OUT AS WHALERS

<u>Year</u>	<u>Ship's Name</u>	<u>Tons</u>	<u>Price</u>	<u>Price per ton</u>
<sup>1</sup> 1784	Aurora	300	£4771	£15 8s (second-hand)
<sup>2</sup> 1777	Henrietta	251	c.£3295	£13
<sup>3</sup> 1786		200-400	£12 12s	per ton
<sup>4</sup> 1786		300	£2434	£8
<sup>4</sup> 1788		300	£2088	£7
<sup>4</sup> 1784		300	£3744	£12 10s
<sup>5</sup> 1803	Resolution	291	£7791	£26 15s
<sup>5</sup> 1813	Esk	350	£14000	£40
<sup>6</sup> 1816		300	£3500	£11 12s
<sup>7</sup> 1818	Fame	300	£5980	£19 18s

Sources:

1. Gordon Jackson, British Whaling Trade, (London, 1978), p.82
2. National Maritime Museum AMS/35
3. P.R.O. BT 6/93 f.219
4. Gordon Jackson, Hull in the Eighteenth Century (Oxford, 1972), p.166
5. Robert Tate Gaskin, The Old Seaport of Whitby, (Whitby, 1909), p.257
6. Select Committee on Seeds and Wool etc., P.P., 1816, VI, (272.), Evidence of Samuel Cooper of Hull, p.183
7. Whitby Museum, Scoresby Archive, Ref. 1A 21



TABLE 5b:  
WAGES IN THE WHALING TRADE

<u>The Baffin</u>	<u>per month</u>		<u>total</u>		
	<u>Wages 1820</u>				
Surgeon	£4	4s	£26	7s	7d
Mate and Harp.	£3		61	1	6
Steersman	£3	15s	57	19	10
Harpooner	£3	15s	49	12	3
Landsman	£2	5s	5	1	3
Carpenter	£5		25	5	6
" mate	£4		17	12	9
Cook	£4		16	1	8
Steward	£2	15s	10	2	11
Armourer	£3		2	11	-
Seaman	£2		4	16	3
AB	£3	10s	12	10	-

(the Harpooners also received £11 11s fish striking money in the 1820 voyage)

Total crew 43

Source: Whitby Museum, Scoresby archive. Ref. 1B 7B

TABLE 6:

ACCOUNTS OF THE WHALER HENRIETTA, 251 TONS, OF WHITBY 1777-1820

Annual expenses, income, profit and loss and cash remaining

Cost of ship and outfit £3294 18s 9d

Cost of 1/64 share £13 5s 1d

<u>Year</u>	<u>Expenses</u>	<u>Income</u>	<u>Profit</u>	<u>Loss</u>	<u>Remains</u>
	<u>£</u>	<u>£</u>	<u>£</u>	<u>£</u>	<u>£</u>
1777	1557		640		59
1778	1257	1469	212		
1779	1214	1212		2	
1780	1173	2006	640		193
1781	1262	1177		85	
1782			800		
1783			750		
1784			2250		
1785			1500		
1786			1500		
1787					
1788					
1789	1418	1015		403	
1790	1174	1180			6
1791	1089	1078		11	
1792	1127	1149			22
1793	2690		1500		231
1794	3289	3631	1500		342
1795	3466	3478	1050		316
1796	5084	5356	2850		272
1797	2205	3838	1350		
1798	2446	4804	1650		
1799	2611	3688	600		
1800	2624	3958	900		
1801	2823	5134	1350		

TABLE 6: (contd.)

<u>Year</u>	<u>Expenses</u>	<u>Income</u>	<u>Profit</u>	<u>Loss</u>	<u>Remains</u>
	<u>£</u>	<u>£</u>	<u>£</u>	<u>£</u>	<u>£</u>
1802	2780	6658	1150		
1803	5464	6491	2250		
1804	4108	5136	1054		
1805	3295	6912	2400		
1806	3148	5773	1408		
1807	3202	4438			1236
1808	3044	4958			1914
1809	3592	7556	2800		
1810	3259	6892	2400		
1811	3450	7679	2010		1560
1812	3516	7523	2250		
1813	5750	8018			
1814	6190	8014	1824		
1815	5805	8073	2268		
1816	6481	7917	1436		
1817	5024	6739	1716		
1818	5260	6643	1705		
1819	3940	5547	1500		
1820	1240	8012	6772		

Note: 'Profit' is a statement and the sum divided amongst shareholders each year

Source: N.M.M. AMS 35

TABLE 7:

## EXPORTS OF WHALE PRODUCTS FROM WHITBY COASTWISE, 1790

<u>Commodity</u>	<u>Quantity</u>	<u>Measure</u>
Train oil	5	Gallons
Whale oil	211	Gallons
Whale oil	234½	Tons
Whalebones	429	Number
Whalefins	174	Cwt.
Whalefins	25	Tons
Sealskins	398	Dozen

Source: Port Books PRO E 190 290/3

## CHAPTER FIVE: THE EMPLOYMENT OF WHITBY SHIPPING 1700-1914

## SECTION FOUR: OTHER TRADES

1. Fishing

'A great fischar toune' were the words used by Leland in describing Whitby in 1538<sup>1</sup> and this image has, to a certain extent, remained with the port to the present. The Whitby fishing industry may be considered in two distinct aspects. Firstly, in the activities of small cobsles and open boats in the inshore fisheries, daily bringing their catch of cod, ling, haddock, lobster, crab and salmon home to market; and secondly, in the venturing further afield of luggers and later trawlers to the North Sea as far as the Dogger Bank, for a week at a time, in the pursuit of larger shoals of white fish, herrings, dog fish and tunny. The number of boats and men engaged in this industry, the quantity of fish landed and the profits earned may be seen in the context of the national fishing fleet, and in the activities of the port of Whitby as a whole. The Whitby fishing trade included all the creeks and members of the port of registry of Whitby, such as Robin Hood's Bay, Staithes and Sandsend, and the use of the harbour of Whitby as a base for the fishing activities of vessels from other ports.

The vessels which fished the coasts off Whitby throughout this period were predominantly traditional Yorkshire cobsles, which varied only slightly throughout this period, from a lug sail and oar propulsion to the mechanised coble which gained popularity only after the Second World War. The salmon cobsles in particular remained totally unchanged.<sup>2</sup> The coble has been described as half boat and half punt, half keel boat and half barge.<sup>3</sup> Eighteenth century cobsles measured between fifteen and twenty feet long, and between three and four feet broad; by the end of the period of the Napoleonic Wars, the coble was generally twenty-five or

twenty-six feet long and five feet broad, with a flat bottom and sharp stem, of between one and two tons burthen.<sup>4</sup> They were thus suited to the rough shelving beaches of Yorkshire and Durham.<sup>5</sup> Only at the end of the period under discussion did their average tonnage increase. The smallest cobbles were crewed by three men and the larger boats by four men and a boy.<sup>6</sup> Mid nineteenth century cobbles could be purchased for between £10 and £40, depending on size, age and condition and in most cases the owner was also the skipper. Unlike investment in Whitby-registered merchant tonnage generally, which attracted shareholders from a variety of occupational backgrounds, the ownership of cobbles and small fishing boats at Whitby and its surrounding harbours was largely confined to working people.<sup>7</sup> Besides shipbuilding and its associated activities, with occupations providing services and consumer goods for the locality, fishing was one of the few sources of income for a large proportion of the working population, especially in the outlying coastal villages where, with poor landward communications and the surrounding barrier of moorland, the inhabitants traditionally looked to the sea for their livelihood.<sup>8</sup>

Inshore fishing vessels operated between ten and fifteen miles off the coast, returning home the same day, as undecked cobbles afforded little protection against the elements.<sup>9</sup> The dangers inherent in this activity have been described by contemporary local historians, and include an account of a storm of 1815 which resulted in the death of twenty-nine fishermen from Staithes and Runswick Bay,<sup>10</sup> in a population of less than 700. By the late nineteenth century, coble fishermen found themselves in competition for fishing grounds with beam trawlers, who scoured the sea bed indiscriminately, forcing local cobbles back to the hard and rocky ground which was unsuitable for trawling. French fishing vessels fishing for herring within the three mile limit off the Yorkshire coast also reduced the earnings of small cobbles<sup>11</sup> which, by the turn of the century and before mechanisation, reached their lowest ebb.

Cod, ling, haddock and mackerel were fished from cobles using hand-lines, with three hooks per line, baited with local whelks and mussels, or through 'jigging' with a shiny object. White fish were also caught on a long line, which bore hooks at regular intervals and was shot and hauled twice a day. Crabs and lobsters were caught in pots and creels respectively, which were fitted to ropes and weighted.<sup>12</sup> Salmon were caught in nets offshore, in line with the harbour mouth, and in the River Esk. Small cobles also took part in the annual herring fishery at the end of August from the mid nineteenth century.<sup>13</sup> The importance of women in this activity, in collecting mussels and baiting lines, in making nets, lobster and crab pots, in salting, cleaning and otherwise preparing the catch and carrying it to market has been the subject of a recent study,<sup>14</sup> which is not appreciated in an analysis of the census or in parliamentary returns.

Vessels in the offshore fishery were considerably larger than cobles: most Whitby luggers carried a coble on board for hand-line fishing and as a tender. The traditional herring buss of the eighteenth and early nineteenth century was clinker built, with three masts, a deck with a large hatchway in the middle and measured about sixty tons, usually crewed by five or six men.<sup>15</sup> Whitby harbour and its surrounding creeks were never free of the problem of silting up, forming a bar at the harbour mouth which was only passable at high water. The need for a lighter vessel drawing less water was supplied by the Staithes yacker or lugger, taking its name from the large triangular sail at the mizzen. It has been suggested that this sail plan was designed for speed, to outpace the Revenue Cutters, suspecting that these vessels were engaged in smuggling. They required a crew of seven, a disadvantage overcome by the development of the Marshall lugger by a Whitby shipbuilder of that name, which could be handled by five men. This design was popular until the 1870's when, faced by competition from sailing and later steam trawlers, Whitby fishermen

abandoned lug sails in favour of a Dandy rig with fore and aft sails, which was worked by only three men.<sup>16</sup> Local antagonism to steam assisted fishing vessels was expressed by the Whitby Gazette when it described their catch as 'the mashed specimen of the sea that are raked up by the machines popularly known as trawlers'.<sup>17</sup> Steam fishing boats owned at Whitby in this period totalled only twenty-three, fifteen of which were purchased in the years 1911 to 1914. They averaged twenty-one tons,<sup>18</sup> less than the eighteenth century herring buss. Offshore fishing boats represented a larger investment of capital than the coble, estimated at over £600 in 1817,<sup>19</sup> and over £300 for the mid nineteenth century Staithes yacker type of fishing craft.<sup>20</sup> A typical offshore boat of the early nineteenth century was run on a share system: of a crew of seven, five men would own a share each, one man a half share, and the ship's boy would be allowed a small sum from the profits. The proceeds of each expedition were divided into six and a half parts, the extra share allowed for the owner. In many cases, as in the ownership of cobbles, the owner commanded his vessel, and thus received two shares in the operation of the boat.<sup>21</sup>

Before the 1840's the east coast herring fishery was based at Yarmouth, and the Whitby offshore boats made an annual six week visit from mid September to the beginning of November. Movements in the spawning ground of the herring enabled this fishery to be carried on from Staithes and Whitby. Fishing for herrings, which were sold fresh, salted or cured as kippers or bloaters became a mainstay of the Whitby economy in the mid nineteenth century, and were caught in drift nets which extended in a circle of about one and a quarter miles in diameter, set at night when the herrings swam to the surface and became enmeshed. This form of net fishing was in direct contrast with trawling, whereby a beam carrying nets was dragged along the sea bottom, scooping up any fish in its wake. Staithes fishermen, in 1863, complained that their catch was reduced in

number and size of fish, one fish buyer suggesting that in twenty years' time there would be no fish at all due to the trawlers. In a national survey, however, it was concluded that the supply of fish around British coasts was increasing, that beam trawling was efficient, and that the unrestricted freedom to fish was to be encouraged. The tenacity of Whitby fishermen in retaining traditional sailing boats and fishing methods may be seen as one of the reasons for the decline of this activity by the end of the period under discussion. Trawling also adversely affected other fish pursued by offshore vessels: cod, ling, plaice, skate, mackerel, haddock, whiting, halibut, turbot and sole.<sup>22</sup> Fish caught in the eighteenth and early nineteenth centuries, such as mud fish, butt, bratt, coalfish, gurnets, dabs and sandfish,<sup>23</sup> had disappeared by the later nineteenth century, possibly due to a change in demand, movement of spawn or perhaps just the names varied.

The number and tonnage of fishing boats owned at Whitby cannot be established for the entire eighteenth and nineteenth centuries but a series from 1772 to 1786 has survived and is summarised in Table 1. These figures refer to offshore boats only. In 1772, the tonnage of Whitby fishing boats equalled 5.3% of the national fishing fleet, and over 10% of the total tonnage of shipping owned at Whitby. Only 3.9% of all vessels owned at British ports in 1772 were fishing boats, so that the port of Whitby owned a higher proportion of fishing vessels than the national average.<sup>24</sup> In 1817, twenty-eight offshore boats were owned at Whitby, only a slight increase from 1786, with 140 cobles.<sup>25</sup> A register of licences issued to fishing boat owners, including luggers, yawls and cobles, lists a total of 175 fishing vessels owned at the port between 1808 and 1838, but it is not clear from this source how many of these vessels were owned at Whitby in each of these years, and no indication is given of tonnages.<sup>26</sup> In 1843, 244 fishing boats of all kinds were owned at Whitby;<sup>27</sup> although the number of small boats is not known for the

eighteenth century, it is probable that this figure represents an increase in Whitby's fishing fleet from earlier periods. Table 2 shows a compilation of the parliamentary returns of fishing boats owned at British ports, which began in 1870, comparing the number and tonnage owned at Whitby with that of the United Kingdom as a whole. The large proportion of cables and small fishing craft is clear from the low average tonnage of the Whitby fishing fleet in the last quarter of the nineteenth century. As a percentage of all British fishing vessels, those owned at Whitby equalled only 1.15% in 1870, and 0.37% in 1913. Whitby's limited interest in steam fishing vessels is also shown in Table 2,<sup>28</sup> and in the summary of these vessels appearing on the Statutory Register of Shipping at Whitby.<sup>29</sup> Only immediately before the First World War were mechanised 'Mules' purchased, followed by keel boats, between the wars, which were decked in craft, with auxiliary sails and diesel engines, able to venture further afield, to Grimsby and the Dogger Bank.<sup>30</sup> As early as the 1860's, trawlers were recognised as the most efficient mode of fishing,<sup>31</sup> yet in an assessment of the British commercial trawler fleet in 1917, Whitby owned only two trawlers, the Eleazar, WY. 105, of 111 tons, built in 1895, and the St. Mary, WY. 96, 99 tons and built in 1898.<sup>32</sup> Drifting was the preferred method of fishing at Whitby, which continued from sailing vessels to steamers. Ten steam drifters were hired from Whitby owners by the Admiralty during the First World War.<sup>33</sup> The Whitby steam fishing boats were mainly built elsewhere, such as at Galampton in Devon, but most of the cibles and luggers were built locally.<sup>34</sup>

The sources used in Tables 1 and 2 also provide details of the personnel manning the fishing boats owned at Whitby. In 1772, 251 men were employed aboard Whitby owned fishing boats compared with 240 full time and 150 casual in 1874, despite a significant increase in population in the hundred years between. Whilst the overall tonnage of fishing boats owned at Whitby declined from the 1870's to the end of the period in



question, the number of crew required to man these vessels also fell, but the total numbers actually employed in Whitby fishing boats increased from 390 in 1874 to 615 in 1903. This paradoxical situation may be explained by a change in the methods of fishing, an increased requirement of men with the advent of the steam trawler or by changes in the processing of the catch. It may reflect a statistical alteration in the persons counted, and include those less directly associated with the industry, such as bait gatherers and crab dressers, although the title of the return used in Table 2 suggests that only those 'employed in Whitby fishing boats' were included. The numbers, and proportion, of those employed in the fishing industry on a part-time basis shows a steady decline, possibly due to an increased degree of specialisation of skills required in the industry. The relationship between the number of men serving on board and the tonnages of fishing vessels, expressed as man/ton ratios are also shown in Table 3. From 20 men per hundred tons at the end of the eighteenth century, the efficiency of Whitby fishing boats in regard to the number of men employed declines, with the decrease in the average tonnage of fishing vessels owned at the port. By the end of the period in question over a hundred men per hundred tons of fishing boats were employed. Thus, on average one fisherman was employed for every ton of fishing boat. Of all the trades and activities of Whitby owned vessels, fishing saw the highest man/ton ratios; a small coaster could operate with a master, mate and boy, but a fishing vessel required men not only to navigate the craft but to prepare the nets or lines, or to drop the lobster and crab pots, and to bring in the catch at the end of the day. A large steamship could achieve economies of scale in manning, but the fishing industry remained basically labour intensive.<sup>35</sup>

It is possible to argue that the fishing industry of Whitby employed considerably more persons than Table 3 suggests. The supporting industries

of bait collection and preparation, of fishing boat construction and the making of equipment, including lobster and crab pots, in addition to fishmongering and retailing, provided considerable numbers with employment, especially the women of the area, who were particularly concerned with fishing for bait and dressing crabs for market. Young, in 1817, considered that 'the fisheries yield employment and support to about four hundred fishermen and their families and to many fishmongers, fishwives, pannier-men' and others in Whitby and the surrounding area.<sup>36</sup> Considering the large size of families in this period, the numbers of those involved in the Whitby fishing industry far exceeds the figure of 144 men in 1786, which includes those manning Whitby fishing boats only. By the period of the Napoleonic Wars, even if fishermen may be seen as no longer predominant in Whitby itself, the inhabitants of the villages of Staithes, Runswick and Robin Hood's Bay looked to the fishing industry as their sole means of livelihood.

How important was the fishing industry of the port of Whitby in relation to the total number of fishing vessels, from Whitby and from other ports, which used the harbour as a base for their activities during the fishing season each year? The Whitby Gazette, published weekly from 1857, in reporting the life of the port, often remarked upon the state of the harbour facilities and the vessels which entered and cleared. As discussed in Chapter Six, the port of Whitby was continually hampered by inadequate facilities, the silting up of the estuary and the severe navigational problems which were encountered in attempting to cross the bar and enter the harbour. In 1885 the Whitby Gazette reported the arrival of between eighty and ninety Penzance boats engaged in the herring fishery. But in 1886 the newspaper complained that Grimsby-owned vessels were predominant in catching the fish off the Whitby coast, but did not land there because of the inadequate harbour accommodation. 928 fishing

boats used Whitby harbour in 1887, but only 740 by 1888. The Cornish boats were especially notable for their absence, due to a complete inability to cross the bar and enter the harbour on their arrival off Whitby. By the end of the century the Whitby Gazette editors complained that the harbour authorities were 'cruelly indifferent' to the Whitby fishing trade, especially in their failure to supply a steam tug to assist the herring boats within the harbour.<sup>37</sup>

A detailed annual analysis of the decline in vessels using Whitby harbour may be seen in Table 4, which summarises the dues paid on boats of under and above fifteen tons, and the total dues paid on herrings and other fish landed at the quays of Whitby.<sup>38</sup> The total dues collected at Whitby on fishing vessels fell from over £366 in 1884 to under £72 in 1905. After 1906, the management of the harbour was transferred from the Trustees of Whitby Port and Harbour to Whitby Urban District Council, which probably resulted in a slight reversal in this trend, but suitable figures are not available. The decay of the harbour's facilities, as suggested by the local press, was principally responsible for the decline in revenue collected. Ironically, money was not coming into the harbour so the authorities could ill afford to carry out the necessary improvements, but until these improvements were made, fishing vessels experienced great difficulty in entering the harbour and paying the dues through mooring there and landing fish.

Table 5 shows that fish was exported coastwise and overseas from the beginning of the eighteenth century from the port of Whitby.<sup>39</sup> The 1702 levy of a farthing per chaldron on coals, for the upkeep of Whitby piers, also exacted one penny per score on all dried fish and mud fish shipped from Whitby, and three pennies per barrel on barrelled fish.<sup>40</sup> In the 1740's and 1750's, besides local consumption, 150 to 200 tons of fish were exported to Spain and the Mediterranean. By the 1780's, dogfish and

porpoises, who prey upon whitefish and shell fish, had seriously depleted the stock of fish, especially in the inshore fishery, and locally-caught fish was seldom sent to foreign markets anymore.<sup>41</sup> The fishing stocks had recovered by 1817, as the twenty-eight large boats then owned at Whitby produced 150 to 180 tons of dried fish in a year. 500 to 550 fish made up each ton, which were bought for £20 to £30 per ton in a good year and £13 to £20 in 1817. The greater part of the catch, an average of thirty tons per year for each large boat, was sold fresh, mainly from the fish market at Whitby itself. The proceeds from the Whitby fisheries have been estimated at between £25,000 and £30,000 per year in the early 1800's.<sup>42</sup> In a return of cod, ling and hake caught in the inshore fisheries in 1843, 95,372 fish were landed at Whitby, exceeded only by Stornoway, Anstruther, Eyemouth, Orkney and Shetland, and only three ports produced more cured fish than Whitby, which totalled 4,054 cwt., compared with a U.K. total of 77,207 cwt.<sup>43</sup> In 1857 the Whitby Gazette reported the largest quantity of herrings ever sent by rail in a period of only three days, on which the railway dues alone amounted to £530. In a meeting of the Whitby Harbour Trustees in 1879, when an application was put forward for more harbour accommodation for the fisheries, it was argued that fish were more valuable than anything else brought into Whitby harbour, totalling up to £40,000. The total value of fish landed in 1886 was estimated as £22,008, including £15,612 for herrings alone. By 1909 it has been recorded that the Whitby fishing trade earned £1,922 from herrings, pilchards and sprats, £4,959 with shellfish and £2,201 with other fish, making a total of £9,082. This decline in profitability matches the decrease in fishing vessels owned at the port and visiting it. The 1909 figure shows a further reduction from the estimated value of fish caught off Whitby in 1892 as £12,372. These figures could be increased if the landings at the creeks and members of the port of Whitby were taken into account, as over £8,000 worth of fish was brought into

Staithes in 1909, almost equalling the head port.<sup>44</sup>

One of the reasons for the decline in the profitability of the Whitby fishing fleet in the late nineteenth century was the local opposition to the adoption of trawling. James Fell, a Staithes fisherman giving evidence in 1863, maintained that in the 1840's, a boat in the inshore fishery could catch 700-800 cod in a week, with a ton of halibut and many skate and haddock. Twenty years later only eight or nine score, or 160-180, was the average, worth about £10 per week compared with £20 or £30 previously, and halibut and turbot were scarce.<sup>45</sup> At Staithes, herrings were the main catch in August and September, and other prime fish were sole, turbot, brill and cod. Fish regarded as offal were haddock, plaice and whiting.<sup>46</sup> Not only were less fish caught, but they were much smaller than before, and this was blamed exclusively on smacks fishing by beam trawl, which brought up all types of fish, both adult and immature. Even the traditional shell fish industry was disturbed. Fell complained that there was no longer anything to catch by the long-line method, and that the smacks 'will trawl themselves out and do for us too'. Robert Verrill, a fellow fisherman, agreed that it was rare to see a cod of over four stone, and John Trattles, a fisherman and boat-owner, considered that the offshore fishery to the Dogger of local boats had decreased significantly in the twenty-five years previous to 1863.

Yet although fishermen of Whitby and its member creeks and harbours, by persisting in their use of the long line and drift net methods of fishing, became uncompetitive in comparison with trawling and the use of steam fishing boats, they benefitted by the coming of rail travel. Fish could now be sent to the large inland markets much faster than before. Tons of fish forwarded from Whitby by the North East Railway rose from 1,696 tons in 1859 to 3,397 tons in 1863, and 2,138 in 1864.<sup>47</sup> The advent of the North East Railway at Whitby made a significant difference

to the fishing industry of the port and, with the interest of that railway company in other fishing ports, the existence of a traditional involvement in the fishing trade at Whitby may have had an important bearing on the decision of the railway company to establish a station and quay there. The railway was especially beneficial to the fishing industry when, in 1880, the fish pier was improved so that fish could be easily transported from there directly to the trains.<sup>48</sup> In a recent analysis of the supply, distribution and consumption of fish in Britain, it was stated that rail transport greatly improved the supply of inland areas with sea fish. Many, especially those caught by the line, were kept alive during the journey.<sup>49</sup> Whitby-caught fish arriving at Billingsgate by the latter half of the nineteenth century included turbot between August and September and herrings between July and September.<sup>50</sup> The Whitby Gazette editors took pleasure in maintaining that Whitby-caught fish were the best available but admitted that the supply was often irregular and inadequate in quantity.<sup>51</sup> Possibly the improvement to the fish pier and regular rail services accounts for the increase in the tonnage of fishing boats owned at Whitby from the early 1880's as seen in Table 2, but the continuing decline of the Whitby fishing fleet after 1890 shows that this feature alone could not sustain the industry.

Table 1 suggests that the Whitby shipping industry was of national significance in the 1770's and perhaps earlier, at least in terms of the number of boats owned, yet a recent article considering the 'Changing Techniques and Structure of the Fishing Industry' in the eighteenth and nineteenth centuries fails to mention Whitby at all.<sup>52</sup> At a meeting of the Whitby Harbour Trustees in 1880, Whitby's poor fishing returns - only 3,600 tons of fish sent by rail in 1878 - was compared with 59,467 tons exported from Grimsby and 26,938 from Hull. An account of the 2,853 smacks and trawlers registered at sixteen East Coast ports shows the Whitby fishing fleet ranking only eleventh in 1884 and twelfth in 1885, with only

twenty-four and twenty-three vessels respectively. In the same return, up to 700 vessels each were owned at Grimsby, Hull, Lowestoft and Great Yarmouth. Of the East Coast fishing fleet of smacks and trawlers, only 0.8% was owned at Whitby. In 1893, whilst the catch of fish at Whitby was valued at £12,372, Scarborough's was worth £83,044, Hull's £420,631 and the total fish landed at Grimsby was valued at £1,269,019 in this one year only.<sup>53</sup>

Other East Coast ports engaged in the fishing trade overtook Whitby in importance during the mid nineteenth century, with the development of trawling in the central North Sea Fishery from Ramsgate, Scarborough, Hull and Grimsby. This was aided by the increase in size and efficiency of vessels at these ports, the extension of the railway network and the use of ice to keep fish fresh longer.<sup>54</sup>

The decline of the port of Whitby in this activity was due more to their failure to adopt trawling as a mode of fishing rather than the slowness in accepting steam fishing vessels. The British fishing industry as a whole saw very little use of steam even in the 1880's, except in hauling heavy gear on board boats. The change to steam as a motive power occurred on a large scale from the eve of the First World War only. By 1911, steam fishing vessels in the British fishing fleet totalled only 3,000 out of 18,000, or nearly 17%. A change in the nature of ownership and management of fishing vessels from individuals and families owning and manning boats to the ownership of large fleets by limited companies, which occurred at Hull and Grimsby in the 1870's and 1880's,<sup>55</sup> is not evident at Whitby. The Whitby Herring Company, formed in 1833,<sup>56</sup> had disappeared by the 1850's,<sup>57</sup> and most boats, especially cobbles, were owned by small family groups from Staithes and Robin Hood's Bay, together with their head port. Robert Milburn, an investor in Whitby steam-  
shipping, purchased seven steam fishing vessels between 1910 and 1914 but,

hard hit by war losses and increasing competition from the French and the Dutch, many Whitby steam fishing vessels were sold in the 1920's and 1930's,<sup>58</sup> and only in recent times has the Whitby fishing trade recovered its importance.

Finally, in considering the significance of fishing from the port of Whitby in relation to the activities of the port as a whole, it is clear that from the number and tonnage of vessels employed, the coasting and Baltic trades exceeded fishing in importance. The proportion of fishing boats to merchant ships generally at Whitby was under 10%, and only 0.4% in 1892: 962 tons of fishing vessels compared with 208,109 aggregate tons of steamships and 11,989 tons of sailing vessels. The number of men employed also appears small, yet to the crews and members of the port of Whitby they would have been a large proportion of the working population. An analysis of the census returns of 1841 for Robin Hood's Bay includes thirty-eight fishermen, over half of whom were from four families,<sup>59</sup> and the dominance of the fishing industry in employing local labour at Runswick has recently been described.<sup>60</sup> The cost of investing in fishing vessels compared with large sailing ships was slight, and the profits earned minimal, especially in relation to the earnings of Whitby whalers and transports. In 1816,<sup>61</sup> only nine fishermen and three fishmongers continued business in Whitby, as better wages could be earned in the booming shipbuilding industry, and in serving on board whalers and transports, but the fishing trade continued in Staithes, Robin Hood's Bay and Runswick. It has been suggested that 'the coming of steam and the decline of the sailing coaster forced many a shipyard to close, and Whitby reverted to a fishing port',<sup>62</sup> indicating that the fishing trade only flourished at Whitby when the other activities of the port declined. Thus, with the growth of steamship building at Whitby, the fishing historian Aflalo reflected that 'all the labour and



capital of the locality seem to have been attracted to the shipyards, and it looks as if the fish trade would follow the jet industry into oblivion'.<sup>63</sup> Fishermen from the creeks and members of the port of Whitby were more consistent in their adherence to this activity, and it was of them that Young wrote: 'though their gains are precarious, it is no uncommon thing for a careful fisherman to become a respectable shipowner'.<sup>64</sup> Examples are the Storms and Robinsons of Robin Hood's Bay, who earned sufficient profits to be able to invest in local tonnage.<sup>65</sup> In a random sample of Whitby-registered fishing boats at the end of the nineteenth century, shown in Table 3, of 109 crew members, only two resided in Whitby and the majority came from Staithes.<sup>66</sup> Thus, the member-harbours of the port of Whitby contributed to the fishing industry of the locality in the ownership, operation and manning of its fishing boats out of all proportion to the involvement of the head port. Only in the fishing industry, of all the maritime activities of the port of Whitby, was this the case.

The fishing industry formed the first links between the inhabitants of Whitby and the sea in the days of the monastery, and it eventually stimulated the building and owning of vessels and their entry into a variety of trades.<sup>67</sup> Fishing was undoubtedly one of the mainstays of the early Whitby economy, as Leland suggested; the earliest Collector to Board Letter Book of Whitby includes a letter from the Custom House, Whitby to the Inspector at the Office of Outports in London, dated 22 September 1722, attempting to explain the late payment of a bill and ending, 'I have sent three couple of the best dried cod and ling this place affords which I desire youll be pleased to accept they are ship'd this day on board the Mary, William Lyth, master, who will give you notice on his arrival. . .'.<sup>68</sup> The eighteenth century port books, summarised in Table 5, show that salmon, mud fish, cod, ling, white and red herrings, whiting and all kinds of dried and pickled fish was

exported from Whitby to Amsterdam, Norway, Sweden, Portugal, Spain and Rotterdam, and coastwise to London, Sunderland, Newcastle, Hull and Hartlepool.<sup>69</sup> The evidence of many shipments of fish from Whitby to Hull throughout the eighteenth century possibly suggests that Whitby's fishing industry exceeded Hull's in terms of catch in this period. Charlton, writing in 1779, in tracing the origins of shipping activity at Whitby, stemming from the requirement for the carriage of coal to the alum works, pointed out that the local fishermen, from their knowledge of the sea, were the first in that area to purchase tonnage and enter the North East coal trade.<sup>70</sup> Thus, in the origins of maritime activity at the port of Whitby, the fishing trade was of primary importance.

Yet from its significance in the growth of Whitby, the fishing industry declined and never approached the scale of the fishing trade at Grimsby or Hull. A number of factors may help explain this lack of development to full potential of the Whitby fishing industry: the antiquated docks and unnavigable harbour, whilst other dock systems were being expanded and rebuilt is possibly of primary importance in such an explanation. This was partly due to the concentration of local capital and interest in a fleet of steamships which had very little use for the port itself, at a time when the most powerful and influential members of the board of harbour trustees were important steam shipowners. The conservatism of local fishermen in their refusal to adopt new fishing methods, and their slow and piecemeal acceptance of new technology in their industry, further hindered the expansion of this activity at Whitby.

The popular image of Whitby as preserved in the photographs of Frank Meadow Sutcliffe of groups of rustic fishermen and decaying boats and cobbles<sup>71</sup> thus does not reflect the central concern of the port of Whitby as a major source of investment and place of building, of sailing and steam tonnage. This view serves to accentuate the dichotomy between the

activity of the shipping of the port and the relatively moribund state of the port itself. This discrepancy was so pronounced that even such proximity to major fishing grounds, and a tradition from medieval times of fishing activity, particularly in the herring and cod fisheries, could not sustain a significant contribution to the British fishing industry.

## REFERENCES: CHAPTER FIVE, SECTION FOUR, 1

1. Quoted by Rev. George Young, A History of Whitby, etc..., (Whitby, 1817), p.485
2. Dora M. Walker, Whitby Fishing, (Whitby, 1973), pp.4-5
3. J.R. Bagshawe, The Wooden Ships of Whitby, (Whitby, 1933), p.17
4. Young, Whitby, p.820
5. Bagshawe, Wooden Ships of Whitby, p.17
6. Walker, Whitby Fishing, p.2
7. P.R.O. CUST 90 / 75. Register of Licences for Fishing Boats of Whitby, 1808-1838, which lists 175 boats. Of a total of ninety-four persons investing in these vessels, only nine were not fishermen.
8. Of 279 males in Robin Hood's Bay in 1841, thirty-eight were fishermen. Notably over half of these fishermen were from four families, the Grangers, Storms, Harrisons and Pinkneys. Fylingdales Local History Group, 'The Parish of Fylingdales in 1841: an analysis of the census returns', North Yorkshire County Record Office Journal, 3 (1979). Table 3 of Chapter Seven shows that fishing was one of the only occupational groups that increased steadily from 1841 to 1871.
9. Bagshawe, p.17
10. Young, p.629
11. Report of the Commission appointed to inquire into the Sea Fisheries of the U.K., P.P., 1866, XVII, (3596.). Visit to Staithes, 30 September 1863, qq. 5074-86, 5309
12. C. on Sea Fisheries, P.P., 1866, XVII, (3596.), Report and Appendix
13. Walker, p.5
14. Peter Frank, Women's Work in the Yorkshire Inshore Fishing Industry, (Whitby, 1975)
15. Young, p.820
16. Walker, pp.4-13
17. Whitby Gazette, 2 January 1891
18. See Table 2
19. Young, p.821
20. P.R.O. CUST 90 / 75
21. Young, p.821
22. C. on Sea Fisheries, P.P., 1866, XVII, (3596.), qq. 5040-6, 5058-9, 5588
23. Lionel Charlton, The History of Whitby, etc..., (York, 1779), p.361
24. P.R.O. CUST 17 / 1-9
25. Young, p.485
26. P.R.O. CUST 90 / 75
27. Accounts and Papers: Statement of the number of boats, crews and persons employed in the herring, cod and ling fisheries, P.P., 1845, XLVIII, (621.), pp.100-1
28. Accounts and Papers: Annual Statements of Navigation and Shipping, P.P., 1884, LXXVIII, (c.3976.); 1884-5, LXXV, (c.4365.); 1886, LXIV, (c.4827); 1888, XCVII, (5399.); 1889, LXXV, (c.5731); 1890, LXXII, (c.6040); 1910, LXXXVII, (c.5292); 1911, LXXIX, (c.5840); 1912-3, LXXXV, (c.6398); 1913, CXI, (c.7021); 1914, LXXXII, (c.7616)
29. Reg. Ship.
30. Walker, pp.4-5

31. C. on Sea Fisheries, P.P., 1866, XVII, (3596.), summary of findings
32. F.J. Dittmar and J.J. Colledge, British Warships, 1914-1919, (London, 1972), p.214
33. Dittmar and Colledge, British Warships, p.232
34. Reg. Ship.
35. See Chapter Seven
36. Young, p.823
37. Wh. Gaz., 18 July 1885, 1 January 1887, 8 February 1889, 1 December 1899
38. Gerald Warburton Rooke and Frank Lockwood Terrett, 'The Reconstruction of Whitby Fish Quay', Journal of the Institution of Civil Engineers, (1958), Appendix
39. P.R.O. E 190 / 209/9 to 290/3, 1701 to 1790
40. See Chapter Six
41. Charlton, Whitby, pp.307, 327
42. Young, pp.822-3
43. See note 27, pp.98-9
44. Wh. Gaz., 1 August 1857, 13 September 1879, 25 June 1887, 11 September 1909
45. C. on Sea Fisheries, P.P., 1866, XVII, (3596.), qq. 5040, 5046, 5051, 5063-4
46. C. on Sea Fisheries, P.P., 1866, XVII, (3596.), report
47. C. on Sea Fisheries, P.P., 1866, XVII, (3596.), qq. 5041, 5058-9, 5076-5077, 5254, 5285, 5657, and Appendix 4
48. Wh. Gaz., 3 January 1881
49. D.J. Oddy, 'The Changing Techniques and Structure of the Fishing Industry', eds. T.C. Barker and John Yudkin, Fish in Britain: Trends in its Supply, Distribution and Consumption During the Past Two Centuries, Occasional Paper 2, Department of Nutrition, Queen Elizabeth College, University of London, (London, 1971), p.12
50. Walter M. Stern, 'The Fish Supply to Billingsgate from the Nineteenth Century to the Second World War', eds. Barker and Yudkin, (see note 49), pp.35, 37
51. Wh. Gaz., 2 January 1891
52. See note 49
53. Wh. Gaz., 10 January 1880, 14 March 1885, 14 April 1893
54. See note 49, pp.9-10, 12
55. See note 49, p.13
56. Whitby Repository, 3 New Series (1833), p.28
57. T. Whellan, History of Whitby, (York, 1976), reprinted from History and Topography of the City of York and the North Riding of Yorkshire, (Beverley, 1859)
58. Reg. Ship.
59. See note 8
60. J.S. Johnson, The Nagars of Runswick Bay, (Bakewell, 1973), and for a description of the Robin Hood's Bay fishing industry, the setting for the fictional Bramblewick, see Leo Walmsley, Three Fevers, (London, 1932)
61. Young, pp.575-6

62. Edgar J. March, Inshore Craft of Britain in the Days of Sail and Oar, (Newton Abbot, 1970), p.106
63. F.G. Aflalo, The Sea Fishing Industry of England and Wales, (London, 1904), p.226
64. Young, p.823
65. Reg. Ship.
66. Taken from the Crew Agreements
67. Charlton, p.307
68. P.R.O. CUST 90 / 1, Whitby Collector to Board Letter Book, 1721-4
69. P.R.O. E 190 / 209/9 to 290/3, 1701 to 1790
70. Charlton, p.307
71. Bill Eglon Shaw, Frank Meadow Sutcliffe: A Second Selection, (Whitby, 1978)

TABLE 1:

## WHITBY-OWNED FISHING VESSELS 1772-1786: NUMBER AND TONS COMPARED WITH NATIONAL TOTALS

Year	Whitby fishing vessels			Wh. fishing/ GB fishing %	Wh. fishing/ Total Wh. %	G.B. fishing G.B. total %
	No.	Tons	Av.			
1772	40	1200	30.0	5.3	10.3	3.9
1773	41	1230	30.0	3.4	9.2	5.3
1774	34	1020	30.0	2.6	7.1	5.7
1775	36	1080	30.0	2.6	7.7	5.9
1776	36	1080	30.0	2.5	8.1	6.2
1777	34	1020	30.0	2.5	6.2	5.9
1778	32	990	30.9	2.4	7.9	5.9
1779	32	990	30.9	2.8	8.7	5.4
1780	32	990	30.9	2.9	8.3	5.5
1781	32	990	30.9	3.1	9.3	5.1
1782	32	990	30.9	3.1	9.3	5.2
1783	32	990	30.9	3.0	8.1	4.9
1784	20	600	30.0	1.7	3.5	4.4
1785	20	600	30.0	1.4	4.3	4.9
1786	24	720	30.0	1.9	4.5	4.8
	Averages			2.7	7.5	5.3

Source: P.R.O. CUST 17 / 1-9

.....

TABLE 2:

## FISHING BOATS OWNED AT WHITBY COMPARED WITH ENGLAND (SAIL AND STEAM)

Year	Wh. tons		Whitby		England		Wh./Eng. (tons) %
	av.	No.	Tons	No.	Tons		
1870	4.1	354	1464	16195	127013	1.15	
1871	4.9	311	1522	15615	131092	1.16	
1872	5.0	301	1512	15331	140535	1.07	
1873	5.1	280	1439	15049	145134	0.99	
1874	5.2	274	1426	15029	150268	0.94	
1875	4.9	270	1329	14830	151041	0.87	
1876	4.9	277	1380	14809	160332	0.86	
1877	4.9	279	1372	13294	174174	0.78	
1878	5.3	268	1407	10786	182415	0.77	
1879	5.6	265	1478	10639	189006	0.78	
1880	5.8	252	1464	10524	194532	0.75	
1881	6.1	236	1428	10357	195348	0.73	
1882	6.7	217	1455	10373	203355	0.71	
1883	7.3	212	1554	8880	190517	0.81	
1884	7.9	228	1809	8622	197300	0.91	
1885	7.7	229	1763	8826	212176	0.83	
1886	7.9	231	1830	8447	216349	0.84	
1887	7.5	233	1748	8390	217346	0.80	
1888	7.2	232	1670	8417	215725	0.77	
1889	6.7	232	1547	8271	213542	0.72	
1890	5.2	227	1187	8050	208420	0.56	
1891	4.7	221	1048	8063	207535	0.50	
1892	4.7	205	962	8050	206649	0.46	

TABLE 2: (contd.)

Year	Wh. tons		Whitby Tons	England		Wh./Eng. (tons) %
	av.	No.		No.	Tons	
1893	4.7	206	967	8017	204794	0.47
1894	4.6	200	918	7998	201547	0.45
1895	4.4	205	911	7901	194442	0.46
1896	4.3	206	886	7911	191638	0.46
1897	4.0	203	815	7755	185142	0.44
1898	3.5	190	660	7643	178458	0.36
1899	3.4	186	640	7371	163944	0.39
1900	3.5	180	622	7190	156959	0.39
1901	3.4	184	633	6964	150109	0.42
1902	3.3	174	579	8189	154367	0.37
1903	3.2	182	587	8822	160096	0.36
1904	3.3	174	581	8962	162431	0.35
1905	3.4	175	591	9131	167499	0.35
1906	3.1	172	538	9332	178509	0.30
1907	2.7	186	501	9513	188718	0.26
1908	3.3	188	625	9574	191993	0.32
1909	3.3	186	605	9549	192160	0.31
1910	3.3	190	618	9965	191971	0.32
1911	3.6	188	677	9401	193472	0.34
1912	4.2	190	793	9283	194362	0.40
1913	4.1	179	739	9212	198419	0.37

## Steam fishing boats

Year	No.	Tons
1883	1	7
1884	1	7
1885	1	6
1887	1	12
1888	1	12
1889	1	12
1909	1	3
1910	1	3
1911	3	83
1912	6	168
1913	6	173
	23	486

av. 21

Source: Accounts and Papers, Annual Statement of Shipping and Navigation, P.P., 1869-1914

## INDEX OF TONNAGE OF FISHING BOATS OWNED AT WHITBY

1830 tons = 100 = 1886

Year	Tons	Index % fluctuations
1870	1464	80.0
1871	1522	83.2
1872	1512	82.6
1873	1439	78.6
1874	1426	77.9



TABLE 2: (contd.)

<u>Year</u>	<u>Tons</u>	<u>Index % fluctuations</u>
1875	1329	72.6
1876	1380	75.4
1877	1372	75.0
1878	1407	76.9
1879	1478	80.8
1880	1464	80.0
1881	1428	78.0
1882	1455	79.5
1883	1554	84.9
1884	1809	98.9
1885	1763	96.3
1886	1830	100.0
1887	1748	95.5
1888	1670	91.3
1889	1547	84.5
1890	1187	64.9
1891	1048	57.3
1892	962	52.6
1893	967	52.8
1894	918	50.2
1895	911	49.8
1896	886	48.4
1897	815	44.5
1898	660	36.1
1899	640	35.0
1900	622	34.0
1901	633	34.6
1902	579	31.6
1903	587	32.1
1904	581	31.7
1905	591	32.3
1906	538	29.4
1907	501	27.4
1908	625	34.2
1909	605	33.1
1910	618	33.8
1911	677	37.0
1912	793	43.3
1913	739	40.4

Source: Accounts and Papers, Annual Statement of Shipping and Navigation, P.P., 1869-1914

## FISHING BOATS OWNED AT WHITBY OF TOTAL TONNAGE OWNED AT WHITBY: TONS

<u>Year</u>	<u>Fishing</u>	<u>Total Whitby</u>		<u>% Fishing/Total Wh.</u>
		<u>Steam</u>	<u>Sail</u>	
1870	1464	3403	64759	2.1
1871	1522	6232	61730	2.2
1872	1512	13687	55090	2.2
1873	1439	14188	52475	2.2
1874	1426	15767	49424	2.2
1875	1329	21378	47736	1.9
1876	1380	23933	45175	2.0
1877	1372	31389	42423	1.9
1878	1407	39534	39289	1.8

TABLE 2: (contd.)

<u>Year</u>	<u>Fishing</u>	<u>Total Whitby</u>		<u>% Fishing/Total Wh.</u>
		<u>Steam</u>	<u>Sail</u>	
1879	1478	52948	34648	1.7
1880	1464	65090	29151	1.6
1881	1428	72797	25839	1.4
1882	1455	81518	22457	1.4
1883	1554	87538	20215	1.4
1884	1809	93736	18399	1.6
1885	1763	94681	17939	1.6
1886	1830	95751	16036	1.6
1887	1748	101915	15208	1.5
1888	1670	122884	14769	1.2
1889	1547	146227	13656	1.0
1890	1187	169989	13123	0.6
1891	1048	195136	12620	0.5
1892	962	208109	11989	0.4
1893	967	200472	11051	0.5
1894	918	197093	11085	0.4
1895	911	199026	10904	0.4
1896	886	194119	10551	0.4
1897	815	187270	9867	0.4
1898	660	182962	9786	0.3
1899	640	191766	9510	0.3
1900	622	189617	9429	0.3
1901	633	198373	8533	0.3
1902	579	195375	8571	0.3
1903	587	190412	8493	0.3
1904	581	200640	7880	0.3
1905	591	188366	7980	0.3
1906	538	197884	7662	0.3
1907	501	197151	7662	0.2
1908	625	195701	7454	0.3
1909	605	185484	7354	0.3
1910	618	184310	7267	0.3
1911	677	182949	7267	0.4
1912	793	176382	7344	0.4
1913	739	166213	7305	0.4

Source: Accounts and Papers, Annual Statement of Shipping and Navigation, P.P., 1869-1914 and Reg. Ship.

TABLE 2: (contd.)

## STEAM DRIFTERS REGISTERED AT THE PORT OF WHITBY, 1910-1914

<u>Name</u>	<u>Year built</u>	<u>Gross</u>	<u>Tons Net</u>	<u>hp</u>	<u>Owner</u>	<u>Fate</u>
E.J.M.	1910	72	25	28	Robt. Milburn, Whitby	Sold Petershe 1913
Roburn	1911	83	36	21	Robt. Milburn, Whitby	Sunk by Germa sub., 1916
Oburn	1912	93	32	26	Robt. Milburn, Whitby	Sold Yarmouth 1929
Alaburn	1912	85	28	20	Robt. Milburn, Whitby	Sold Grimsby, 1928
J. Burn	1913	90	41	26	Robt. Milburn, Whitby	Sold Yarmouth 1929
Aspire	1914	62	39	20	Edward Turner, Whitby	Broken up, 1928
Energy	1914	62	39	28	Edward Turner, Whitby	Sold Yarmouth 1917
Wyeburn	1914	94	41	26	Robt. Milburn, Whitby	Sold to Dutch 1939
Eskburn	1914	90	41	26	Robt. Milburn, Whitby	Sunk in collision, 19

Source: Registers of Shipping, Custom House, Whitby

.....

TABLE 3:

## MEN EMPLOYED IN FISHING IN WHITBY OWNED FISHING VESSELS AND NATIONALLY

<u>Year</u>	<u>Whitby No.</u>	<u>G.B.</u>	<u>%</u>
1772	251	6118	4.1
1773	258	8949	2.9
1774	204	9091	2.2
1775	216	9906	2.2
1776	216	10475	2.1
1777	204	10148	2.0
1778	198	9928	2.0
1779	198	8762	2.3
1780	198	7495	2.6
1781	198	7158	2.8
1782	198	7483	2.6
1783	198	7635	2.6
1784	120	8328	1.4
1785	120	9239	1.3
1786	144	7823	1.8

Source: P.R.O. CUST 17 / 1-9

TABLE 3: (contd.)

## MEN AND BOYS EMPLOYED IN WHITBY FISHING BOATS

<u>Year</u>	<u>Fishermen and boys</u>		<u>Part time</u>	<u>Total</u>
	<u>Men required to</u>	<u>(Full time)</u>	<u>and casual</u>	
	<u>crew, for tonnage</u>			
	<u>of vessel</u>			
1874	821	240	150	390
1875	824	240	150	390
1876	809	240	150	390
1877	801	260	159	419
1878	761	266	159	425
1879	747	300	162	462
1880	780	300	160	460
1881	799	290	160	450
1882	792	295	160	455
1883	825	305	175	480
1884	810	305	175	480
1885	821	358	218	576
1886	832	385	214	599
1887	808	435	208	643
1888	801	435	210	645
1889	767	435	200	635
1890	660	410	220	630
1891	648	398	210	608
1892	599	351	205	556
1893	645	460	225	685
1894	629	467	216	683
1895	628	436	230	666
1896	641	417	207	624
1897	626	413	198	611
1898	587	495	203	698
1899	571	440	180	620
1900	551	420	170	590
1901	567	425	176	601
1902	539	420	170	590
1903	556	435	180	615
1904	535	420	174	594
1905	531	420	180	600
1906	518	420	180	600
1907	551	420	125	545
1908	556	420	130	550
1909	544	480	50	530
1910	563	430	50	480
1911	565	450	50	500
1912	587	450	50	500
1913	552	400	50	450

Source: Accounts and Papers, Annual Statement of Shipping and Navigation,  
P.P., 1869-1914

TABLE 3: (contd.)

## MAN-TON RATIOS IN THE WHITBY FISHING FLEET

<u>Year</u>	<u>Tons</u>	<u>Men</u>	<u>Men/00 tons</u>
1772	1200	251	20.9
1773	1230	258	21.0
1774	1020	204	20.0
1775	1080	216	20.0
1776	1080	216	20.0
1777	1020	204	20.0
1778	990	198	20.0
1779	990	198	20.0
1780	990	198	20.0
1781	990	198	20.0
1782	990	198	20.0
1783	990	198	20.0
1784	600	120	20.0
1785	600	120	20.0
1786	720	144	20.0

---

Source: P.R.O. CUST 17 / 1-9

## MAN-TON RATIOS IN THE WHITBY FISHING FLEET

<u>Year</u>	<u>Tons</u>	<u>Men</u>	<u>Men/00 tons</u>
1874	1426	390	27.3
1875	1329	390	29.3
1876	1380	390	28.2
1877	1372	419	30.5
1878	1407	425	30.2
1879	1478	462	31.3
1880	1464	460	31.4
1881	1428	450	31.5
1882	1455	455	31.3
1883	1554	480	30.9
1884	1809	480	26.5
1885	1763	576	32.7
1886	1830	599	32.7
1887	1748	643	36.8
1888	1670	645	38.6
1889	1547	635	41.0
1890	1187	630	53.1
1891	1048	608	58.0
1892	962	556	57.8
1893	967	685	70.8
1894	918	683	74.4
1895	911	666	73.1
1896	886	624	70.4
1897	815	611	75.0
1898	660	698	105.8
1899	640	620	96.9
1900	622	590	94.9
1901	633	601	94.9
1902	579	590	101.9
1903	587	615	104.8
1904	581	594	102.2
1905	591	600	101.5
1906	538	600	111.5

TABLE 3: (contd.)

<u>Year</u>	<u>Tons</u>	<u>Men</u>	<u>Men/100 tons</u>
1907	501	545	108.8
1908	625	550	88.0
1909	605	530	87.6
1910	618	480	77.7
1911	677	500	73.9
1912	793	500	63.1
1913	739	450	60.9

Source: Accounts and Papers, Annual Statement of Shipping and Navigation, P.P., 1869-1914

Note: The number of men given refers to those employed full time and part-time, not necessarily those required according to tonnage.

## THE CREWS OF WHITBY REGISTERED FISHING VESSELS

<u>Name</u>	<u>Official No.</u>	<u>Tons</u>	<u>Year of sample</u>	<u>No. crew</u>	<u>Main residing area</u>
Good Intent	45733	36.28	1868	9	Staithes
Rose of England	22149	36.53	1874	8	Staithes
Racehorse	22147	36.0	1874	8	Staithes/Runswick
Olive Branch	17459	34.44	1870	8	Staithes
Blue Jacket	17457	34.17	1870	8	Staithes
True Love	17454	29.77	1870	8	Staithes
Challenger	17453	31.45	1870	9	Staithes
Good Design	81213	41.0	1880	8	Staithes
Whitby	82668	42.0	1883	5	Scarboro'
Esk	82675	67.0	1883	5	Scarboro'
Felicity	82676	48.0	1883	9	Staithes
Lily	58786	43.94	1872	8	Staithes/Runswick
*Roburn	131835	36.0	1911	10	Yarmouth

\*steam trawler

Source: Based on Crew Agreements from the archive of the Maritime History Group, Memorial University of Newfoundland

TABLE 4:

## DUES PAID ON FISHING BOATS AND FISH LANDED AT WHITBY HARBOUR, 1883-1906

<u>Year</u>	<u>Boats</u> <u>-15 tons</u>			<u>Boats</u> <u>+15 tons</u>			<u>Fish</u>			<u>Total</u>		
	<u>£</u>	<u>s</u>	<u>d</u>	<u>£</u>	<u>s</u>	<u>d</u>	<u>£</u>	<u>s</u>	<u>d</u>	<u>£</u>	<u>s</u>	<u>d</u>
	1883	60	5	6	18	0	0	196	9	10	274	15
1884	76	12	6	22	15	4	266	15	11	366	3	9
1885	44	8	6	17	9	10	189	19	1	251	17	5
1886	43	15	0	16	12	4	153	12	11	214	0	3
1887	40	17	0	23	5	3	166	14	11	230	17	2
1888	39	2	6	17	8	7	145	9	6	202	0	7
1889	34	18	0	16	19	5	95	1	4	146	18	9
1890	60	1	6	14	4	2½	170	8	4½	244	14	1
1891	42	1	6	11	15	9½	110	14	6½	164	11	10
1892	52	2	0	6	16	4½	164	10	3½	223	8	8
1893	51	12	6	7	5	8	149	18	3½	208	16	5½
1894	40	0	6	6	1	11	144	2	2	190	4	7

TABLE 4: (contd.)

<u>Year</u>	<u>Boats</u> <u>-15 tons</u>	<u>Boats</u> <u>+15 tons</u>	<u>Fish</u>	<u>Total</u>
1895	£51 13 0	£6 7 10	£161 1 2	£219 2 0
1896	32 13 0	6 6 11	128 17 1	167 17 0
1897	28 6 0	5 7 11	89 10 8	123 4 7
1898	26 16 0	3 3 7½	88 18 7½	118 18 3
1899	15 18 6	1 0 10	66 1 7	83 0 11
1900	19 9 6	2 11 3½	78 10 9½	100 11 7
1901	27 13 0	3 4 8	91 9 2	122 6 10
1902	22 9 6	3 18 7½	89 1 5½	115 9 7
1903	19 0 0	4 9 5	81 1 1	104 10 6
1904	14 2 0	4 17 0	65 13 9	84 12 9
1905	12 11 0	2 12 3	56 12 10	71 16 1
1906	13 17 6	2 19 2½	58 2 5½	74 19 2

Source: See note 38

.....

TABLE 5:

EXPORTS OF FISH FROM WHITBY COASTWISE AND OVERSEAS 1702, 1703, 1704, 1705, 1707, 1708, 1709, 1710 and 1790  
CARGOES

<u>Year</u>	<u>Overseas</u> <u>No. cargoes</u>	<u>Coastwise</u> <u>No. cargoes</u>	<u>Destinations</u>
1702	2		Amsterdam
1702		8	London
1703	2		Norway, Sweden
1704	3		Oporto, Norway
1705	1		Norway
1706	2		Lisbon, Portugal
1707	1		Norway
1708	3		Spain
1709	2		Rotterdam, Spain
1709		14	London, Sunderland, Newcastle, Hull
1710	2		Barcelona, Gibraltar
1790		15	London, Hartlepool, Newcastle, Hull

Source: P.R.O. E/190  
Port Books, see note 39

## CHAPTER FIVE: THE EMPLOYMENT OF WHITBY SHIPPING 1700-1914

## SECTION FOUR: OTHER TRADES

2. The Baltic

The Baltic as an area of activity of Whitby shipping in the eighteenth and nineteenth centuries deserves close scrutiny through its importance in employing a large proportion of the shipping of the port, as seen in the analysis of the Seamen's Sixpence returns and the Port Books in the first section of this chapter. To Whitby, which enjoyed a close proximity to this area (see Map Three), the Baltic became a traditional area of employment, for the carrying trades in timber, hemp, pitch, tar, flax, corn and iron, and for the import of shipbuilding materials for the port's own use. A round voyage to Norwegian or Baltic ports rarely took more than two months, and thus Baltic trading could be combined with coal voyages, coastwise or transoceanic voyaging or whaling in a single year. A triangular traffic of Newcastle coal to Holland, then in ballast to Norway and the Baltic ports, and timber back to London or a Northern port was a common feature, especially of the eighteenth century.<sup>1</sup> This particularly appealed to Whitby shipowners, faced with a lack of local bulk commodities for export, and requiring an alternative market for timber in addition to the demands of the shipbuilders of the port.

An indication of the rise of Whitby shipping as a proportion of all English shipping passing through the Sound and thus entering the Baltic Sea in the eighteenth century is shown in Table 1.<sup>2</sup> Including vessels sailing with cargoes only, the importance of Whitby ships increased from under one per cent of all British shipping in the early years of the eighteenth century to nearly 21% in 1773. The principal problem with the Sound Toll Accounts, from which these figures are derived, is that they were not calculated according to place of ownership, or place of build of



vessels, but according to the home port of the master in each case. Thus these figures do not include Whitby-owned vessels whose masters hailed from other ports, and includes ships owned at other ports with Whitby-based captains. Study of the Statutory Registers of Whitby and the Seamen's Sixpence returns of Whitby-owned vessels suggests that the majority of Whitby-owned vessels were commanded by local men, although it is difficult to estimate the number of Whitby masters serving on board the ships of other ports before the period of the Lloyd's Captains Register. Many of the masters of Whitby ships were related to the builder or owner(s), and this practice suggests that relatively few masters were not of the port of registry of their ships. As has been considered in Chapters One and Two, many Whitby built vessels were sold to other ports, and thus an estimate of a figure slightly above the true picture of shipping owned at Whitby in the eighteenth century should be borne in mind in considering the data summarised in Tables 1 and 2. Table 1 shows a steady growth in the number of ships whose masters were based at Whitby, in comparison with the total number of English vessels passing through the Sound each year. The years of war with France in the early 1760's shows a decline in the trade, which had a similar influence on the whaling trade from Whitby, and the falling off of Whitby ships in the Baltic after 1776 may be explained by the outbreak of the war with America which resulted in vessels serving as transports. In the period before 1750, it would appear that only a negligible number of Whitby ships sailed into the Baltic Seas, as shown in Table 1. No registers of shipping were kept at this early date, so it is not known if the proportion of Whitby shipping employed in the Baltic of the total of all vessels owned at the port in this period was high or low. It has been argued, however, in Section One of this Chapter, that at the beginning of the eighteenth century, Whitby shipping was concentrated in the coal and coastwise trades

and that its involvement in the Baltic was a feature of the 1750's onwards.

When the shipping of other ports passing through the Sound is considered, and a comparison made with the port of Whitby (column 5 in Table 1), it would appear that Whitby's importance in this trade in relation to the other major ports of England was more consistent than the numbers alone would suggest. In 1700, Whitby ranked seventh, in 1711-2 fourth, in 1739 fifth and in 1753 fourth. After 1758, Whitby as the home port of masters commanding vessels trading to the Baltic ranked between fourth and second behind all other English ports, in this case Hull, London and Newcastle. In the years 1770-3, only London sent more vessels to the Baltic, and in 1775 and 1779-80, only Hull. Although these figures do not necessarily accurately reflect the actual number of vessels owned at Whitby and passing through the Sound each year, it would be fair to argue that in the eighteenth century, Whitby shipping played a major part in the traffic between England and the Baltic ports.

A more detailed analysis of shipping through the Sound in the years 1784 to 1793 has been made possible through the work of Hans Chr. Johansen of Odense University.<sup>3</sup> This has been summarised in Tables 2a to 2h. The Sound Toll Accounts have been analysed by calculating the number of passages through the Sound of vessels according to the home port of the master, the number of passages per year of each vessel, and passages relating to port of departure and port of destination. Table 2a shows, for the years 1784 and 1787-1793, the total number of passages through the Sound each year of masters whose home port was Whitby, and the number of individual masters. The total number of passages of English ships is also given, together with the number of all ships passing through the Sound of all countries. Appended to Table 2a is a percentage summary of these figures. The number of different masters is less than the total number of voyages to allow for repeated passages in the same year.

Masters occasionally varied in their statement of home ports each year but this was comparatively rare. The number of passages per year reaches a peak in 1792 but declined in 1793, possibly reflecting the outbreak of war with France which appears to have halted the trend of an overall increase in the number of passages per year since 1784. However, as a percentage of all English shipping, Whitby vessels voyaging through the Sound reached a peak in 1787, at nearly 17% of the national total. Although it has been suggested that this figure perhaps exaggerates the actual total of Whitby-owned vessels in this period, it represents an involvement of Whitby shipping in the Baltic trade beyond the proportion of Whitby-owned tonnage related to national tonnage as a whole, as seen in the Customs 17 figures discussed in the first section of this chapter. Shipping commanded by Whitby-based masters passing through the Sound reached a peak of 4.5% of all shipping in that trade in 1789.

Table 2b shows an analysis of the number of passages through the Sound achieved by each master per year. The large proportion of vessels making only one or two voyages per year suggests that many were engaged in other trades and activities in the same year besides their passage to the ports of the Baltic Sea. The length of time of a Baltic voyage would inevitably vary according to ports of call: St. Petersburg and Riga were the most distant from Whitby, in comparison with Copenhagen, for example. An analysis of the Crew Agreements, although of a much later date, shows that, on average, between three and five voyages per year were achieved by vessels trading to the Baltic. A further drawback of the Sound Toll Accounts is the lack of mention of the tonnages of vessels, so that an analysis of the size of these vessels and the aggregate tonnage that they represented is unfortunately not possible. In relation to the numbers of passages each year, the weather conditions in the Baltic also need to be taken into account. The freezing up of the northern ports of

the Baltic Sea and the Gulf of Bothnia in winter was common,<sup>4</sup> and voyages to the area as a whole would have been largely confined to the Spring, Summer and Autumn months of the year. This is further evidence that the Baltic trade was not necessarily the exclusive area of activity of vessels in any one year.

However, table 2b shows that an increasing proportion of vessels made three or more passages through the Sound each year. In 1784, only 39% of masters made three voyages or more, but by 1793 this had reached 55.9%, suggesting the increasing specialisation of Baltic traders in the later eighteenth century. Throughout the period 1784 and 1787-1793 as a whole, Whitby masters making three or more passages per year averaged 52.8%, whereas the national average was 41%, and of all shipping entering the Sound, only 33.7% of masters made three or more voyages per year. This possibly reflects the proximity of Whitby and the other northern ports, which served as the port of destination and port of departure for many Whitby ships, to the Baltic Sea, compared with other ports of the British Isles and the rest of Europe. Besides the Baltic countries themselves, only the Dutch were closer to the Sound than the East coast of England.<sup>5</sup>

Table 2c considers Whitby shipping in the Baltic in relation to other ports of England. It is immediately apparent that entrances and clearances of vessels from and to the Baltic were comparatively few compared with the number of passages of Whitby masters. The total number of passages achieved each year by these masters was between first and third in rank compared with other English ports. In 1787 and in 1791, masters referring to their home port as Whitby made passages through the Sound which in number exceeded that of any other single English port, including Hull and London. According to the number of individual masters, Whitby remained in fourth place throughout this period, suggesting that captains changed their home port only rarely. Thus by the end of the eighteenth century, the port of

Whitby was already of considerable importance for the supply of seamen and master mariners, which appears especially remarkable in the light of the small population of this area.

In Table 2d, the importance of Whitby as a port of departure and a port of destination of vessels in the Baltic trade is further examined. More vessels left Whitby for the Sound than called there on their return: many vessels departing from Whitby would have done so in ballast, and the market for Baltic raw materials and products within Whitby itself was small in comparison with other English ports, such as Hull, which supplied a large hinterland. In 1784, Whitby was stated as the port of destination only seventeen times in comparison with 1290 entrances from the Baltic at all English ports, or only 1.3%. Clearances from Whitby to the Baltic ports were only 3.2% in this year. If details of tonnages were given, the aggregate tonnage of vessels entering and clearing from Whitby may represent slightly higher proportions, but it is clear that Whitby's role in the Baltic trade was important in relation to its shipping rather than in the traffic of the port itself. The final columns of Table 2d show the overall total of all departures and destinations of shipping which passed through the Sound, and in each case the numbers are the same. This must fail to record vessels lost or captured whilst on voyage, and thus records only intended voyages, and not actual arrivals and departures. However, the variations between these totals would have been comparatively slight and would not alter the main pattern of these figures.

Table 2e shows a detailed breakdown of the results shown in Table 2c. In relation to the number of passages achieved by masters of vessels of the major ports of England, London was overall of the greatest importance, but Hull and Whitby closely rivalled the Metropolis in this respect. In each year, passages of Whitby masters exceeded the ports of Newcastle, Liverpool, Lynn, Scarborough and Shields. Most of these ports were larger

centres of population, commerce and capital than Whitby, yet their shipping rarely exceeded the scale of that connected with the port of Whitby according to the number of ships in the Baltic trade. It is probable that even if not all of these vessels were owned at Whitby, most of them were built there, and the sturdy and capacious construction for which Whitby ships were famed would have made them especially suitable for the carriage of timber and grain and other Baltic products. Newcastle and Hull were also of considerable importance in the Baltic trade, and thus Whitby's geographical proximity also influenced its role in this activity.

The number of different masters, as seen in Table 2a, is further examined in Table 2f, especially in comparison with other major English ports. The number of Whitby masters was relatively small compared with their total number of passages, reflecting the high number of voyages per year, as discussed in relation to Table 2b. Newcastle is as near the Sound as Whitby, yet with a larger number of vessels did not achieve the number of passages per year, so it is possible that Whitby vessels were remarkable for a greater than average productivity in this trade. Evidence of their high productivity is also apparent in the whaling trade, and was to a certain extent the result of the employment of larger than average vessels, although this would not necessarily affect the number of passages per year. Perhaps Whitby shipowners were prepared to take greater risks by sending out vessels to the Baltic later into the winter. This high productivity was not the result of a concentration on the nearer Baltic ports; an analysis of the Seamen's Sixpence Returns shows that St. Petersburg, Memel and Stockholm were more popular ports of call of Whitby ships in the Baltic than the nearer ports of Copenhagen and Dantzig.

Tables 2g and 2h consider in more detail the role of Whitby as a port

of destination of shipping voyaging in the Baltic Sea. At least half of the vessels clearing from Whitby for the Baltic returned to other ports for a market for their cargoes. In 1792 Whitby-based masters achieved a total of 518 passages through the Sound, yet in only 12 cases was Whitby itself the port of destination. London as a port of departure varied between 39% and 47% of the clearances, whilst Whitby varied between 3% and 5%. In each case, of all English ports, London was most important, followed by Hull, Newcastle, Liverpool, Lynn and then Whitby. It is probable that the majority of passages by Whitby masters were from London or the two most prominent east coast ports. London was even more important as a port of destination for shipping from the Baltic. Between 43% and 55% of all entrances in the Baltic trade in this period occurred at the port of London. Liverpool overtook Newcastle in this respect, as a more important place for the consumption of Baltic goods and for re-export.

The Sound Toll Accounts in this analysis include twenty-one different countries, of Scandinavia, the Baltic itself, France, Spain and the Mediterranean, Africa, Asia and America, a total of 523 ports. Of the number of passages each year by Whitby masters, a comparison can be made with other ports outside England which maintained an interest in the Baltic trade. In 1791, when the Whitby figure of 436 passages exceeded that of any other English port, only Amsterdam, with 510 passages, was more important in this context. In 1787, Copenhagen and Gothenburg, in addition to Amsterdam, were responsible for more passages through the Sound, and in 1792 only Amsterdam and London. Thus, the significance of the port of Whitby in the Baltic trades becomes even more apparent in comparison with foreign ports, especially those of closer proximity to the area.

In writing of the North European Trades, Ralph Davis wrote that 'for

more than half a century it was the source providing a larger volume of English imports than any other', and that all English ports took part in it, especially as the unnecessary transshipment of timber was expensive. He refers to London, Hull, Newcastle, Lynn, Boston, Yarmouth, Bristol and Liverpool as being particularly important ports in this trade.<sup>6</sup>

Thus recent work on the Sound Toll Accounts showing the significance of the port of Whitby was not appreciated in previous work on this area of trading. Recent work by Sven-Erik Astrom on the origins rather than the destination of timber from the Baltic has included an analysis of cargoes of timber in the years 1685 and 1784. He has noticed a change from timber shipped with mixed cargoes to specialised timber carrying vessels, with a widening of the sources of supply of timber from solely Norwegian to throughout the North European ports.<sup>7</sup> Perhaps this shift in emphasis influenced the increase of Whitby shipping in the Baltic in the course of the eighteenth century, especially with the rise of shipbuilding at the port and the rise in demand for shipbuilding materials. A widening of sources lowered the price of this basic commodity, and the increase in English shipping in this trade was also a result of the decline of Dutch commerce in the area. The Sound Toll Accounts also show the imbalance in the trading between Britain and the Baltic countries: Ralph Davis stated that 'little of the timber was paid for by the export of goods from England'.<sup>8</sup> In almost every year of the Sound Toll Accounts considered, entrances to English ports from the Baltic significantly exceed clearances, especially in the 1790's, as seen in Table 2d.<sup>9</sup>

The nature of the Baltic trade in the closing years of the eighteenth century and in the early decades of the nineteenth century was determined largely by the impact of the Napoleonic Wars. The problems of venturing into the Baltic in this period are indicated in the letter books of the Whitby shipowner, shipbuilder and merchant, John Barry.<sup>10</sup> In a letter of 1807 to Captain John Dixon of the Curlew, Barry gives instructions to



## load deals at Dantzig

I would have you to proceed immediately when you get the ship ready if no convoy is to be appointed in the course of ten days to get a licence to proceed without one and when you get to the Sound if Mr. Chapman [a Whitby merchant acting as agent to Barry] thinks there will be any danger of you being stopped at Dantzig by the enemy in that case go to . . . any port in Norway and get a cargo of good fir timber. . . you must be careful to have a right manifest when you come here and be sure not to smuggle anything either on my account or on your account. . .

The timber was destined for John Barry's shipbuilding needs, and it is clear that Dantzig timber was preferred, possibly because of a long-standing arrangement with Messrs. Uphagen and Company at Dantzig and the good terms offered, and the suitability of Dantzig deals rather than Norwegian redwoods. By sailing without a convoy, Barry was incurring considerable risk, yet he was insistent that the legalities of the voyage should be strictly observed, possibly reflecting stringent Customs authorities back in Whitby.

In the post war years John Barry's business was taken over by his son Robert. Freights were low and considerable responsibility was vested in the master to obtain the best rates and to keep expenses to a minimum, as seen in Robert Barry's letter to Matthew Dobson, master of the Dove in 1823. The importance of links with local agents and merchants in the Baltic is also further emphasised. Many of these merchants invested in shares in Whitby shipping, a practice which became even more popular in the Whitby steam fleet.<sup>11</sup>

On your arrival at St. Petersburg you must deliver your letters to Messrs. Thornton Melville and Company to whom you must address the ship for a homeward cargo and you must also make enquiry yourself what freights are offering for England. . . I would give the preference to London I have no doubt but you will get a cargo for there - if any other House should offer you anything that is better than Messrs. Thornton, Melville & Co. can give you must take it, but first acquaint them before you finally chose, and I would wish you to be guided entirely by them in your proceedings. . . . If you load hemp you will require deals and deal ends for dunnage, which you must also purchase on ship's account and I must caution you to be as careful as possible in your expenses as such small vessels as the Dove cannot in these times afford any extravagance. . .

The popularity of Baltic voyages among Whitby-owned vessels may be seen in the Barrys' Freight Book of 1822-31, which records 55 voyages of the family's ships. Eighteen of these voyages included Baltic ports: eleven to St. Petersburg, two to Archangel, Königsberg and Dantzig and one to Memel, equalling a third of all the voyages of Barry-owned ships. A picture of the profitability of shipping trading to the Baltic in the post war period is provided by Robert Barry's evidence to the Select Committee of 1833.<sup>12</sup> The accounts of the Sylph of 148 tons, built in 1828 and the 159 ton Nymph, built in 1830, both show an overall loss in the balance between receipts and payments. Profits were relatively small: the Nymph earned only £14 14s 5d during the whole year of 1832, and entered other trades to supplement these small profits. Years of overall loss were also common: the Sylph made a loss of £7 14s 3d in 1829, and a further loss of £74 19s in 1831. The Sylph cost £1900 in 1828 and was continuously employed in bringing grain and seed from the Baltic ports of Prussia and Russia. Her value in 1833 was estimated at only £1400, and the meagre profits earned failed to cover the depreciation on the vessel. The Nymph was the last vessel ever built by Robert Barry, at a cost of £1950. She was offered for sale in early 1833 at £1600, but no purchaser was found until she was sold to Teignmouth in 1836. The decline of British shipping in the Baltic trade was especially apparent in the evidence presented at the 1835 Select Committee, when it was stated that no British ships were being chartered from Memel and Dantzig, and that the importation of wood from Norway was exclusively in Norwegian tonnage. British tonnage in the Baltic had declined from half of the total to only a third by 1833, and this had further dropped to only 16% by 1835. It was suggested that the shipping of Northern nations was built, equipped and navigated at a cost much less than of British ships, and were thus still remunerative despite low freights. Duties on British tonnage carrying timber cargoes from the Baltic were also so high that in many

cases it was more profitable to carry a Baltic cargo to Halifax or another North American port, to take advantage of the lower colonial duty.<sup>13</sup>

Whitby shipping, together with the vessels of other British ports, never again held the prominent position in the Baltic trade that was enjoyed in the late eighteenth century. Of the intended voyages of Whitby-owned vessels recorded in the 1850 Lloyd's Register, only 23.5% of shipping was employed in the Baltic. By the late nineteenth and early twentieth centuries, the tonnage of Whitby sailing vessels in the Baltic trade showed a slight increase, but Whitby steamshipping, which carried a volume of cargo far exceeding the capacity of sailing vessels owned at the port, concentrated primarily upon the shipment of coal from the Tyne and South Wales to Port Said and Constantinople, and in the import of grain from the Black Sea ports.<sup>14</sup> By the 1890's, the only Northern ports visited by Whitby-owned vessels were Hamburg, Bremenhaven and Aarhus, ports only peripheral to the Baltic proper.<sup>15</sup> The shipbuilding materials and grain trades were the principal raison d'etre of the employment of Whitby shipping in the Baltic Seas and, with the supply of timber for the construction of ships from British North America and the eventual change in shipbuilding materials to iron and steel, together with the import of grain from the Black Sea and from the Prairies, the cargoes available at the Baltic ports lost their attractions. The impact of colonial preference also served to diminish the activities of British shipping in the Baltic Seas, and the owners of Whitby registered shipping looked further afield and away from traditional trading areas in their search for profitable cargoes.

## REFERENCES: CHAPTER FIVE, SECTION FOUR, 2

1. Ralph Davis, The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries, (London, 1962), pp.212-3, 215
2. Based on the findings of Nina E. Bang and Knut Korst, Tabeller over Skibsfart og Varetransport gennem Øresund, 1661-1783, og gennem Storebaelt, 1701-1748, (Copenhagen, 1930), pp.210-270
3. Hans Chr. Johansen, Unpublished tables of an analysis of Shipping through the Sound from the Sound Toll Registers, 1784-1793. Institute for Historie og Samfundsvidenskab, Odense Universitet, Odense, Danmark. An analysis of the Sound Toll Accounts is also included in Jake V.T. Knoppers, Dutch Trade with Russia from the Time of Peter I to Alexander I: a quantitative study of Eighteenth Century Shipping, Inter University Centre for European Studies, (Montreal, 1976)
4. Davis, English Shipping Industry, p.217
5. See Map Three, adapted from Phillips' Historical Atlas, Medieval and Modern, (London, 1927), p.57, Central and Eastern Europe in 1795
6. Davis, pp.213-4
7. Sven-Erik Astrom, 'North European Timber Exports to Great Britain, 1760-1810', eds. P.L. Cottrell and D.H. Aldcroft, Shipping, Trade and Commerce: essays in memory of Ralph Davis, (Leicester, 1981), pp.81-98
8. Davis, p.213
9. See J. Jepson Oddy, European Commerce, etc..., (London, 1805), pp.393-99, 444
10. John Barry to Captain John Dixon of the Curlew, 17 February 1807, and John Barry to Captain Matthew Dobson of the Dove, 12 August 1823, Wh. Lit. & Phil.
11. See Chapter Four
12. Select Committee on Manufactures, Commerce and Shipping, P.P., 1833, VI, (690.), qq. 6120-3, evidence of Robert Barry, supplemented with details from Richard Weatherill, The Ancient Port of Whitby and its Shipping, (Whitby, 1908), and Reg. Ship.
13. Select Committee on Timber Duties, P.P., 1835, XIX, (519.), evidence of Robert Carter, R. Anderson, H. Metcalfe and John Spence. See also David M. Williams, 'Customs evasion, colonial preference and the British tariff, 1829-1842', eds. Cottrell and Aldcroft (see note 7)
14. See Chapter Five, Section One, and Chapter Four
15. From a sample of steamship voyages taken from the Whitby Gazette weekly report of steamship movements, 1880-1914

TABLE 1:

SHIPS COMMANDED BY WHITBY-BASED MASTERS PASSING THROUGH THE SOUND  
1700-1783, WITH CARGOES

<u>Year</u>	<u>No. Whitby ships</u>	<u>Total Eng. ships</u>	<u>Wh./Eng. %</u>	<u>Ranking of Wh. cf. other ports</u>
1700	8	261	3.0	7th
1701	1	170	0.6	17
1702	1	69	1.4	9
1703	2	78	2.5	8
1704	-	70	-	-
1705	-	37	-	-
1706	-	33	-	-
1707	-	43	-	-
1708	-	28	-	-
1709	-	22	-	-
1710	3	82	3.7	6
1711	5	55	9.0	4
1712	3	91	3.3	4
1713	1	148	0.7	12
1714	1	194	0.5	13
1715	1	116	0.9	13
1716	-	123	-	-
1717	-	115	-	-
1718	1	91	1.0	11
1719	2	162	1.2	11
1720	2	164	1.2	12
1721	3	159	1.9	9
1722	5	196	2.6	8
1723	3	203	1.5	8
1724	-	227	-	-
1725	2	230	0.9	13
1726	4	229	1.7	9
1727	-	219	-	-
1728	4	232	1.7	8
1729	1	398	0.3	20
1730	5	273	1.8	9
1731	-	213	-	-
1732	3	257	1.2	8
1733	2	228	0.9	10
1734	2	225	0.9	10
1735	4	249	1.6	9
1736	3	254	1.2	12
1737	5	272	1.8	8
1738	11	283	3.9	6
1739	7	271	2.6	5
1740	3	254	1.2	12
1741	9	264	3.4	8
1742	5	221	2.3	9
1743	6	215	2.8	7
1744	8	170	4.7	5
1745	2	148	1.4	9
1746	1	161	0.6	16
1747	6	243	2.5	9
1748	9	180	5.0	5
1749	8	194	4.0	5
1750	19	235	8.0	5
1751	17	236	7.2	3

<u>Year</u>	<u>No. Whitby ships</u>	<u>Total Eng. ships</u>	<u>Wh./Eng. %</u>	<u>Ranking of Wh. cf. other ports</u>
1752	24	321	7.5	5
1753	25	310	8.1	4
1754	30	398	7.5	5
1755	35	421	8.3	3
1756	29	292	9.9	3
1757	21	268	7.8	5
1758	31	241	12.9	3
1759	21	227	9.3	4
1760	32	211	15.2	3
1761	19	172	11.0	3
1762	17	200	8.5	4
1763	24	300	8.0	4
1764	44	327	13.5	3
1765	20	388	5.2	4
1766	23	345	6.7	4
1767	40	415	9.6	4
1768	53	512	10.4	4
1769	88	525	16.8	3
1770	108	584	18.5	2
1771	113	571	19.8	2
1772	117	573	20.4	2
1773	129	618	20.9	2
1774	116	757	15.3	3
1775	143	828	17.3	2
1776	108	722	14.9	3
1777	103	799	12.9	3
1778	93	670	13.9	3
1779	91	504	18.1	2
1780	100	539	18.6	2
1781	76	566	13.4	3
1782	32	322	9.9	4
1783	91	786	11.6	4

Source: N.E. Bang and K. Korst, Takeller over Skibsfart og Varetransport gennem Øresund 1661-1783, (København, 1930), pp.210-270

TABLE 2a:

SHIPPING THROUGH THE SOUND - WHITBY  
PASSAGES PER YEAR OF WHITBY-BASED MASTERS

<u>Year</u>	<u>Home port (no. of passages)</u>	<u>No. of different captains</u>	<u>Total England &amp; Ireland</u>	<u>Total all ships</u>
1784	311	123	2221	10995
1787	360	113	2159	9774
1788	389	119	2520	9259
1789	398	124	2680	8858
1790	387	127	2910	9746
1791	436	135	2734	10465
1792	518	160	3422	12120
1793	371	127	2740	9930

TABLE 2a: (contd.)

<u>Wh. %</u>	<u>of Eng.</u>	<u>of Total</u>
1784	14.0	2.8
1787	16.7	3.7
1788	15.4	4.2
1789	14.9	4.5
1790	13.3	3.8
1791	15.9	4.2
1792	15.1	4.3
1793	13.5	3.7

Source: Based on an analysis of the Sound Toll Accounts by Hans Chr. Johansen, Odense Universitet, Danmark. (See note 3)

TABLE 2b:

## SHIPPING THROUGH THE SOUND: WHITBY

## NO. OF CAPTAINS MAKING 1 - 5+ PASSAGES IN TOTAL NUMBER OF PASSAGES

<u>Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5+</u>	<u>Total</u>
1784	34	41	18	17	13	123
1787	27	22	24	16	24	113
1788	30	22	20	9	38	119
1789	31	26	22	11	34	124
1790	33	30	20	14	30	127
1791	32	28	19	20	36	135
1792	39	33	17	24	47	160
1793	25	31	21	33	17	127

1792 (Eng. Wales, Ire.)	258	463	90	254	157	1222
----------------------------------	-----	-----	----	-----	-----	------

1792 (Total all ships)	1279	1927	449	735	449	4839
------------------------------	------	------	-----	-----	-----	------

Source: See Table 2a

TABLE 2c:

## SHIPPING THROUGH THE SOUND: WHITBY

## RANKING IN TERMS OF PASSAGE NUMBERS ETC. OF OTHER PORTS IN ENGLAND, WALES, AND IRELAND

<u>Year</u>	<u>Home port</u> <u>no. passages</u>	<u>No. different</u> <u>captains</u>	<u>As port of</u> <u>departure</u>	<u>As port of</u> <u>destination</u>
1784	3rd	4th	7th	10th
1787	1st	4th	5th	8th
1788	2nd	4th	5th	11th
1789	2nd	4th	5th	14th
1790	3rd	4th	6th	13th
1791	1st	4th	7th	10th
1792	2nd	4th	5th	8th
1793	3rd	4th	6th	14th

Source: See Table 2a

TABLE 2d:

## SHIPPING THROUGH THE SOUND: WHITBY

## NUMBER OF PASSAGES

## WHITBY AS PORT OF DEPARTURE AND PORT OF DESTINATION

<u>Year</u>	<u>Wh. Dep.</u>	<u>Wh. Dest.</u>	<u>Eng. Dep.</u>	<u>Eng. Dest.</u>	<u>Total Dep.</u>	<u>Total Dest.</u>
1784	42	17	1301	1290	10995	10995
1787	47	24	1306	1364	9774	9774
1788	42	19	1387	1482	9259	9559
1789	45	10	1253	1257	8858	8858
1790	33	11	1457	1663	9746	9746
1791	32	14	1600	1667	10465	10465
1792	49	29	1788	1918	12120	12120
1793	60	12	1586	1737	9930	9930

Source: See Table 2a

.....

TABLE 2e:

## SHIPPING THROUGH THE SOUND: WHITBY COMPARED WITH OTHER MAJOR PORTS:

## NUMBER OF PASSAGES BY CAPTAINS WHO REFERRED TO THAT PORT AS THEIR HOME PORT

<u>Year</u>	<u>Whitby</u>	<u>London</u>	<u>Hull</u>	<u>Newc.</u>	<u>L'pool</u>	<u>Lynn</u>	<u>Scarb.</u>	<u>Shields</u>
1784	311	342	358	280	102	116	103	141
1787	360	357	305	270	151	82	46	116
1788	389	502	295	349	133	84	56	162
1789	398	589	335	289	136	112	51	140
1790	387	606	403	343	191	108	72	178
1791	436	416	430	332	208	125	73	154
1792	518	533	448	429	232	117	111	240
1793	371	387	417	358	174	92	105	175

Source: See Table 2a

.....

TABLE 2f:

## SHIPPING THROUGH THE SOUND: WHITBY COMPARED WITH OTHER MAJOR PORTS:

## NO. OF DIFFERENT CAPTAINS

<u>Year</u>	<u>Total Eng. &amp; total all ships</u>	<u>Whitby</u>	<u>Lond.</u>	<u>Hull</u>	<u>Newc.</u>	<u>L'pool</u>	<u>Lynn</u>	<u>Scarb.</u>	<u>Shields</u>
1784	867 4969	123	192	138	126	62	51	46	75
1787	812 4333	113	194	116	122	72	32	20	59
1788	854 4210	119	285	129	151	65	27	23	72
1789	1079 3995	124	325	141	140	65	46	24	72
1790	1176 4386	127	348	175	139	105	44	30	86
1791	984 4554	135	210	183	137	112	49	31	78



TABLE 2f: (contd.)

<u>Year</u>	<u>Total Eng. &amp; total all ships</u>	<u>Whitby</u>	<u>Lond.</u>	<u>Hull</u>	<u>Newc.</u>	<u>L'pool</u>	<u>Lynn</u>	<u>Scarb.</u>	<u>Shields</u>
1792	1222 4839	160	287	187	185	121	55	46	109
1793	1026 4126	127	219	159	163	71	29	41	89

Source: See Table 2a

.....

TABLE 2g:

SHIPPING THROUGH THE SOUND: WHITBY COMPARED WITH OTHER MAJOR PORTS:  
THE PORT AS PORT OF DEPARTURE

<u>Year</u>	<u>Totals</u>	<u>Whitby</u>	<u>Lond.</u>	<u>Hull</u>	<u>Newc.</u>	<u>L'pool</u>	<u>Lynn</u>	<u>Scarb.</u>	<u>Shields</u>
1784	1035	42	406	209	173	124	49	15	17
1787	1025	47	409	214	120	166	40	6	23
1788	1090	42	489	208	177	107	36	7	24
1789	995	45	472	182	159	82	38	3	14
1790	1184	33	481	220	203	170	43	11	23
1791	1332	32	526	293	194	223	47	6	11
1792	1424	49	618	327	184	177	33	13	23
1793	1269	60	499	307	192	127	44	20	20

Source: See Table 2a

.....

TABLE 2h:

SHIPPING THROUGH THE SOUND: WHITBY COMPARED WITH OTHER MAJOR PORTS:  
THE PORT AS PORT OF DESTINATION

<u>Year</u>	<u>Totals</u>	<u>Whitby</u>	<u>Lond.</u>	<u>Hull</u>	<u>Newc.</u>	<u>L'pool</u>	<u>Lynn</u>	<u>Scarb.</u>	<u>Shields</u>
1784	928	17	397	229	79	130	56	6	14
1787	951	24	412	227	47	187	40	7	7
1788	1024	19	535	221	55	136	40	5	13
1789	886	10	453	206	54	107	45	5	6
1790	1243	11	678	211	79	209	45	2	8
1791	1262	14	557	299	73	264	47	5	3
1792	1372	29	621	322	76	228	62	16	18
1793	1368	12	759	299	91	143	46	9	9

Source: See Table 2a

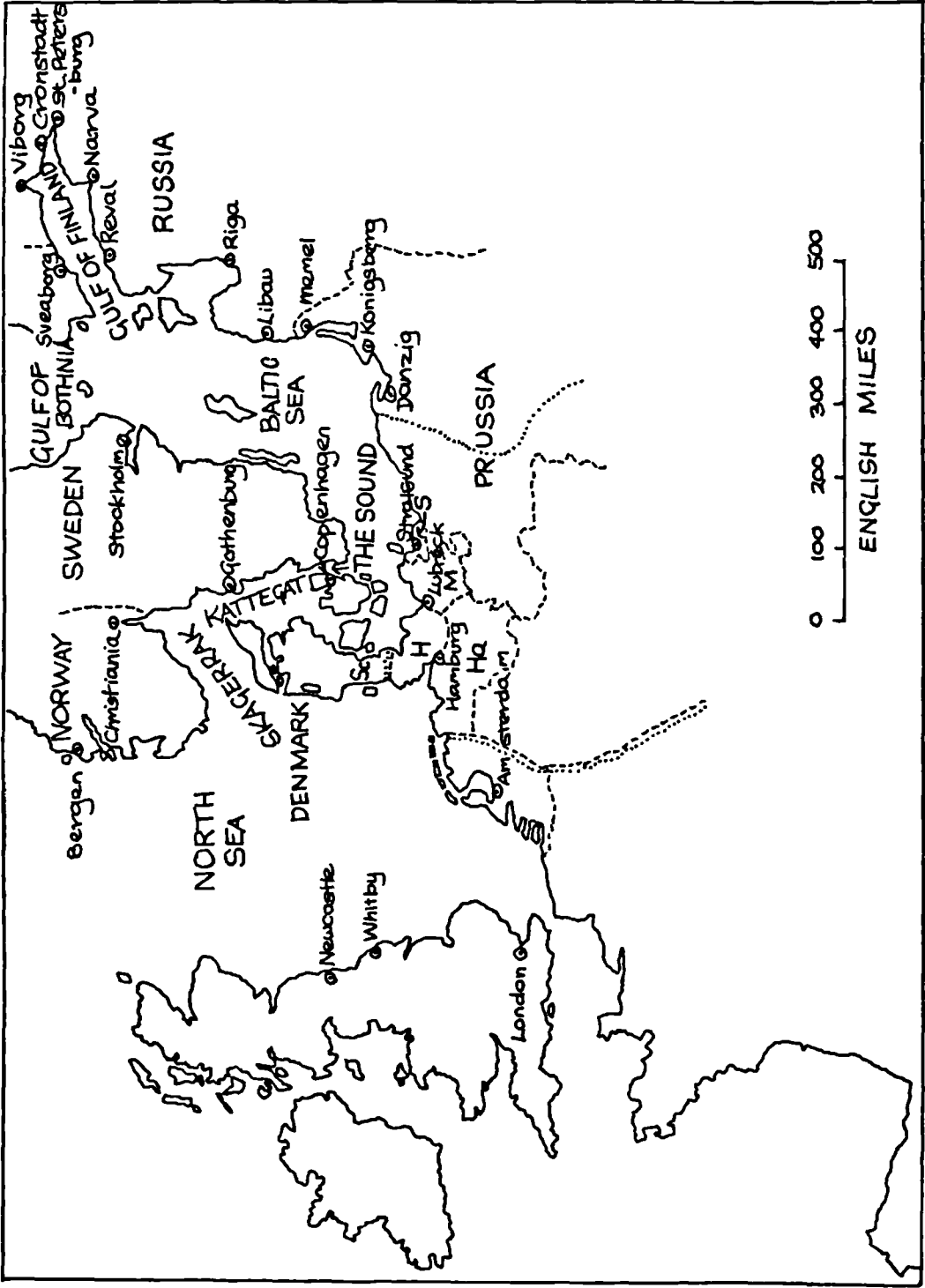
**MAP THREE :  
WHITBY AND THE  
BAL TIC, 1795**

..... THE HOLY ROMAN  
EMPIRE

- H HOLSTEIN
- S SWEDISH
- M POMERANIA
- Sc MECKLENBURG
- Ha SCHLESWIG
- Ha HANOVER

Based on maps included in  
Phillips' Historical Atlas,  
Medieval and Modern  
(London, 1927)

Commodities imported into  
England : timber, iron, pitch,  
tallow, hemp, flax, corn



## CHAPTER FIVE: THE EMPLOYMENT OF WHITBY SHIPPING 1700-1914

## SECTION FOUR: OTHER TRADES

3. The Emigrant Trade

For Quebec and the Canadas - with goods and passengers - and carries a surgeon - the fine new ship Columbus 467 tons burthen, H. Barrick commander, will sail from Whitby about the first week in April 1832. The ship having a poop and forecastle and seven foot six inches between decks, affords superior accommodation for passengers desirous to embark for America. For terms of passage (the ship finding water and fuel) and freight of goods, apply to Messrs. H. and G. Barrick, shipbuilders, Whitby, who will give letters of recommendation to their agent at Quebec; also ample information respecting the employment of labourers and small capitalists for the sale of land in Upper Canada. Early applications are requested, as the ship is expected soon to be filled up.<sup>1</sup>

Between 1821 and 1829 only 9,000 to 17,000 emigrants embarked each year from Britain to her colonies,<sup>2</sup> but by 1831 this had risen to 83,000, voyaging mainly to British North America followed by the United States. By 1852 emigration from British ports reached a peak of 369,000, by which time the most popular destination was the U.S.A. (244,000); Australia (88,000), with only 33,000 travelling to British North America.<sup>3</sup> Altogether, over 7½ million people emigrated from Britain in the first three-quarters of the nineteenth century.<sup>4</sup> Emigration was regarded by the Government as a means of reducing unemployment and poverty,<sup>5</sup> and could be conveyed by merchant shipping as an outward cargo for ships in the timber trade, and help to pay for a voyage that would otherwise be made in ballast.<sup>6</sup>

The popular view of the emigrant trade is principally one of Irish emigration via the port of Liverpool. Contemporary engravings in such periodicals as The Illustrated London News show scenes of parish priests blessing Irish emigrants as they left their villages and when embarking at Liverpool.<sup>7</sup> In the period 1860 to 1900, 5½ million emigrants left Britain, 4¾ million from Liverpool, with the majority originally from

Ireland.<sup>8</sup> The situation was entirely different in the period of the beginnings of emigration in the 1820's and 1830's. Emigrants left Britain from a variety of areas in this period, especially from the distressed parts of Scotland, Lancashire, Yorkshire, Wiltshire and Gloucestershire.<sup>9</sup>

The emigrant trade was far from being confined to the port of Liverpool in this period. In 1825, vessels sailed from eleven English ports carrying emigrants; by 1832 thirty-seven ports were engaged in this trade.<sup>10</sup> The dispersed nature of the emigrant trade in this period reflected the conditions in the country before the advent of the railways. The trade was not then the specialised movement of passenger traffic that it was to become with increased legislation and the use of steam tonnage. Vessels carrying emigrants before the 1850's were prepared to carry non-human cargo too, especially when only a relatively small trickle of emigrants were making the journey across the Atlantic. It was in this early period of the trade that the port of Whitby was the scene of embarking emigrants, when Whitby-owned shipping carried those of the local population looking for a new life on the other side of the Atlantic. The limited hinterland of Whitby meant that the shipment of local emigrants would be a trade small in volume and duration. Liverpool, on the other hand, had the credentials for an emigrant port which Whitby lacked, and therefore, by the 1840's and 1850's, dominated the emigrant trade when it assumed a more specialised character. Liverpool had a large population and hinterland with proximity to the major areas of emigration as well as owning a considerable tonnage of merchant shipping. Liverpool developed an infrastructure of organisation to deal with agents and government officials and, from the mid nineteenth century, a railway network to attract emigrants from not only the rest of Britain but providing links from Europe via such ports as Hull.<sup>11</sup> Whitby's entry into

this trade further illustrates the flexibility of deployment of the merchant shipping of the port, due to the ingenuity of local shipowners and shipbuilders in seeking maximum financial return from their tonnage. Whitby's involvement in the emigrant trade, which was confined to the 1820's, 1830's and 1840's, remained a minor activity associated with the port's timber trade with British North America.

Table 1 shows the number of emigrants embarking from Whitby for British North America, arriving at Quebec or Montreal between 1830 and 1837. The first Parliamentary figures for emigrants leaving Whitby are in 1830; evidence to be discussed later suggests that the trade began slightly earlier. In this year, Whitby was the seventh most important port in this trade in England according to the number of emigrants for whom it served as port of embarkation. Hull was then the foremost emigrant port with 2592 emigrants leaving that year. The shipment of emigrants attracted the shipowners of Hull with the early interest of the port in importing timber from British North America, when the price of European timber rose at the beginning of the nineteenth century. 1086 emigrants embarked from Whitehaven in 1830, followed in importance by Liverpool, London and Plymouth respectively. Ships out of Whitby carried 374 emigrants from the locality that year, one of nineteen ports engaged in this activity.

Thus the early period of emigration was marked by a small volume of trade in emigrants from a wide range of ports, in contrast with the concentration of emigration from specialised ports and the increase in emigrant traffic which were features of the second half of the nineteenth century. By 1831, the number of emigrants leaving Whitby had increased to 482, making the port the sixth most important in this trade. In the latter half of the 1830's, however, the flow of persons leaving via Whitby for North America declined abruptly, and it would appear that the supply of emigrants from the locality had dried up, or that they voyaged

via other ports, particularly from the nearer West coast of England, especially after the advent of rail travel. Evidence of people from Whitby showing an interest in emigration may be seen in their seeking of advice: 'A man from Whitby was told that a writer to an attorney would be out of place as an emigrant, but that a cook accustomed to the sea would be all right'.<sup>12</sup> The fact that a voyage to British North America was fraught with danger and that the prospective migrant incurred great risk was well known, and possibly dissuaded many from the attempt until the improvements in the trade by the late nineteenth century. Among many obituary notices was 'At Sea, on their passage out of Quebec, the three younger children of John Mewburn Esq., late of Whitby in Yorkshire, Surgeon - Rebecca Ellenor, Margaret and Arthur. Their remains were interred in one grave, in the Protestant Burial Ground, on Friday 25 May 1832. The funeral service was performed by the Venerable the Archdeacon of Quebec'.<sup>13</sup>

Table 2 shows an analysis of Whitby-owned ships engaged in the carriage of emigrants from the locality, reconstructing each voyage in this trade. Compiled from the Whitby Repository, the Statutory Registers of Shipping, and from local contemporary secondary sources, together with the Seamen's Sixpence returns and the relevant Lloyd's List and Underwriters' 'Green Books', the figures of emigrants carried by individual ships does not correspond exactly to Table 1 but are close enough to suggest that the majority of vessels engaged in the emigrant trade out of Whitby have been identified.<sup>14</sup> Nineteen vessels were for certain engaged in this activity, with a possible four additional vessels, in the carriage of approximately 1600 persons voyaging to British North America in the period 1828 to 1837, an average of 104 emigrants per vessel.

Table 2 further shows the small-scale nature of this trade. In 1830, five vessels carried 405 emigrants; in 1831, five carried 330, in 1832 four ships took 426; in 1834 three 301, and only a single vessel thereafter, the Majestic in 1835, the Medusa in 1836 and the Rushlands in 1837. The

The largest number of persons carried by one vessel was the 380 ton King William with 300 emigrants. The Gulnare of 338 tons carried 230 emigrants in 1830, and the Columbus, as mentioned in the advertising poster, was to carry 245 emigrants in her 1832 voyage. Such a large number of emigrants on one crossing was comparatively rare in the case of Whitby-owned vessels. The average tonnage of vessels in the emigrant trade from Whitby was 320 tons and the average number of emigrants only 104, so it is probable that other cargoes were carried too, as suggested by the Columbus' poster. The employment of a Whitby-owned vessel in the emigrant trade exclusively, even on just the outward leg of the voyage, was comparatively rare, especially compared with the specialist emigrant and passenger ships of the late nineteenth century. Of the fifteen voyages of Whitby ships in the emigrant trade for which detailed information concerning the number of persons carried is available, twelve were made with less than one hundred prospective emigrants on board, and only three, those referred to above, carried more than 200. In five voyages, only thirty emigrants or less were carried. One example of an emigrant-carrying vessel with other cargoes was the Albion, en route for Nova Scotia, with 'woollens, drapery, linen, ironmongers' ware etc. and 188 emigrants'.<sup>15</sup> Although emigrant traffic was concerned with cargoes which were high in value, it did not represent a large volume of tonnage, and it is well known that volumes, rather than values, are important in creating a demand for shipping services.<sup>16</sup> A voyage to Atlantic Canada or St. Lawrence ports took a 200-300 ton wooden sailing vessel from four to six weeks,<sup>17</sup> and such a voyage would not be undertaken in the carriage of emigrants only. Evidence suggesting that Whitby ships carrying emigrants were engaged in the shipment of North American timber is apparent in the government returns of the shipwrecks of timber ships. The Majestic, for example, was lost in the St. Lawrence whilst en route to load a homeward

timber cargo, and the Medusa foundered with a timber cargo off Flamborough Head in 1834, but was saved to voyage to Quebec again in 1836.<sup>18</sup> The Earl Moira, a timber ship which became waterlogged so that only the masts emerged from the water and the crew were forced into cannibalism to survive, owned at Whitby and sailing from Miramichi to Penzance, became a famous case quoted by those who argued for government intervention to prevent unsafe, overloaded timber cargoes. Especially after the decline of British tonnage in the Baltic, as outlined in Part 2 of this Section, an increasing number of Whitby-owned vessels, particularly those in search of timber cargoes for local shipbuilding needs, entered the BNA timber trade. The Freight Book of Robert Barry of 1822-31 records a large number of such voyages.<sup>19</sup> The Seamen's Sixpence returns also include Whitby shipping voyaging to Quebec, Montreal and Atlantic Canada: many of these were known to be carrying emigrants, as seen in Table 2, and it is likely that many returned with timber cargoes for Whitby or elsewhere. The analysis of the Custom House Bills of Entry in Section One of this chapter also points to this conclusion. The emigrant trade features in this study of Whitby shipping due to its relatively detailed documentation in contemporary sources, and the interest it attracted from local inhabitants and observers, rather than its commercial value to Whitby shipowners, and is included here to show the variety of occupations of Whitby-owned vessels and the varying means by which tonnage could be employed in order to maximise profits.

The owners of these emigrant-carrying vessels may be discerned from the Statutory Registers of Shipping. Table 3 summarises the details of ownership, and it is significant that fourteen out of twenty were owned by the persons who originally built them. Eight of these were owned and built by one man: Henry Barrick, whose interest in the local shipping industry stemmed from the activities of his father and brothers. John Barry, a shipbuilder, shipowner and merchant with vessels in the Baltic



timber trade, West Indies and India trades, built two vessels which subsequently carried emigrants and Robert Campion, from another long established Whitby shipbuilding family, built three. Thirteen vessels of the nineteen which have been positively identified as carrying emigrants, or nearly 70%, were operated by only three individuals, all of whom built their own ships. This situation further illustrates a feature of the Whitby shipping industry common throughout the whole period, that through their prosperity gained by the building of merchant shipping for other ports and other Whitby shipowners, Whitby shipbuilders were enabled to become important shipowners and merchants in their own right. The case of shipbuilders operating their own vessels can sometimes be interpreted as the result of a failure to sell their ships, in whole or in part. But it seems unlikely that the Barricks, for example, had found themselves in this situation, with their record of continuously turning out new tonnage which came under their own management.

Table 4 summarises the extent of Henry Barrick's role in the carriage of emigrants in Whitby ships. This makes possible a closer scrutiny of the patterns of voyages in this trade. In 1830, in one of the first voyages with emigrants on board, the Gulnare sailed for Quebec carrying 230 persons. This vessel is described in her certificate of registry as built in 1830 by Henry Barrick, and sailed in May of that year, her maiden voyage. With 230 emigrants on board a 338 ton ship, it is unlikely that any other major item of cargo was carried, and with his own shipbuilding needs in mind, it is possible that the Gulnare returned with timber, if not to Whitby, then to a larger shipbuilding centre. As seen in Table 2, five other Whitby-owned vessels, two of which were also built that same year, voyaged to Quebec. The Gulnare arrived at Quebec on 14 July 1830. Samuel Cunard, in giving evidence to the Select Committee on Emigration from Scotland, estimated that

the voyage time to Quebec took between a month and six weeks.<sup>20</sup> Thus the Gulnare's voyage was not exceptionally long and was probably successful, because the same vessel made another voyage to Quebec with emigrants the following year. She was then sold to Laurie, Stringer and Company of Liverpool in 1831 for £4,750.<sup>21</sup> It could have been the original intention of the builders to sell the vessel in any case, and two successful voyages may have made her appear a more attractive proposition to a potential buyer. Was £4,750 a good price for a 1-2 year old 338 ton ship in 1831 ? This equals a price of over £14 per ton; in 1840 the price per ton of Whitby-built ships was quoted as £13, and £9 10s in 1844.<sup>22</sup> So clearly the vessel fetched a good price. In March 1831 the second of Henry Barrick's vessels to carry emigrants set out on her maiden voyage to Quebec. A brig of 239 tons, she arrived at Quebec on 2 July, a long voyage having commenced in March, and again found a purchaser in Liverpool, Sir John Tobin, who paid £2,630 or £11 per ton for her in 1833. The Ida was re-registered at Greenock, another popular emigrant port, in 1840. In 1832 Barrick built and managed a further two vessels in voyages to Quebec. The Columbus sailed in April 1832 carrying 245 passengers, and was subsequently recorded in the Falmouth register in 1873 before she was sold to Norway in 1883. Barrick's second vessel of 1832, the Corsair of 264 tons, carried 76 passengers to Quebec, arriving on the 19 May, having sailed on 1 April, a voyage of only 49 days. In 1834 Barrick built the 310 ton barque Hindoo, which carried 106 emigrants to Quebec before transferring to the Liverpool register. Barrick's Arundel also sailed in 1834, with 173 passengers, leaving Whitby on 10 May and arriving at Quebec on 22 June. The loss of the Majestic at the mouth of the St. Lawrence on her maiden voyage must have caused Barrick considerable loss, and the voyage of the Medusa in the following year was the last voyage in which a Barrick-owned vessel carried emigrants.

Thus the series of vessels built and owned by Henry Barrick in the first half of the 1830's made, with a single exception, just one voyage carrying emigrants, and were quickly sold to other ports. Henry Barrick may have undertaken a voyage carrying emigrants when unable to sell his newly-built vessel, and on the principle that she was better employed than idle, but this may have soon ceased to be the case with the seven vessels that followed the Gulnare between 1831 and 1836. Barrick entered the trade in carrying emigrants when the national totals of persons leaving for British North America and the United States began to rise dramatically and abandoned the shipment of emigrants when local interest in migration declined by 1838, a year which saw a fall in emigration nationally from 72,000 in 1837 to 33,000 in 1838.<sup>23</sup> When the numbers leaving Britain rose again at the end of the 1830's, and in the 1840's and 1850's, local emigrants probably left from more conveniently located ports such as Liverpool. The Barrick family, as seen in Chapter One, had built ships and operated them from at least the late eighteenth century, must have regarded the carriage of emigrants as only one aspect of the employment of their vessels and one which, despite the interest which arose in the community, was relatively short-lived and, through the small volume of traffic that it represented, not particularly profitable.

Another aspect of the involvement of the port of Whitby in the emigrant trade was the employment of Whitby-built vessels in the carriage of emigrants from other ports. At least three of Henry Barrick's ships continued in the emigrant trade whilst owned at Liverpool - the Gulnare, Ida, and Hindoo. Other Whitby-owned vessels that had carried emigrants and were subsequently sold to Liverpool were the Crown and Captain Ross. The Intrepid and Earl Stanhope were sold to London, the King William was sold to Bristol, the Columbus to Falmouth and the Regina to Barbados.<sup>24</sup> The Crown when owned at Liverpool completed a voyage to

New Brunswick from Liverpool and appears in the London Seamen's Sixpence returns as sailing to Miramichi in 1829.<sup>25</sup> She is mentioned in John Barry's Freight Book on a timber voyage from Quebec in 1825, and it is probable that she continued to carry timber homewards and emigrants embarking at Liverpool outwards.

Whitby owned vessels found a further role in the emigrant trade when being hired by the Government to carry assisted emigrants, principally to Australia. In 1839, the John Barry of 524 tons, built and owned in Whitby, appears in a return 'of freights and other particulars connected with the running of Government Emigrant Ships 1837-9'.<sup>26</sup> The John Barry was engaged by the emigration department and was reported by the Admiralty to be taken up on 5 June 1837. When this vessel was engaged in London she was already 23 years old; of the return of 47 ships there were only four older ships thus employed. Other Whitby ships carrying emigrants were, as in other trades, far from new-built; the Crown was built in 1801 and still completing trans-Atlantic voyages in 1830. The emigrants embarked upon the John Barry at Dundee, and the owner, Robert Barry, was paid £4 17s 6d per ton. This appears as a very high freight when it is remembered that freights in the transport service in the American War of 1775-83 reached only 13s 9d per ton at the highest. The John Barry departed on 24 March 1837, and arrived on 13 September, a total of 112 days on voyage to New South Wales. Of the other vessels in the return, only three ships recorded faster voyage times. A total of 323 persons embarked, comprising eighty-seven male adults, ninety-five female adults, forty-four children between fourteen and seven years old, and ninety-seven children under seven. Ten births took place on the voyage, and twenty-five children and twelve adults died. This mortality rate is not high compared with the other vessels mentioned in the returns, and especially in view of the large number of very young children. The

expense of selecting emigrants for these assisted passages to Australia including surgeon's expenses and superintendence amounted to £988 16s 6d, freight cost £2,554 10s and victualling etc. £2,660, and thus a total of £6,203 6s 6d. Robert Barry thus received a freight of £2,554 10s for a voyage of less than four months, a voyage in the emigrant trade which earned considerably higher profits than previous passages in this employment. Another Whitby-owned ship carrying emigrants on behalf of the Government was the Hindoo in 1844.<sup>27</sup>

Whitby vessels also played an important part in the 'emigration' of convicts to Australia. Table 5 summarises voyages of vessels built in Whitby (and in some cases owned at the port at that time) to New South Wales between 1801 and 1849.<sup>28</sup> Of a total of 419 voyages, 37 were by Whitby-built vessels, a significant number from one port, when vessels were hired from all over the world, and many Calcutta-built and British North American ships were employed. Most of these vessels made a single voyage in the trade but those making three or more passages must have found the Government rates remunerative. Large vessels were obviously preferred to carry sufficient emigrants to justify such a long voyage, and Whitby shipbuilders, specialising in the building of ships and barques of between 350 and 550 tons, found another market for their vessels in the Australian convict trade. Whitby-built vessels were also to be found carrying convicts to other parts of Australia, but relatively few after 1850, by which time, according to the intended voyages of Whitby-owned vessels recorded in Lloyd's Register,<sup>29</sup> most Whitby ships were employed in the coal and coasting trades.

In conclusion, it may be seen that the port of Whitby's involvement in the emigrant trade, through Whitby ships carrying local emigrants, and in the hire of the Government in the carriage of assisted emigrants and convicts, was of short duration only. The majority of vessels in this

activity completed one passage only with emigrants on board, and the carriage of these persons never represented a large volume of traffic. They did, however, provide an opportunity for shipowners to reduce the losses of an outward voyage in ballast whilst engaged in the British North America timber trade. A feature of the employment of Whitby-owned shipping in the eighteenth and nineteenth centuries was that few trades remained profitable for long periods, and this was particularly true of emigration, which was subject to many fluctuations. The Irish famine, the gold rush in California and Australia and the American Civil War, all influenced the extent of the tide of emigration. It may be suggested that, from this consideration of a minor, short-term trade, that merchant shipping was flexible in its deployment almost by definition, and especially so in the case of Whitby, a small port owning and building shipping out of all proportion to its population and hinterland, and lacking consistent local demand for imports and exports. Furthermore, Whitby-built vessels were noted for their ability to enter almost any trade, their durability, stoutness and capacity contributing to an explanation of the prosperity of the port.

## REFERENCES: CHAPTER FIVE, SECTION FOUR, 3

1. Shipping Collection, Wh. Lit. & Phil.
2. Accounts and Papers: Emigration: a return of the number of persons who have emigrated to the colonies from Great Britain in each year since 1820, P.P., 1830, XXIX, (650), p.435
3. Accounts and Papers: Statistical Tables relating to Emigration and Immigration, P.P. 1863, XXXVIII (430) and P.P. 1896, XCIII (130).
4. O. MacDonagh, A Pattern of Government Growth 1800-1860. The Passenger Acts and their enforcement (London, 1961), p.15
5. Report from the Select Committee on Emigration from the U.K., P.P., 1826, IV, (404)
6. 1st, 2nd and 3rd Reports of Select Committee on Emigration from the U.K., P.P., 1826-7, V, (88), (237), (550)
7. Terry Coleman, Passage to America, (London, 1972)
8. Francis E. Hyde, Liverpool and the Mersey: the Development of a Port 1700-1970 (Newton Abbot, 1971), p.112
9. First Report on Select Committee on Emigration from the U.K., P.P., 1826-7, V, (88), p.211
10. Accounts and Papers: Emigration:, P.P., 1833, XXVI, (696), pp.280-1, P.P., 1838, XL, (389), pp.35-7
11. Hyde, Liverpool, p.112
12. Sidney's Emigrant Journal, July 1849, quoted in Coleman, Passage to America, pp.31-2
13. E.C. Guillet, The Great Migration: the Atlantic Crossing by Sailing Ship Since 1770, (Toronto, 1937), reprinting of an obituary notice in the Coburg Star, 6 June, 1832
14. Whitby Repository, (1828), p.63; (1830), p.224; (1831), p.160; (1832), p.159. Richard Weatherill, The Ancient Port of Whitby and its Shipping, (Whitby, 1908), pp.19, 36, 153-7, 207, 285. Captain D.S. Ramsdale, Particulars of Ships sailing from Whitby to Canada with Emigrants, Unpublished MS., Whitby Museum. Dr. English, Whitby Prints and Diary of Events, Unpublished MS., Whitby Museum. P.R.O. ADM 68/194-218. Lloyd's List 1828-1836, Lloyd's Underwriters' 'Green Books', 1828-1836
15. Weatherill, Whitby, p.36
16. 'What really mattered to the shipowner was weight and volume, not value. What created the demand for shipping was mass, not price'. Ralph Davis, The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries, (London, 1962), p.176
17. D.V. Glass and P.A.M. Taylor, Population and Emigration: Commentaries on British Parliamentary Papers, (Dublin, 1976), p.59
18. Select Committee on the Causes of Shipwrecks, P.P., 1836, XVII, (567.) and Select Committee on Shipwrecks of Timber Ships, P.P., 1839, IX, (333.). The case of the Earl Moira was quoted in S.C. on Shipwrecks of Timber Ships, P.P., 1839, IX, (333.), by George Charles Smith, Minister of the Mariner's Church, q.976

19. Barry Bequest, Shipping Collection, Wh. Lit. & Phil.
20. First and Second Report from the Select Committee on Emigration from Scotland, P.P., 1841, VI, (182), (333), qq.3037-8
21. Weatherill, p.153
22. S.C. on British Shipping, P.P. 1844, VIII, Evidence of Gideon Smales, p.93
23. Accounts and Papers, Statistical Tables Relating to Emigration and Immigration, P.P., 1863, XXXVIII, (430)
24. Reg. Ship.
25. P.R.O. ADM 68 / 217
26. Accounts and Papers, Emigrant Ships, P.P., 1839, XXXIX, (580), p.569
27. Accounts and Papers, Emigrant Ships, P.P., 1844, XXXV, (503), p.261
28. Charles Bateson, The Convict Ships 1788-1868, (Glasgow, 1969), Appendix 1. A similar list may be compiled from J.S. Cumpston, Shipping Arrivals and Departures, Sydney, 1788-1825, (Canberra, 1963), which includes the number of prisoners carried: 2379, in the years 1812-1824, on board the Whitby ships Indefatigable, 549, Atlas, 501, Mariner, 449, Shipley, 381, Chapman, 558, Ocean, 437, John Barry, 520, Neptune, 477, Hindustan, 424, and Brothers, 425 tons
29. See Section One of this chapter



TABLE 1:

EMIGRANTS EMBARKING FROM WHITBY FOR BRITISH NORTH AMERICA, ARRIVING AT QUEBEC OR MONTREAL, 1830-1837

<u>Year</u>	<u>No. Emigrants</u>	
1830	374	
1831	482	471
1832	470 <sup>1</sup>	236
1833		46
1834		273
1835		59
1836		71
1837		71 <sup>2</sup>

Sources: 1. P.P., 1833, XXVI, (696), pp.280-1. See note 10  
2. Accounts and Papers: Correspondence relating to Emigration, P.P., 1838, XL, (389), pp.35-7

Note: The majority of these emigrants were probably not from Whitby itself, as Table 5 of Chapter Seven does not show a significant decline in population in the town of Whitby from 1831 to 1841

TABLE 2:

VESSELS LEAVING WHITBY WITH EMIGRANTS, 1828-1837

<u>Year</u>	<u>Name</u>	<u>Tons</u>	<u>No. Emigrants</u>	<u>Dates</u>
1828	Crown	383	30	15.v.28 → 21.vii.28
1829	None			
1830	Intrepid	374	?	? → 9.ix.30
1830	Addison	233	80	Apr. 1830 → ?
1830	Gulnare	338	230	May 1830 → 14.vii.30
1830	Earl Stanhope	295	70	June 1830 → 9.ix.30
1830	Jackson	251	25	June 1830 → 9.ix.30
1831	Ida	239	?	March 1831 → 2.vii.30
1831	King William	380	300+	Apr. 1831 → ?
1831	Smales	161	30+	? → 30.iv.31
1831	Addison	233	?	
1831	Gulnare	388	?	
1832	Columbus	467	245	Apr. 1832 → ?
1832	Corsair	264	76	1.iv.32 → 19.v.32
1832	Regina	228	85	12.iv.32 → 29.v.32
1832	Smales	161	20	22.iii.32 → 20.v.32
1834	Hindoo	310	100	7.v.34 → 14.vi.34
1834	Captain Ross	310	28	9.v.34 → 22.vi.34
1834	Arundel	210	173	10.v.34 → 22.vi.34
1835	Majestic	504	?	
1836	Medusa	354	70	13.v.36 → ?
1837	Rushlands	?	?	

Sources: Whitby Repository 1828-1832  
Weatherill, Whitby  
Lloyd's List, Guildhall Library  
Reg. Ship.

TABLE 3:

## OWNERS OF WHITBY SHIPS IN THE EMIGRANT TRADE, 1828-1837

<u>Name</u>	<u>Built by/year</u>	<u>Owner(s)</u>	<u>Fate</u>
Crown	J. Barry 1801	Barry	Sold to Liverpool
Intrepid	Newcastle 1809	J. Wright	Sold to London
Addison	Sunderland 1824	A. Brown MM	Lost
Gulnare	H. Barrick 1830	H. Barrick	Sold to Liverpool
E. Stanhope	J. Langbourne 1830	Langbourne	Sold to London
Jackson	T. Brodrick 1829	T. Jackson MM	
Ida	H. Barrick 1831	H. Barrick	Sold to Liverpool
K. William	R. & N. Champion 1831	R. & J. Champion	Sold to Bristol
Smales	F. Spencelayh 1819	G. Smales	
Columbus	H. & G. Barrick 1832	H. & G. Barrick	Sold to Falmouth
Corsair	H. Barrick 1832	H. Barrick	
Regina	R. & J. Champion 1832	R. Champion	Sold to Barbados
Hindoo	H. Barrick 1834	H. Barrick	Sold to Liverpool
Captain Ross	R. Champion 1834	R. & J. Champion	Sold to Liverpool
Arundel	H. Barrick 1834	Chapman	
Majestic	H. & G. Barrick 1835	H. & G. Barrick	Lost
Medusa	H. Barrick 1836	H. Barrick	
Rushlands			
John Barry	J. Barry 1814	R. Barry	

Sources: Whitby Repository 1828-1832

Weatherill, Whitby

Lloyd's Register

Reg. Ship.

TABLE 4:

## VESSELS BUILT AND OWNED BY HENRY BARRICK IN THE EMIGRANT TRADE, 1830-1836

<u>Name</u>	<u>Tons</u>	<u>Date built</u>	<u>Voyage</u>	<u>No. Emigrants</u>
Gulnare	338	1830	Whitby May 1830 → Quebec 14 July 1830	230
Gulnare	338	1830	Whitby ?1831 → Quebec ?1831	?
Ida	239	1831	Whitby Mar 1831 → Quebec 2 July 1831	?
Columbus	467	1832	Whitby 16 Apr 1831 → Quebec ? 1831	245
Corsair	264	1832	Whitby 1st Apr 1832 → Quebec 19 May 1832	76
Hindoo	310	1834	Whitby 8 May 1834 → Quebec 14 Jun 1834	100
Arundel	210	1834	Whitby 10 May 1834 → Quebec 22 Jun 1834	173
Majestic	504	1835	Whitby ? 1835 → Quebec ? 1835	?
Medusa	354	1836	Whitby 13 May 1836 → Quebec ? 1836	70

Sources: Whitby Repository, 1828-32

Weatherill, Whitby

Lloyd's List

Reg. Ship.

TABLE 5:

WHITBY-BUILT AND WHITBY-OWNED SHIPS CARRYING CONVICTS TO NEW SOUTH WALES  
1801-1849

<u>Name</u>	<u>Rig</u>	<u>Tons</u>	<u>Date built at Whitby</u>	<u>No. voyages, dates</u>	<u>Days on voyage</u>
Indian	Ship	522	1809	1 1810	151
*Indefatigable	Ship	549	1799	1 1815	?
*Atlas III	Ship	501	1812	1 1816	181
*Mariner	Ship	449	1807	3 1816, 1825, 1827	370
Shipley	Ship	381	1805	4 1817, 1818, 1820, 1822	487
Ocean	Ship	437	1808	2 1818, 1823	267
Neptune	Ship	477	1810	2 1818, 1820	250
*John Barry	Ship	520	1814	4 1819, 1821, 1836, 1839	531
*Hindustan	Ship	424	1819	1 1821	118
Brothers	Ship	425	1815	2 1824	153
Hercules II	Ship	482	1822	2 1825, 1832	248
*Competitor	Ship	425	1813	1 1828	119
*Lady Faversham	Ship	430	1826	1 1830	112
*Captain Cook	Ship	452	1826	3 1832, 1833, 1836	398
Diana	Bark	320	1824	1 1833	165
*Royal Sovereign	Bark	336	1829	2 1834, 1835	271
Heber	Ship	443	1835	1 1837	118
Emma Eugenia	Bark	383	1833	1 1838	95
Waverley	Bark	436	1838	1 1839	115
*Whitby	Bark	437	1837	1 1839	125
Isabella II	Bark	323	1827	1 1840	141
*King William	Ship	380	1831	1 1840	111

Source: Charles Bateson, The Convict Ships 1788-1868, (Glasgow, 1969),  
Appendix 1, see note 28.

\* Owned at Whitby

## CHAPTER FIVE: THE EMPLOYMENT OF WHITBY SHIPPING 1700-1914

## SECTION FIVE: WARTIME

'Most of the ships in the transport service have originally been coalliers [sic] belonging to the ports of Whitby, Scarborough, Shields, Sunderland, and Newcastle.'<sup>1</sup> An observer of 1818 thus indicated the importance of Whitby-owned vessels among those hired to the Government in wartime. In 1809, at the peak of governmental employment of merchant shipping, 1214 vessels of over 250,000 aggregate tons were hired as transports. Nearly two million tons of shipping was registered at British ports in this year, therefore over 14% of tonnage found employment in the carriage of troops, stores and horses overseas.<sup>2</sup> To assess the impact of the outbreak of war in the eighteenth and nineteenth centuries on the shipping industry of the port of Whitby, a quantification of the number and tonnage of Whitby-built and Whitby-owned vessels serving as transports, together with wartime shipping losses and gains, has been attempted. The study of this impact is to be considered through the experience of the shipowners of Whitby, the shipbuilders, the seamen and finally of the port itself.

The reconstruction of details of Whitby-built and owned vessels serving as transports in, principally, the American and Napoleonic Wars, serves as a basis for an analysis of the importance of Whitby shipping in this activity. Richard Weatherill, a local historian writing in 1908, has identified a series of Whitby vessels as transports; most of his sources remain a mystery, but he appears to have consulted 'a register of 1814'.<sup>3</sup> Using this list, aided by reference to the Statutory Registers,<sup>4</sup> Seamen's Sixpence accounts,<sup>5</sup> and a sample of volumes of Underwriters 'Green Books',<sup>6</sup> together with available Admiralty and Transport Board contracts and registers,<sup>7</sup> Tables 2 and 3 have been compiled, showing the

number and tonnage of Whitby-registered and Whitby-built ships which were serving as transports in each year. It cannot be certain that all Whitby vessels acting as transports have been identified, and the length of service of each ship fully ascertained - one of the many problems was caused by the remeasurement of each vessel's tonnage by the Transport Board<sup>8</sup> and the subsequent difficulties in identification.

The shipowners, shipbuilders and seamen of the port of Whitby faced the changes brought by the wars of the eighteenth and nineteenth centuries with some ambivalence. Booms in shipbuilding and in shipping registered co-existed with increased risks, financial instability and national uncertainty. An outbreak of hostilities meant the opening of new trades with the closing of others, and a large demand by the Government for merchant tonnage, as reserves of ships and men employed by the navy in peacetime were low.

Firstly, the role of Whitby shipowners in hiring their vessels to the Government is outlined in Tables 2, 4 and 6, whereby a comparison may be made between the number of Whitby-registered vessels serving as transports and, as far as may be discerned, all transports, and the total Whitby-owned fleet. In 1806, a year of heavy demand for transports, over 26% of Whitby-registered shipping was in the hire of the Government. By 1814 this rose to 39%, and assuming that the survey of all Whitby-owned vessels becoming transports is not wholly complete, this proportion could be higher. An average of 6.9% of Whitby registered ships acted as transports in the war years between 1786 and 1815. If Table 1 and Table 6 are compared it may be seen that in every year except 1809 the percentage of transports among Whitby ships as a whole is much higher than the percentage of transports in British owned tonnage. The high proportion of Whitby ships among the total transports hired, over 8% in 1806, further points to the importance of this activity to the port. The

figure of 24.1% for 1803 may be slightly exaggerated as it is uncertain if all transports hired have been counted. No long series of the number of transports employed each year exists, and it is not stated that the tonnages recorded in the official returns were register tons, or the lower Transport Board calculation. However, these means of comparison with the total of Whitby transports show the truth in the contemporary observation that the port played an important role in this activity. As discussed in the first section of this chapter, before the war with America, and between 1783 and 1793, the majority of Whitby-owned vessels were engaged in the coal and coasting trades, or in the Baltic. Thus, on the outbreak of war, they were never far from the Royal Dockyards of Chatham and Deptford for survey, in comparison with vessels in more distant trades. Few vessels under 250-300 tons interested the Transport Board, which favoured the selection of Whitby-owned ships, which were generally of above average tonnage.<sup>9</sup>

One of the chief attractions to the shipowner of entering the Government service was undoubtedly the regular and high rates of pay. Table 8 shows how the rates per ton per month reached a peak in the early years of the war with France. The amounts received by individual ships shows their earnings over specific periods. Freight rates increased in a variety of trades,<sup>10</sup> particularly distant voyages which faced risk from privateers, yet rather than take a chance in a possibly lucrative expedition, many Whitby shipowners, used to the only limited profits available in the coal trade,<sup>11</sup> enthusiastically offered their vessels as transports. Even the many Quaker shipowners of Whitby, such as the Chapmans, willingly abandoned their pacific beliefs to employ their ships in carrying guns and soldiers. Transports were hired on tonnage or freight, as regular transports or for six or three months certain; they were paid according to the tonnage of the vessel, or per ton of stores,

per head of persons carried, or for a particular voyage only.<sup>12</sup> War related inflation influenced the increase in rates at their peak, so much so that the Wakefield, of 300 tons, Robert Braithwaite master, earned £2626 7s 2d for carrying stores for the Government between 1799 and 1801, whilst being paid at the rate of £5 10s per ton.<sup>13</sup> This appears an especially high rate of pay in comparison with voyages in the coal trade, such as the Matthew & Thomas,<sup>14</sup> and even exceeds the earnings of the Henrietta, a particularly successful Whitby whaler.<sup>15</sup>

However, Whitby shipowners faced certain disadvantages in employing their vessels in the transport service. Owners were often paid in Navy Bills when money was short, and there were often considerable delays in payment. The 1754-73 register of transports mentions the date 'when bills were past' and the period between this date and when the vessel was last in the service of the Government was often between six months and a year or more - a lengthy period when the shipowner and master were faced with the payment of wages, the bill for provisions and the costs of repairs to their vessels.<sup>16</sup> The owner of a transport who was unfortunate enough to suffer the loss of his ship in the service of the Government, could not always be sure of full compensation. Joseph Gibson of Whitby whose vessel Jupiter served as a transport in 1776 wrote to the Commissioners of the Navy that his ship

was struck with lightening which rent the mainmast in pieces, split the pumps and killed one man and . . . in a short time was entirely destroyed. . . your petitioner hopes that your Honours will think it reasonable that he should be indemnified from the loss occasioned by this unfortunate accident in the same manner as [if] the said ship had been really taken or destroyed by the enemy.

Despite several letters from Gibson, and a petition in his favour signed by seventeen of the most important shipowners of Whitby, there is no record that he was ever compensated.<sup>17</sup>

The huge expense of hiring transports sometimes led the Government to

alter its plans when it was decided that it could no longer afford to mount a proposed expedition. The carriage of troops to Sicily in 1808 required 8,600 tons at 25 shillings per ton per month, costing a total of £128,000. The Government abandoned its plan of carrying the war to the enemy in the Mediterranean, and all transport tonnage was ordered to return on the grounds of economy.<sup>18</sup>

In wartime, the shipowner faced a variety of options in the deployment of his tonnage. A vessel could continue in her usual activity, despite increased risks, or could venture into a new trade, to maximise profits or, in the event of extreme trading difficulties, lay up for the duration. A suitable vessel might also become a privateer, or a transport.<sup>19</sup> Table 6 shows that, when the demand for transports was particularly heavy, Whitby shipowners were prepared to take full advantage of the Government's favourable rates, and often continued the employment of their vessels in the transport service for a number of years.<sup>20</sup> Contemporary historians of Whitby point to the importance of this 'trade' to Whitby shipowners: in 1779, Charlton recorded that 'we have 251 ships belonging to the port of Whitby, the greatest part of which are always employed in the coal trade; but, since the unhappy disturbances arose in America, 70 or 80 of them are in the transport service, fifteen or twenty are in the East Country trade, fourteen or fifteen go to Greenland' with the remainder employed in the Baltic and coasting trades.<sup>21</sup> Young, in 1817, observed that 'in time of war, a great number of our ships, especially those of the greateast burden, have been employed in the transport service'.<sup>22</sup> A later writer, Weatherill, stated that 'During the long French War, and the American War, numbers of Whitby owned ships were hired by the Government for the transport service, no vessels of that day being better adapted for it. In a register of shipping for 1814 there are 92 Whitby built ships then in the service'.<sup>23</sup> Although this later reference has



proved impossible to trace, the impact of service as transports as an option in the employment of Whitby ships was significant. The geographer East saw the specialisation of Whitby shipping in the transport service, together with its peacetime role in the coal trade, as a function of the isolation of the port, and its need to look seaward for its economic opportunities.<sup>24</sup>

The importance of the transport service to the Whitby shipowner must not be exaggerated; Table 6 shows that, in many wartime years, under 5% of all vessels registered were thus employed, according to the calculations outlined above. The whaling trade, for example, achieved high profits and was continued despite the Napoleonic Wars, yet at the closing of hostilities the number of whalers increased.<sup>25</sup> Other trades, especially involving long distances, were continued, but faced the disadvantages of voyaging in convoy.<sup>26</sup> However, it was with specific reference to the transport service that a contemporary local poet wrote that 'this war has filled the owners' purses'.<sup>27</sup>

Secondly, the influence of warfare on the activities of Whitby shipbuilders must also be taken into account. Table 3 shows the totals of Whitby-built tonnage employed as transports, in each year, which in most cases is larger than transports owned at Whitby.<sup>28</sup> In comparison with Table 2, it would appear that the height of involvement of Whitby shipowners in the transport service occurs in 1804-1814, whilst the peak of activity of Whitby shipbuilders was in 1775-8 with a smaller increase in the Napoleonic Wars. However, these tables may not be so simply compared, as Table 2 shows the results of deliberate policy on the part of shipowners in employing their vessels in this 'trade', yet of Whitby-built vessels employed in this way, many were built some time before they were thus deployed, and the number built directly for the service is unknown. This does not necessarily answer the question of why Tables 2

and 3 show peaks in different periods. The American wars did not bring about a demand for transport tonnage to the same degree as that experienced during the Napoleonic Wars, and as transports were largely surveyed in London, the recruitment of vessels was also carried out there.<sup>29</sup> The transport board survey reports, made at Deptford Dockyard, of 1775-8 show a large proportion of Whitby-built vessels (32.7%) and those built in America amounted to 38.5%, with relatively few built at Chatham, in the River, or elsewhere.<sup>30</sup> No port of registry was given in these returns, but a check with the 1776 Underwriters' 'Green Book' shows that the majority of the owners of these vessels were based in London.<sup>31</sup> At the beginning of the American War, the Transport Board were able to satisfy their needs in London, but when this proved inadequate, the place of build may have been taken into account as possible ports for recruitment. A letter from the Admiralty to the Navy Board of 1776 illustrates this point:

I have laid before my Lords Commissioners of the Admiralty your letter. . . informing them that as the methods you have taken to procure transports have not produced the numbers the service requires, you have in order to forward it increased the rate of tonnage from ten to eleven shillings per ton, and agreed for six months' certain, at which notice has been given to the owners of the ships in London, Glasgow, Whitehaven, Liverpool, Bristol, Whitby and Hull. . .<sup>32</sup>

In a period of greater demand for transports, during the Napoleonic Wars, it is likely that this trend of the recruitment of vessels from the important shipbuilding outports continued, and thus many Whitby-owned, in addition to Whitby-built vessels owned elsewhere, served as transports.

Table 5 shows the proportion of Whitby built vessels serving as transports among all those engaged in this activity. Table 4 shows Whitby-owned transports and, as the majority of these were also built at Whitby, the figures may be combined to show a proportion much higher than the national average. The importance of Whitby-built vessels among all ships employed as transports may be partly explained by their large

average tonnage. A Whitehall official wrote to the Admiralty in 1742 on the transport of troops, saying that 'colliers of 300 tuns and such ships as draw the least water, will be the fittest for the service'.<sup>33</sup> The significance of Whitby ships in the coal trade as early as 1702-4 has already been discussed,<sup>34</sup> and thus there is a strong likelihood that many Whitby-built vessels had been employed as transports in the wars of the early eighteenth century for which records are less plentiful. Table 7, the results of an analysis of the 1807 'Green Book', further shows the vital role of Whitby shipbuilders in the construction of vessels which became transports in the years of war with France. Of a total of 63 ports which were the place of build of vessels surveyed as transports between 1799 and 1807, 23.7% of the total tonnage was built at Whitby. Other collier ports, which specialised in the building of relatively large vessels, built only a small proportion of the tonnage listed in Table 7, and only when the other coal ports are combined do they equal the importance of Whitby. With such a close proximity to the coalfields, and the continued demand for coal at the Metropolis, the ships of Newcastle and Sunderland were less likely to leave the coal trade and become transports, especially when the exodus of vessels from this trade led to improved freights. The supply of tonnage built at Whitby exceeded the local demand in this period, and Whitby became a traditional exporter of tonnage, which was not necessarily the case, to such a degree, at the other coal ports.

Table 7 also shows that the average tonnage of Whitby-built vessels in the transport service in this period in most cases exceeded that of other ports. Another feature of Whitby-built vessels that must have been attractive to the surveyors was their longevity and durability. Whitby-built ships up to thirty years old fulfilled the strict requirements of the transport board, and of forty-nine Whitby-built vessels surveyed at

Deptford between 1775-7, nineteen were over ten years old and six over twenty. Whitby-built vessels were generally described by dockyard officials as 'she is roomly and has good accommodations' and able to carry armaments, suggesting the qualities of capacity and strength possessed by these vessels.<sup>35</sup> The Adventure, built at Whitby in 1801 was described by the surveyors as 'in our opinion is one of the best of the vessels tendered for the service'.<sup>36</sup> The large number of Whitby-built vessels employed as transports in the American war as well as in the early years of the nineteenth century is seen in the records of the hiring of transports for specific periods in 1775 and 1776: on 20 October 1775, eight of the twenty-eight vessels hired were built at Whitby, on 23 December 1775 twelve of a total of thirty-eight, and between 19 February and 16 April 1776, eight of thirty-four newly hired vessels were Whitby-built.<sup>37</sup> That many owners of Whitby vessels serving as transports insisted that their ships be refitted at Whitby, and the employment of many Whitby shipyard workers in His Majesty's yards,<sup>38</sup> further shows the importance of the effects of war on shipbuilding at Whitby, and the high reputation enjoyed by Whitby shipbuilders in this period.

The large proportion of Whitby-built ships serving as transports may also be seen as a factor influencing the growth of the Whitby shipbuilding industry, especially in the years of the Napoleonic Wars. Reliable statistics of shipping built at British ports were not kept before 1786, but study of the shipbuilding output of the 1790's shows Whitby as second port according to tonnage launched in 1792 and 1793, and third in 1789, 1790, 1791, 1794 and 1806, which is summarised in Table 10.<sup>39</sup> In 1804, according to shipyard employees, Whitby was the sixth most important in England and eighth in Britain with 265 workers.<sup>40</sup> Young, writing in 1817, suggests that the wars of the eighteenth and early nineteenth century led to a great increase in shipbuilding at the port,

to twenty to twenty-one ships per year during the American wars, to an average of twenty-four to twenty-five up to 1806, reaching a peak in 1802 with thirty-nine vessels.<sup>41</sup> After 1806, however, the building of vessels at Whitby declined to an average of ten ships per year, perhaps reflecting an over-production of tonnage in the previous decades. The sharp decline after 1815 also suggests the manner in which the Whitby shipbuilding industry was stimulated by the advent of war. Whellan, writing in 1859, also pointed to the wealth brought to this industry by the war: 'During the French Revolutionary war the trade of Whitby continued in a most flourishing state, so that the inhabitants were able to expend forty or fifty thousand pounds annually in building new ships'.<sup>42</sup>

Whitby-built vessels were not only in demand for transports, but were required to fill the need for tonnage created by the expansion of trade generally which the French Wars brought. The delays in the carriage of goods imposed by the convoy system, and with the addition of wartime risks to marine risks, meant that a greater amount of tonnage was needed to carry the same goods. Thus Whitby-built vessels were of considerable significance as transports due to the preference of surveyors for large collier-type craft, for strong, capacious and durable vessels and because, by the last decade of the eighteenth century, the port of Whitby was the scene of the production of merchant shipping second only to Newcastle and London.

A variety of sources, as discussed in the opening of this section, show the hiring of Whitby-built ships as transports, yet there are few references to the building of naval ships at Whitby. Weatherill records that 'the Admiralty also bought several large vessels, built here, for the Navy'.<sup>43</sup> Many of the survey reports consider Whitby vessels as 'fit for purchase into the service'. However, it is unclear if such references are to transports or not. It would appear that the vast majority of naval warships were built at naval dockyards, and the vessels built for

the navy at other ports were storeships and supply vessels, in the manner of permanent transports. As the navy was reluctant to invest in tonnage beyond immediate wartime use, such vessels were probably rare. There is no evidence of contracts being taken out between the Admiralty and individual Whitby shipbuilders. This was a period of intense speculative building, relying on high freights to maintain the demand for tonnage. Vessels required by the Admiralty would thus probably have been purchased in the same way as merchant shipowners acquired their tonnage.

Thirdly, consideration of the impact of war on the seamen of Whitby further shows the effects of this phenomenon on the life of the port and its commercial prosperity. The importance of Whitby as a port for the supply of seamen is further discussed in Chapter Seven, and an official observation of 1789 concluded

It is of the greatest importance to our Naval Power, that our shipping and sailors should abound the most, in those ports which are situated the nearest to our Naval Arsenals. In this view, it is to be regretted that so large a proportion of our ships should belong to the ports which lie from the Humber to the Tyne. . .<sup>44</sup>

Over 21% of British merchant seamen were based at the ports of Newcastle, Hull, Whitby, Sunderland and Scarborough, whilst many of the south coast ports had experienced a decline in the number of seamen. It was estimated in 1789 that 2,958 seamen hailed from Whitby, a higher number than the port of Sunderland and over half the number of Newcastle-based seamen. A very large number of seamen were needed at the outbreak of war, especially with the enlargement of the navy. It has been suggested that the navy's poor performance at the beginning of the Seven Years' War was caused by a shortage of seamen.<sup>45</sup> Thus it may be expected that the outbreak of war might result in changes not only for the shipowners and shipbuilders of the port but its mariners. Table 11 shows a distinct decline in the number of Whitby-based seamen in relation to the pre-war

numbers and as a proportion of the national sea-going labour force. In 1800 only 2014 seamen were based at Whitby, compared with nearly 3,000 in 1789. This decline may be accounted for by the recruitment of seamen for the navy, and the increase in Whitby seamen serving on board transports, vessels which were excluded from statistics of entrances and clearances, by virtue of their quasi-naval status. As the number of Whitby-based seamen declined, the total number of seamen 'that usually sailed in vessels registered' at all English ports shows a constant rate of increase from 1789 to 1815, reflecting the overall increase in trade and in vessels registered. It may thus be suggested that Whitby seamen, as in the case of Whitby-owned and Whitby-built shipping, played a part in the transport service above that of most ports.

However, an alternative explanation may be seen in the abandonment of seafaring by large numbers of Whitby seamen due to their bitter resentment of impressment.<sup>46</sup> A typical account of local hatred of the Press was published by Richard Moorsom, Member of Parliament for Whitby in 1832. The Oak, owned by Whitby's most prominent shipowner of the eighteenth century, James Atty, embarked upon a whaling voyage in 1803, and in her absence war was declared and a small press detachment was installed at Whitby. The return of the Oak was eagerly awaited by friends and relatives of the crew but, in spite of the Protections held by the whaling men, the vessel was immediately boarded by the Press. They were beaten off, and the men escaped, to hurrahs from the shore, and the local magistrate refused to issue a warrant against the men. A subsequent case brought against the magistrate at the King's Bench was withdrawn due to public clamour. The pages of Mrs Gaskell furnish similar examples.<sup>47</sup>

Whitby seamen are known to have served in naval vessels, as early as during the Seven Years' War, when, as a result of a series of petitions, a bill was brought to remit seamen's wages home, to prevent seamen's

families from becoming a charge upon the parish, in the hope that further seamen would be encouraged to join up. A petition from 'the Owners and Masters of Ships, and other Principal Inhabitants, of the Town of Whitby' was presented to the House of Commons on 21 March 1757, and similar documents were sent from Newcastle, Scarborough and Liverpool.<sup>48</sup> The payment of monthly money has been seen as a form of 'social control' over seamen in the mercantile marine,<sup>49</sup> but in naval vessels it reflected the attempts of seamen to ensure that at least part of their wages were actually received. The uncertainty of receipt of wages and the very limited remuneration that could be earned by seamen in the Royal Navy was expressed in the mutinies of the Nore and Spithead, yet occasionally, with the prospect of prize money, volunteers from the merchant service to the Royal Navy were not unknown. However, the frequent applications for protections against impressment, held particularly by Whitby masters and mates in the Newcastle to London coal trade and in fishing,<sup>50</sup> suggest that continued service in merchant ships was the preferred option of many Whitby seamen.

A contemporary Whitby poet, in referring to the masters of Whitby-owned vessels serving as transports, reflected that 'by the war are made great men; So that the captains of our place Are now dressed up in silver lace'.<sup>51</sup> The financial benefits which accrued to merchant seamen, particularly in the coal trade, were considerable during the years of war. Depleted by men joining transports and naval vessels, the greater need for seamen was reflected in their wages. A seaman of the Hannah in 1715-18 earned £2 15s per voyage,<sup>52</sup> but in 1795, 1800 and 1804, seamen serving on colliers playing between Shields and London were paid as much as £10 10s per voyage.<sup>53</sup> Higher wages had to be balanced against the increased risk to the lives of seamen in wartime with danger of capture by enemy privateers, but the relatively small casualty list of Whitby ships in



wartime,<sup>54</sup> and the small number of seamen lost whilst serving on transports,<sup>55</sup> suggests that the seamen of Whitby made net gains from the wars of the eighteenth and early nineteenth centuries.

Finally, the effects of the incidence of war on the port of Whitby as a whole were also considerable. National tonnage registered rose from 1,286,778 in 1793 to 3,088,204 tons in 1814. Tonnage on the Whitby register in this same period experienced a decline from 53,001 tons to 46,361 which cannot necessarily be accounted for by loss due to marine or war risk.<sup>56</sup> Table 9a shows the total number of Whitby-registered vessels captured and lost in the period 1793-1815, and the numbers lost, which was generally the result of adverse weather conditions, in most years exceeds those captured. Tables 9b and 9c show losses from the Whitby register in the years preceding and following the years of war, and these are not markedly lower than the totals shown in Table 9a. It has been suggested that losses due to marine hazards were at least as numerous as those caused by enemy action,<sup>57</sup> a point borne out by these figures. Shipbuilding at Whitby increased dramatically in this period, but it would appear that relatively few of these vessels were being registered at the port. Chapter Two has shown how a considerable quantity of Whitby registered tonnage was sold particularly to London in these years, many to London shipowners who wished to employ vessels in the transport service. London coal factors were important among owners of shares in Whitby registered tonnage, and, with high freights in the coal trades and large profits to be earned in the transport service, Whitby-built colliers were in heavy demand, and many Whitby shipbuilders and shipowners found large profits in the immediate sale of their vessels rather than in operating them on their own accounts. Of the thirty-nine ships built in 1802, it would seem that relatively few were added to the Whitby register. Whitby's role as a net exporter of tonnage reached a

height during the Napoleonic Wars, and the Whitby register itself was to reach its peak in sailing ship owning in 1866 with over 75,000 tons.<sup>58</sup>

The port books show that entrances and clearances into and from the port of Whitby expanded slightly due to the increased demand for shipbuilding materials. As seen in the letters of Robert Barry, the wartime risks of Baltic voyages led to delays and greater expense, yet supplies were received.<sup>59</sup> The decline of Whitby shipbuilding after 1806 reflects a fall in demand rather than difficulties in the import of the necessary raw materials. The importance of Whitby shipbuilding in the early years of the Napoleonic wars, however, reflects even more the disparity between the trade of the port and the enterprise of its shipbuilders and shipowners. The fact that Whitby was not regarded as significant in relation to its traffic and port facilities is apparent in an application from the Collector of Customs in Whitby, Francis Gibson, in 1797, to the Transport Office, offering his services as commissary or agent for prisoners of war. Evan Nepean of the Admiralty, in his reply, considered that 'we do not think it is necessary to appoint an Agent with a salary at that port'.<sup>60</sup>

The town of Whitby, as the place of residence of its shipbuilders and shipowners, reflected the wealth which its inhabitants acquired during the wars of the eighteenth and early nineteenth centuries. A contemporary observer remarked that

Opulence produced elegance, its usual concomitant, and the town soon assumed a new appearance. . . the people of Whitby began to construct spacious and commodious habitations of brick, and many of them in a style of magnificence.<sup>61</sup>

This consideration of the influence of war on the shipowners, shipbuilders, seamen and the port of Whitby as a whole has been based largely upon evidence relating to the American war of 1775 to 1783 and the war against France of 1793-1815. The wars of the early eighteenth century have left insufficient evidence for a detailed study, whilst the wars of the later nineteenth century were wholly different in nature and requirements. There

is evidence that a small number of Whitby-owned transports continued in the service beyond 1815, such as the Regulus of 368 tons, which received £3,091 4s for carrying troops to Jamaica in 1821, possibly for reinforcing or changing a garrison.<sup>62</sup> However, no trace of Whitby-owned shipping acting as transports in the Crimean War has been discovered.<sup>63</sup> The Whitby tonnage hired to the Government in the first half of the nineteenth century was mainly concerned with the shipment of emigrants and convicts, as seen in the fourth section of this chapter. By the 1860's steam transports, which were owned by the Admiralty were employed in preference to merchant shipping when needed.<sup>64</sup>

In conclusion, the outbreak of war in 1775 and again in 1793 was probably regarded as a new opportunity for profit by the shipping interest of Whitby, rather than by fear or apprehension. Primarily through the important and sustained demand for transports, for which typical Whitby-built vessels were deemed especially suitable, the port of Whitby thrived in this period. It has been suggested in a recent study of freight rates and the transport service that 'during the war against France the commercial prosperity in Britain made it more advantageous for the merchant to put his ship to a trade than to let it to the Government'.<sup>65</sup> Clearly, especially in such years as 1806 and 1814, the shipowners of Whitby were persuaded otherwise.<sup>66</sup> The shipbuilders of the port also considered the transport service to be as attractive as any other form of employment. Ports which were dependent for their livelihood on the successful prosecution of overseas trade were less enthusiastic about the outbreak of war: Gordon Jackson, after an analysis of the effects of war on the economy of Hull, concluded that 'wars always created difficulties for the shipping industry which were not adequately offset by the higher freight rates' and that 'the tempo of trade was generally slower in war than in peace time'.<sup>67</sup> Liverpool was reliant to a large degree upon the success

of the textile producers of its hinterland and the producers of many primary products overseas, which suffered adverse fluctuations as a result of war.<sup>68</sup> Whitby shipping had no long term commitment to a specific overseas trade for the supply of goods essential to its prosperity as a port, besides the import of shipbuilding materials, much of which was reimported from other British ports. Its shipowners and shipbuilders were thus enabled to continue in the coal, whaling or Baltic trades, or exploit the opportunities offered by a Government faced with the need to transport vast numbers of men and horses and large quantities of munitions and stores over long distances for a number of decades in the late eighteenth and early nineteenth centuries. In the latter, they were so successful that a contemporary writer considered that Napoleon 'ought to be held in a sort of respectful remembrance in Whitby, - in as much as his mad and ambitious career brought to the place a temporary stream of wealth'.<sup>69</sup>

## REFERENCES: CHAPTER FIVE, SECTION FIVE

1. Jeffery Dennis, An Address to the Honorable Committee for the Relief of Distressed Seamen, etc..., 2nd ed., (London, 1818), p.5
2. See Table 1
3. Richard Weatherill, The Ancient Port of Whitby and its Shipping, (Whitby, 1908), Appendices: Vessels owned and/or built at Whitby 1717-89, Vessels built at Whitby 1790-1871, Vessels owned at Whitby 1790-1900.
4. Reg. Ship.
5. P.R.O. ADM 68 / 194-218
6. Lloyd's Register 1776, 1794, 1807, 1810
7. Principally P.R.O. ADM 1, 7, 49, 106, 108. Seldom are more details than the name of vessel, tonnage and name of master given, so that vessels in these sources may be identified only by reference to the registers, etc.
8. David Syrett, Shipping and the American War 1775-1783, (London, 1970), pp.111-3, a device that reduced the freight payable
9. See Chapters One and Two
10. M.E. Condon, 'Freight Rates and the British Transport Service during the war against Revolutionary France 1793-1802', Maritime History, V (1977), p.26
11. See Section Two of this chapter
12. Condon 'Freight Rates', pp.26-7
13. P.R.O. ADM 108 / 158-161. See Table 8c
14. See Section Two of this chapter
15. See Section Three of this chapter
16. There are many examples of this in P.R.O. ADM 49 / 126
17. P.R.O. ADM 49 / 125 fo. 101
18. Piers Mackesy, The War in the Mediterranean 1803-1810, (London, 1957), p.265
19. Ralph Davis, The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries, (London, 1962), pp.329-30. There is little evidence of Whitby ships becoming privateers.
20. See Tables 8b and 8c. Among the Barry Papers of Whitby Museum is the logbook of the Hyperion of Whitby, 468 tons, Wm. Lashley master, built at Whitby in 1810 and owned by John Barry. Also, between July 1812 and April 1815 she served as a transport, principally calling at Spanish and Italian ports. Fifty-five transports of 15694 aggregate tons originally posted as transports between 1798 and 1802 were still in the service five years later. Lloyd's Register 1807.
21. Lionel Charlton, A History of Whitby, etc..., (York, 1779), p.359. 'East Country' refers to the Far East.
22. George Young, A History of Whitby, etc..., (Whitby, 1817), p.560.
23. Weatherill, p.21. This does not appear to be a 'Green' or 'Red' Book.

24. W.G. East, 'The Historical Geography of the Town, Port and Roads of Whitby', Geographical Journal, LXXX (1932), pp.484-497
  25. See Section Three of this chapter
  26. The convoy system imposed upon a group of vessels the speed of the slowest sailer, causing delays, and with lower prices and a glut of goods with many vessels arriving together. Delays were also caused by applications to sail without convoy and for passes to specific areas, such as the Mediterranean
  27. John Twistleton, quoted by Robert Tate Gaskin, The Old Seaport of Whitby, (Whitby, 1909), pp.342-3, which refers to William Hustler's ship Christopher
  28. With statutory registration only from 1786, it has been impossible to identify many Whitby-built vessels before this period as being owned at the port, so Table 3 inevitably includes many vessels which should occur in Table 2.
  29. Syrett, American War, p.107
  30. P.R.O. ADM 106 / 3318
  31. Lloyd's Register, 1776
  32. N.M.M. , ADM N/245
  33. N.M.M. , ADM N/234
  34. See Chapters One and Two
  35. Each vessel entering the transport service was thoroughly examined for signs of wear, and the extent of her tonnage was considered. The results of a survey of a Whitby built ship, the London of 339 tons, surveyed on 18 October 1806 is quoted in Accounts and Papers, P.P., 1809, VI, (128.), ms. pp.406-7. She was described as 'a very good ship, has been well attended to, and in estimating her value, only 3s per ton per year to be deducted for wear and tear. N.B. The cabins not to be altered: can accommodate 4 officers in cabins, hang 8 cotts, and has a State Room with 2 beds for any superior officer'.
- Not all Whitby built vessels passed the exacting requirements of the transport board surveyors, e.g. Simpson 354 tons, built 1801 or the Sprightly, 153 tons built 1799: P.R.O. ADM 106 / 3329 f.17, f.47. There is also evidence of a Whitby built vessel becoming unfit whilst in service and discharged, P.R.O. ADM 49 / 2 f.154
36. P.R.O. ADM 106 / 1138. This reference does not give details of the builder and this vessel was not registered at Whitby.
  37. P.R.O. ADM 106 / 3329 f.15
  38. P.R.O. ADM 106 / 1533 contains examples
  39. P.R.O. CUST 17 / 1-30
  40. See Chapter One. An Account, showing the number of shipwrights, P.P., 1805, VIII, (193.), p.485
  41. Young, p.553
  42. T. Whellan, History of Whitby etc..., (Beverley 1859), pp.292-3
  43. See Chapter One, Note 30. Naval ships were built at Topsham and Sandwich in addition to Liverpool, and it is strange that there is

no evidence of naval ships being built at Whitby, despite its high reputation for shipbuilding. There may have been naval contracts taken out with Whitby shipbuilders, but none have been traced

44. British Library, Liverpool Papers Add. MSS. 384 29/30. 30 September 1789. 'Observations on the register of shipping made in pursuance of 26 Geo 3 c.60, being the new Navigation Act'
45. Stephen F. Gradish, The Manning of the British Navy during the Seven Years' War, (London, 1980)
46. See Davis, p.324
47. Richard Moorsom, Letter to William Richmond Esq., relative to the shipping interest of England, the reciprocity treaties, and the evils of impressment; the latter particularly exemplified in the case of the Brig Oak of Whitby, (Whitby, 1832). Quoted by Gaskin, p.301 and Mrs Gaskell, Sylvia's Lovers, (London, 1863)
48. House of Commons' Journals, Vol. XXVII, 31 May 1754-15 Nov. 1757, p.796. See also p.799 (Newcastle) and p.813 (Liverpool). Quoted by Gradish, Manning, p.99n
49. Simon Ville, 'Wages, prices and profitability in the shipping industry during the Napoleonic wars. A case study', Journal of Transport History, I (1980), p.45
50. P.R.O. ADM 7 / 363-400
51. John Twistleton, quoted in Gaskin, p.279
52. See Section Two of this chapter
53. Ville, 'Wages', Appendix One
54. See Table 9a
55. Accounts and Papers, P.P., 1816, XIX, (530.), ms. p.233. A total of only 281 seamen's lives were lost from transport ships from 1 Jan. 1814 to 1 July 1816, whilst 879 were saved from drowning etc. No transports had been wrecked in this period
56. See Table 6
57. C.E. Fayle, 'Shipwrecking and Marine Insurance' in C.N. Parkinson (ed.) The Trade Winds, (London, 1948), p.41
58. Weatherill, p.19
59. See Section Four of this chapter
60. P.R.O. ADM 1/3734
61. Whellan, pp.292-3
62. Accounts and Papers, P.P., 1822, XIX, (99.), ms. p.245
63. Accounts and Papers, P.P., 1854-5, XXX, (1.), ms. p.261
64. Accounts and Papers, P.P., 1862, XXXIV, (151.), ms. p.901, Accounts and Papers, Correspondence, P.P., 1862, XXXVIII (95.), ms. p.467, 1865, XL, (159.), ms. p.581
65. Condon, 'Freight Rates', p.32
66. See Table 6
67. Gordon Jackson, Hull in the Eighteenth Century, (Oxford, 1972), pp.136-7

68. F.E. Hyde, Liverpool and the Mersey: the Development of a Port 1700-1970, (Newton Abbott, 1971), pp.36-8. See also Robert Craig and Rupert Jarvis, Liverpool Registry of Merchant Ships (Manchester, 1967). Table 17 records that between 1786 and 1804, 544 prizes of 113,065 agg. tons were registered at Liverpool - a number far in excess of Whitby-bought prizes
69. John Hugill, An Address to the Inhabitants of Whitby and its vicinity, etc..., (Whitby, 1830), p.8



TABLE 1:

NATIONAL TOTALS OF VESSELS HIRED AS TRANSPORTS AS A PROPORTION OF  
TOTAL VESSELS REGISTERED IN ENGLAND

Year	Transports		Vessels req'd		% (tons)
	No.	Tons	No.	Tons	
1803	36	6950	14029	1709590	0.4
1804	157	44787	14604	1784085	2.5
1806	488	124724	14877	1786692	7.0
1807	578	128974	15087	1797135	7.2
1808	838	182997	15327	1833971	10.0
1809	1214	265886	15487	1875234	14.2
1810	528	147995	16048	1918039	7.7
*1813-5	1020	276554	17346	2139301	12.9

---

\*At highest point in 3 years

Sources: Commons' Journals, 1810, LXV, Ap. 13, p.730 and  
Accounts and Papers, P.P., 1826, XXII, (378.), p.303  
P.P., 1807, IV, (115.), p.105  
P.P., 1803-4, VII, (97.), ms. p.459  
N.M.M., ADL/G/1  
P.P., 1809, X, (186.), ms. p.387

TABLE 2:

## WHITBY-REGISTERED VESSELS EMPLOYED AS TRANSPORTS IN YEARS OF WAR

Year	No.	Tons
1748	4	1104
1757	1	245
1758	1	245
1761	1	245
1762	2	593
1763	2	593
1775	3	1042
1776	7	2226
1777	3	998
1778	5	1493
1779	1	368
1780	3	811
1781	4	1173
1782	3	900
1790	1	363
1791	-	-
1792	1	421
1793	1	263
1794	4	1347
1795	3	909
1796	2	658
1797	1	377
1798	1	377
1799	2	671
1800	7	2453
1801	4	1711
1802	1	550
1803	4	1678
1804	10	3534
1805	17	5236

TABLE 2: (contd.)

<u>Year</u>	<u>No.</u>	<u>Tons</u>
1806	33	10125
1807	12	3529
1808	17	5317
1809	8	2543
1810	9	3066
1811	2	716
1812	2	661
1813	-	-
1814	51	18119

Note: The reconstruction of the details of Whitby-built and Whitby-owned vessels serving as transports was compiled by the use of a card index of known transports, to which was added information from Admiralty and Transport Board contracts and registers, which do not give port of registration, and not always place of build.

Sources: see references 3-7

TABLE 3:

## WHITBY-BUILT VESSELS EMPLOYED AS TRANSPORTS IN YEARS OF WAR

<u>Year</u>	<u>No.</u>	<u>Tons</u>
1742	1	317
1747	1	257
1748	16	2955
1749	16	2955
1756	1	332
1757	4	1221
1758	7	2053
1759	5	1776
1760	7	2396
1761	7	2328
1762	7	2328
1763	6	2064
1764	1	359
1770	1	359
1771	-	-
1772	-	-
1773	1	430
1774	-	-
1775	29	9675
1776	59	20144
1777	20	5799
1778	12	3311
1779	3	957
1780	6	2112
1781	7	2463
1782	3	1105
1783	-	-
1784	-	-
1785	-	-
1786	-	-

TABLE 3: (contd.)

<u>Year</u>	<u>No.</u>	<u>Tons</u>
1787	-	-
1788	-	-
1789	-	-
1790	1	300
1791	-	-
1792	1	476
1793	-	-
1799	10	3736
1795	3	873
1796	3	913
1797	3	902
1798	1	324
1799	1	331
1800	5	1589
1801	8	2563
1802	2	558
1803	7	2223
1804	6	1640
1805	2	553
1806	13	3697
1807	9	2276
1808	12	3701
1809	2	692
1810	4	1131
1811	-	-
1812	2	827
1813	1	351
1814	33	10322
1815	2	665

Source: See references 3-7 and Table 2

TABLE 4:

NO. AND TONS WHITBY REGISTERED VESSELS HIRED AS TRANSPORTS COMPARED WITH NATIONAL TOTALS OF TRANSPORTS, 1803-1815

<u>Year</u>	<u>Whitby req'd.</u>		<u>Total transports</u>		<u>%</u>
	<u>No.</u>	<u>Tons</u>	<u>No.</u>	<u>Tons</u>	
1803	4	1678	36	6950	24.1
1804	10	3534	157	44787	7.9
1806	33	10125	488	124724	8.1
1807	12	3529	578	128974	2.7
1808	17	5317	838	182997	2.9
1809	8	2543	1214	265886	1.0
1810	9	3066	528	147995	2.1
1813-5	51	18119	1020	276554	6.6

Sources: See Tables 1 and 2

TABLE 5:

NO. AND TONS WHITBY BUILT VESSELS HIRED AS TRANSPORTS COMPARED WITH NATIONAL TOTALS OF TRANSPORTS, 1806-1810

Year	Whitby built		Total transports		%
	No.	Tons	No.	Tons	
1803	7	2223	36	6950	32.0
1804	6	1640	157	44787	3.7
1806	13	3697	488	124724	3.0
1807	9	2276	578	128974	1.8
1808	12	3701	838	182997	2.0
1809	2	692	1214	265886	0.3
1810	4	1131	528	147995	0.8
1813-5	33	10322	1020	276554	3.7

Source: See Tables 1 and 3

TABLE 6:

NO. AND TONS OF WHITBY REGISTERED VESSELS ACTING AS TRANSPORTS AS A PROPORTION OF THE TOTAL NUMBER STANDING ON THE REGISTER, 1786-1815 AT WHITBY

Year	Vessels registered at Whitby		Transports		%
	No.	Tons	No.	Tons	
1786	116	15474	-	-	-
1787	267	49364	-	-	-
1788	288	52222	-	-	-
1789	256	48385	-	-	-
1790	254	48102	1	363	0.8
1791	250	49326	-	-	-
1792	262	50790	1	421	0.8
1793	268	53001	1	263	0.5
1794	262	52559	4	1347	2.6
1795	253	50355	3	909	1.8
1796	239	44911	2	658	1.5
1797	233	40972	1	377	0.9
1798	239	41696	1	377	0.9
1799	227	37174	2	671	1.8
1800	227	36868	7	2453	6.7
1801	236	37696	4	1711	4.5
1802	241	37902	1	550	1.5
1803	247	38007	4	1678	4.4
1804	248	39411	10	3534	9.0
1805	244	39388	17	5236	13.3
1806	243	38464	33	10125	26.3
1807	216	35448	12	3529	10.8
1808	214	36116	17	5317	14.7
1809	212	37108	8	2543	6.9
1810	204	34714	9	3066	8.8
1811	226	39376	2	716	1.8
1812	230	41462	2	661	1.6
1813	241	43085	-	-	-
1814	243	46361	51	18119	39.1
1815	231	43938	-	-	-
			Av.		5.3

Source: See Table 2, P.R.O. CUST 17 / 12-30, Cesar Moreau, Chronological Records of the British Royal and Commercial Navy (1827)

TABLE 7:

PLACE OF BUILD OF TRANSPORTS LISTED IN 1807 LLOYD'S REGISTER (UNDERWRITER'S REG.) 'GREEN BOOK' (INCL. VESSELS SURVEYED AS TRANSPORTS 1799-1807)

<u>Place</u>	<u>No.</u>	<u>Tons</u>	<u>Av. tons</u>	<u>Tons % total</u>
Whitby	45	14221	316.0	23.7
Shields	17	5376	316.2	9.0
Sunderland	15	4178	278.5	7.1
Hull	12	3661	305.1	6.1
Newcastle	12	3376	281.3	5.6
Thames	9	2840	315.6	4.7
America	8	1954	244.3	3.3
Scarborough	9	2008	223.1	3.3
Aberdeen	4	1143	285.8	1.9
Leith	7	1497	213.9	2.5
Unknown	5	1451	290.2	2.4
Newfoundland	2	336	168.0	0.6
Yarmouth	2	207	103.5	0.3
Wales	4	711	177.8	1.2
New Brunswick	2	570	285.0	0.9
Whitehaven	2	408	204.0	0.7
Weymouth	2	361	180.5	0.6
'French'	3	712	237.3	1.2
Cowes	2	219	109.5	0.4
Teignmouth	2	410	205.0	0.7
Bristol	2	628	314.0	1.0
Howden Pans	3	786	262.0	1.3
Berwick	2	587	293.5	1.0
Scotland	4	954	238.5	1.6
Sweden	3	691	230.3	1.2
Spain	2	1106	553.0	1.8
'Dutch'	2	732	366.0	1.2
Stockton	3	971	323.7	1.6
Wemyss	2	372	186.0	0.6
Lynn	1	202		0.3
Saltcoates	1	209		0.3
Dysart	1	217		0.4
Liverpool	1	392		0.7
Topsham	1	600		1.0
Dale	1	60		0.1
King's Yd.	1	185		0.3
Greenock	1	66		0.1
Foreign	1	280		0.5
Sandwell	1	337		0.6
Dunbar	1	122		0.2
Newburgh	1	134		0.2
Littlehampton	1	265		0.5
Maryport	1	218		0.4
Workington	1	246		0.4
Philadelphia	1	270		0.5
Bermuda	1	374		0.6
Hartlepool	1	246		0.4
Devon	1	229		0.4
Salcombe	1	76		0.1
Southampton	1	136		0.2
Seaton Sluice	1	258		0.4
New York	1	270		0.5

TABLE 7: (contd.)

400

<u>Place</u>	<u>No.</u>	<u>Tons</u>	<u>Av. tons</u>	<u>Tons</u> <u>% total</u>
Ipswich	1	259		0.4
Kirkaldy	1	201		0.3
'British'	1	122		0.2
Neath	1	127		0.2
Bridlington	1	308		0.5
Rochester	1	203		0.3
Gainsboro'	1	128		0.2
Bideford	1	164		0.3
Rye	1	130		0.2
Konigsberg	1	315		0.5
Buenos Aires	1	166		0.3
<b>TOTAL</b>	<b>221</b>	<b>59881</b>		<b>100.0</b>

Source: 1807 Underwriters' Reg. N.M.M.  
 .....

TABLE 8a:

## RATES OF PAY PAID TO TRANSPORTS PER TON PER MONTH

1756	12s 8d
1757	13s 0d
1758	12s 9d
1759	13s 0d
1760	9s 0d
1761	12s 0d
1762	12s 0d
1763	10s 6d
1764	10s 6d
1770	10s 0d
1771	10s 0d
1773	9s 4d

Source: P.R.O. ADM 49/126

1795	£3 3s 0d
1796	£3 3s 0d
1797	£3 3s 0d
1798	£3 3s 0d
1799	£5 10s 0d
1800	£2 0s 0d
1801	18s 0d
1802	--
1803	--
1804	£1 18s 0d
1805	£1 0s 0d
1806	17s 0d
1807	£1 0s 0d
1808	17s 0d
1809	£1 0s 0d
1810	£1 0s 0d

Source: P.R.O. ADM 108 / 158-161

TABLE 8a: (contd.)

	<u>6 month transports</u>		<u>3 month transports</u>
	<u>coppered wood</u>		
1807	19s	17s	17s - 20s
1808	21s	19s	17s - 20s
1809	25s	21s	20s - 25s
1810	25s	21s	20s - 25s
1811	25s	21s	20s - 25s
1812	21s-	21s	20s - 25s
	25s		

Source: Accounts and Papers, P.P., 1812, IX, (129.)

TABLE 8b:

## REGISTER OF TRANSPORTS 1754-1773

## SERVICE OF WHITBY BUILT AND/OR OWNED TRANSPORTS, 1756-1773

<u>Name</u>	<u>Tons</u>	<u>Time of Service</u>	<u>Rate per ton per month</u>	<u>Total freight</u>	<u>Employment</u>
Concord	312	1761-3	9/8d	£3805-8-8	Forces to Germany
Elizabeth	332	1756-7	12/-	£2209-4-9	Forces to N. America
Elizabeth	332	1758-9	13/-	£4224-19-0	Forces to coast of France & Guadelupe
Friends'					
Adventure	257	1758	12/-	£770-19-8	Forces to Embden
Friends' Glory	348	1762-3	9/8d	£1052-10-0	Forces to Germany
Hero	275	1760-63	12/9d	£7146-4-9	Forces to W. coast France & Lisbon
John & Mary	359	1758-9	13/-	£4591-16-9	Forces to France & Guadelupe
John & Mary	359	1761-3	12/9	£5863/-/3	Forces to Belisle & Havannah
John & Mary	359	1763-4	10/6	£2344-13-6	W. Indies
John & Mary	359	1770-71	10/-	£1705-15-8	Forces Cork-Bristol Portsmouth-Minorca
Lark	266	1757-58	13/-	£2720-3-1	Forces to Coast, France & N. America
Lark	266	1761-3	12/9d	£3767-16-9	Forces to New York, Weser, Havannah
Laurell	371	1760-1	9/-	£1625-12-9	Forces to R. Weser
Laurell	371	1761-2	9/-	£1828-10-9	Forces to R. Weser
Laurell	371	1762-3	12/9	£3167-19-5	Forces to Germany
Masquerade	264	1760-1	9/-	£1164-15-5	Forces to R. Weser
Masquerade	264	1761-2	12/9	£3100-7-0	Bellisle, N. York - Havannah - forces
Mary	317	1760-61	9/-	£1977-14-4	Forces to R. Weser
Mary	317	1761-3	12/9	£4924-15-10	Forces to French coas
Prince of Wales430		1758-60	12/9	£3549-9-4	Forces to Quebec
Prince of Wales430		1760-61	9/-	£2595-4-7	Forces to R. Weser
Prince of Wales430		1761-3	12/9	£6093-19-9	Forces to coast of France & Lisbon
Prince of Wales447		1773	9/4d	£1538-17-0	Portsmouth-Cork-NY-back-forces

Source: P.R.O. ADM 49 / 126

TABLE 8c:

## SERVICE OF WHITBY-BUILT (OR WHITBY OWNED) TRANSPORTS, 1795-1810

<u>Name</u>	<u>Tons</u>	<u>Master</u>	<u>Total amount</u>	<u>What service</u>	<u>Rate per ton per month</u>	<u>Dates</u>
Susannah	285	Jn. Skelton	£1736-7-2	Troops	£7-16-0 per man	1795-7
Eagle	281	? Holdsworth	£1447-10-6	Troops	£3-3-0 per ton	1795-6
Ceres	288	Matt. Popplewell	£1183-8-0	Stores	£3-3-0 per ton	1795-6
Wakefield	300 $\frac{47}{94}$	Rt. Braithwaite	£2626-7-2	Stores	£5-10-0 per ton	1799-1801
Indefatigable	549 $\frac{56}{94}$	Jn. Brown	£1823-12-6	Ordnance	16s, 17/6d " "	1800-1803
Grant	386	Wm. Peacock	£682-13-7	Provisions	£2 per ton	1800-1801
Ceres	288 $\frac{9}{94}$	Thos. Forrest	£525-4-1	General	18s per ton	1800-04
Benson	330 $\frac{9}{94}$	G. Hildreth	£2189-17-8	Troops,	£2, 14/6d " "	1799-1800
				horses		
Wakefield	330 $\frac{47}{94}$	Rt. Braithwaite	£3958-12-1	Provisions	14/6d " "	1799-1801
					per mth	
*Union	190 $\frac{56}{94}$	Wm. Steward	£1237-3-10	General	20s., 15s " "	1805-1806
*Union	288 $\frac{87}{94}$	Robt. Backer	£2144-19-4	General	20s., 15s	1805-1806
*Susanna	171 $\frac{41}{94}$	Geo. Dixon	£563-3-5	General	20s., 15s	1805-1806
*Samuel & Jane Sally	413 $\frac{44}{94}$	Robt. Blackburn	£2218-4-6	General	20s., 15s.	1805-1806
	313	Pearson	£1817-9-9	Ordnance	£1-18-0 per stores ton	1804-1805
*Request	248 $\frac{10}{94}$	Hen. Johnston	£1397-12-6	General	20s., 15s	1805-1806
*Rodney	309	Geo. Bowes	£1179-9-8	General	20s., 15s	1805-1806
*Traveller	393 $\frac{38}{94}$	Constable Dunning	£1756-13-9	General	20s., 15s	1805-1806
*Rachel	314	Wm. Carr	£1843-8-5	General	20s., 15s	1805-1806
*Idas	243 $\frac{72}{94}$	John Linton	£1576-3-10	General	20s., 15s	1805-1806
*Esk	305 $\frac{50}{94}$	John West	£1728-13-7	General	20s., 15s	1805-1806
*Emerald	314 $\frac{9}{94}$	John Storr	£1905-15-3	General	20s., 15s	1805-1806
Ceres	288	Thos. Forrest	£12274-0-2	General	£2, 18s	1800-1804
*Barrick	300 $\frac{72}{94}$	Thos. Bailey	£1841-0-2	General	20s	1805-1806
*Alexander	313 $\frac{73}{94}$	John Dixon	£1131-16-6	General	20s., 15s	1805-1806
*Aid	303 $\frac{56}{94}$	Rich. Kneeshaw	£2297-16-7	General	20s., 15s	1805-1806
*Benson	330 $\frac{9}{94}$	Wm. Willis	£1950-0-4	General	20s., 15s	1805-1806
*Union	190 $\frac{56}{94}$	Robt. Robertson	£2606-18-10	General	20s., 17s	1807-1806
*Union	288 $\frac{87}{94}$	Robt. Brain	£8725-19-1	General	15s., 17s., 20s	1806-1805
*Susanna	171 $\frac{41}{94}$	Geo. Dixon	£701-8-1	General	15s	1806-1807
*Samuel & Jane	413 $\frac{44}{94}$	Robt. Blackburn	£12612-17-10	General	20s., 17s	1807-1805
*Rambler	245 $\frac{64}{94}$	Thos. Pattison	£1572-14-5	General	20s	1807-1806



TABLE 8c: (contd.)

<u>Name</u>	<u>Tons</u>	<u>Master</u>	<u>Total amount</u>	<u>What service</u>	<u>Rate per ton per month</u>	<u>Dates</u>
*James & Margaret	125 $\frac{49}{94}$	Jas. Dixon	£722-5-10	General	20s	1807
*Harford	312 $\frac{39}{94}$	Jos. Clark	£147-8-11	General	20s	1807-1808
*Hannah	277 $\frac{52}{94}$	Thos. Sidgworth	£7882-19-1	General	20s., 17s	1807-1808
*George	366 $\frac{85}{94}$	Thos. Coverdale	£8729-4-7	General	20s	1807-1810
*Fides	353 $\frac{35}{94}$	Ben Bridekirk	£1239-8-11	General	20s., 15s	1805-1808
*Eagle	281 $\frac{9}{94}$	John Smith	£6866-17-2	General	15s., 17s	1806-1807
*Esk	297 $\frac{42}{94}$	Ben Chapman	£4748-7-5	General	17s., 20s	1808-1808
*Aid	330 $\frac{56}{94}$	Rich. Kneeshaw	£5302-6-8	General	17s., 20s	1807-1808
*Ark	120 $\frac{4}{94}$	John Gales	£800-3-5	General	20s	1807

\*to serve three months certain in European seas

Source: P.R.O. ADM 108 / 158-161  
Freight Ledgers, 1795-1818

TABLE 9a:

WHITBY-REGISTERED VESSELS CAPTURED OR LOST DURING THE NAPOLEONIC WARS,  
1793-1815

<u>Year</u>	<u>Captured</u>		<u>Lost</u>		<u>Total</u>	
	<u>No.</u>	<u>Tons</u>	<u>No.</u>	<u>Tons</u>	<u>No.</u>	<u>Tons</u>
1793	-	-	9	1071	9	1071
1794	-	-	5	747	5	747
1795	5	1165	2	392	7	1557
1796	4	1211	9	2710	13	3921
1797	4	1037	11	2113	15	3150
1798	1	324	5	1250	6	1574
1799	1	65	5	592	6	657
1800	2	348	1	44	3	392
1801	-	-	3	479	3	479
1802	-	-	3	516	3	516
1803	-	-	4	957	4	957
1804	-	-	2	96	2	96
1805	-	-	-	-	-	-
1806	-	-	1	175	1	175
1807	2	238	2	450	4	688
1808	-	-	1	378	1	378
1809	1	192	4	479	5	671
1810	-	-	-	-	-	-
1811	-	-	6	1593	6	1593
1812	1	197	1	319	2	516
1813	1	158	3	860	4	1018

TABLE 9a: (contd.)

<u>Year</u>	<u>Captured</u>		<u>Lost</u>		<u>Total</u>	
	<u>No.</u>	<u>Tons</u>	<u>No.</u>	<u>Tons</u>	<u>No.</u>	<u>Tons</u>
1814	1	89	7	2137	8	2226
1815	-	-	8	1879	8	1879

Note: Vessels recorded in the Register as captured but no date given:-  
23 5333

Source: Registers of Shipping, Custom House, Whitby

.....

TABLE 9b:

## WHITBY-REGISTERED VESSELS LOST DURING PEACETIME, 1786-1792

<u>Year</u>	<u>Vessels lost</u>	
	<u>No.</u>	<u>Tons</u>
1786	-	-
1787	1	381
1788	5	1071
1789	-	-
1790	4	1282
1791	2	428
1792	3	945

Source: Registers of Shipping, Custom House, Whitby

.....

TABLE 9c:

## WHITBY-REGISTERED VESSELS LOST DURING PEACETIME, 1816-1823

<u>Year</u>	<u>Vessels lost</u>	
	<u>No.</u>	<u>Tons</u>
1816	6	816
1817	5	667
1818	4	694
1819	2	170
1820	6	965
1821	2	139
1822	11	1963
1823	9	1326

Source: Registers of Shipping, Custom House, Whitby

TABLE 10:

WHITBY-BUILT VESSELS SERVING AS TRANSPORTS COMPARED WITH NO. AND TONS  
VESSELS BUILT AT WHITBY AND NATIONAL TOTAL 1787-1807

Year	$\frac{1}{2}$ %	<sup>1.</sup> Whitby-built transports		<sup>2.</sup> Vessels built Whitby		Vessels built England		Wh./Eng. tons %
		No.	Tons	No.	Tons	No.	Tons	
1787		-	-	26	3836	745	77996	4.9
1788		-	-	16	2469	668	60598	4.1
1789		-	-	17	4432	500	49108	9.0
1790	6	1	300	23	4999	456	49470	10.
1791		-	-	22	5665	446	48741	11.6
1792	8	1	476	23	5957	484	56044	10.6
1793		-	-	22	5828	512	55839	10.4
1794	81	10	3736	15	4607	420	47353	9.7
1795	16.5	3	873	20	5295	444	56946	9.3
1796	57.5	3	913	8	1587	514	75270	2.1
1797	65	3	902	7	1385	522	69425	2.0
1798	6	1	324	21	5372	580	67955	7.9
1799	7.7	1	331	14	4285	569	72713	5.9
1800	24.6	5	1589	28	6464	677	401776	1.6
1801	44.8	8	2563	24	5723	420	92000	6.2
1802	12	2	558	31	4587	792	90605	5.1
1803	38.3	7	2223	33	5807	848	95129	6.1
1804	32.3	6	1640	25	5079	579	67119	7.6
1805	11.4	2	553	18	4871	597	61137	8.0
1806	79.5	13	3697	21	4647	506	50429	9.2
1807	61.2	9	2276	17	3717	510	49283	7.5

Sources: Table 3 and P.R.O. CUST 17 / 12-30

TABLE 11:

TOTAL NUMBER OF SEAMEN THAT USUALLY SAILED IN VESSELS REGISTERED AT WHITBY

Year	No. Seamen	% Index	$\frac{1789 = 100}{\% \text{ of England}}$
1789	2958	100.0	3.7
1790	2741	92.7	3.3
1791	2731	92.3	3.1
1792	2825	95.5	3.2
1793	2867	96.9	3.3
1794	2806	94.9	3.2
1795	2648	89.5	3.1
1796	2362	79.9	2.7
1797	2231	75.4	2.4
1798	2226	75.3	2.3
1799	2084	70.5	2.1
1800	2014	68.1	1.9
1801	2038	68.9	1.9
1802	2089	70.6	1.8
1803	2191	74.1	1.9
1804	2276	76.9	2.0
1805	2492	84.2	2.1
1806	2405	81.3	2.0
1807	2206	74.6	1.9
1808	2295	77.6	1.9

TABLE 11: (contd.)

<u>Year</u>	<u>No. Seamen</u>	<u>% Index</u>	<u>1789 = 100</u> <u>% of England</u>
1809	2159	73.0	1.8
1810	2132	72.1	1.7
1811	2416	81.7	2.0
1812	2529	85.5	2.0
1813	2661	90.0	2.1
1814	2809	95.0	2.1
1815	2563	86.6	1.9
1816	2674	90.4	2.0
1817	2580	87.2	2.0
1818	2538	85.8	2.0
1819	2719	91.9	2.1
1820	2636	89.1	2.1
1821	2550	86.2	2.1
1822	2511	84.9	2.1
1823	2372	80.2	2.0
1824	2305	77.9	1.9
1825	2242	75.8	1.6

---

Source: P.R.O. CUST 17 / 12-30 and Cesar Moreau, Chronological Records of the British Royal and Commercial Navy, (1827)

## CHAPTER SIX: THE PORT AND HARBOUR OF WHITBY 1700-1914

The previous two main sections in this study of the port of Whitby have been principally concerned with the shipowning and shipbuilding activities of the port and with the manner and nature of the employment of these vessels. The third aspect of Whitby's maritime enterprise of the eighteenth and nineteenth centuries was its physical setting: the facilities of the harbour, the building of piers, wharves and quays, and the maintenance of a navigable channel and harbour entrance. The preceding chapters have described a local shipping industry of continuing importance, in sail and steam, and it has been suggested that the locational background, extent and activity of the port itself was at odds with this phenomenon, that the shipping of Whitby was on a scale out of all proportion to the harbour and town itself. The significance of steamship owning at Whitby at the end of the nineteenth century has been seen as among the culminating points of maritime activity at the port,<sup>1</sup> yet the Whitby Gazette described its local harbour as absent of fishing boats, discouraging visitors by its depressed state and offensive smell, and the Harbour Board were considered as 'like a fifth wheel of a coach'.<sup>2</sup> The truth of this assertion at this time and throughout the eighteenth and nineteenth centuries requires further analysis, together with a consideration of the role of Whitby harbour in the success and decline of the shipping industry of the port.

The earliest references to Whitby harbour in the work of historians of the port describe the existence of medieval harbour buildings and piers yet point out their state of total decay. Appendix 1 shows a summary of the Acts of Parliament which were required throughout the eighteenth and nineteenth centuries continually to rebuild and maintain the piers, bridge and quays. The number alone shows the effects of the two main problems

faced by the inhabitants concerned with the state of the harbour: the especially severe weather conditions to which the North East coast was subject, and the sluggishness of the River Esk and the concomitant silting up of the harbour.

At the end of the seventeenth century an unsuccessful attempt was made to obtain an Act for the repair of Whitby's piers. A petition of 1696 argued that Whitby harbour was one of the most commodious 'in the north of England, being capable of receiving five hundred sail of ships' that might enter with a northerly or southerly wind, but 'the ancient piers being much decayed the mouth of the harbour was almost choked up, and in danger of being quite stopped up' unless repaired. They further complained that lives were lost and the trade of the port suffered as a consequence. However, the Bill collapsed with opposition from shipowners, masters and 'Hostmen' of Newcastle, Scarborough and Ipswich, possibly fearing a loss of trade and revenue from vessels seeking refuge if Whitby harbour was improved.<sup>3</sup> The beginnings of major improvements in Whitby harbour were delayed until the Act of 1702 and the appointment of the harbour trustees, a move which was to dominate the subsequent state of the port facilities of Whitby.

The 1702 Act established a body of Trustees responsible for the condition of Whitby harbour and, as seen in Appendix 1, this form of administration continued until the Urban District Council took over control in 1905. A brief outline of the principal trustees throughout the period is shown in Appendix 2. The 1702 Act provided the trustees with an income, with a farthing per chaldron of coal levy towards repairing and rebuilding Whitby's piers, based on all ships, except those owned at Great Yarmouth, that loaded coals at Newcastle, Sunderland, Blyth, Seaton Sluice or any other member of the port of Newcastle. In the first instance, the levy was to continue for nine years. A series of duties were also imposed on goods imported into Whitby itself: 6d per chaldron of

coal, 2s every weigh of salt, 4d for each quarter of malt, corn or grain, with 3d per ton on British ships importing foreign goods and 6d per ton on foreign ships entering. Exports from Whitby - butter and fish - were taxed at a rate of 1d per firkin and 1d per score respectively.<sup>4</sup> However, the revenue received failed to keep pace with the spending of the trustees. From May 1702 to May 1708 only £1940 12s 4d had been collected, whilst £2530 5s 5d had already been expended, and the proposed improvements to the piers were but half completed. By the mid nineteenth century, due principally to the passing tolls on Newcastle colliers, this income had risen to between £4,000 and £5,000 per year.<sup>5</sup> There was some possibility of continued improvements to the harbour with such an income, but, as a result of a meeting of North East coast shipowners,<sup>6</sup> in 1861 the passing tolls were abolished, leaving the trustees with such a negligible income that they could no longer afford to engage Francis Pickernell, the harbour engineer, who had achieved a considerable improvement to the east and west piers.

The earliest detailed map of Whitby, compiled by Young in 1817 and showing the port in 1740, includes two narrow and short piers extending from the East and West Cliffs and dividing Whitby's outer harbour from the sea. The approximate scale shows the West Pier as under a thousand feet long, and the East Pier only 750 feet. It also shows the proposed extension to the West Pier.<sup>7</sup> This was completed,<sup>8</sup> and a lighthouse, eighty-three feet above sea level, which could be seen for thirteen miles in clear weather, was erected at the end of the West Pier in 1831.<sup>9</sup> In the first Ordnance Survey map of Whitby in 1849, the extended West Pier measures 1,250 feet, but the East Pier remained as before.<sup>10</sup> By 1860, the East Pier had been continued out to sea and furnished with a lighthouse,<sup>11</sup> but few other improvements to Whitby's piers were made until 1907-8, under the Whitby Urban District Council, when the full

pier extensions, almost doubling the length of the existing piers, were completed, with a further lighthouse at each end.<sup>12</sup>

The poor state of Whitby harbour for the entry and clearance of vessels was officially discussed in 1845. With the exception of the small stream of the Esk, the harbour was dry at low water, and its entrance and sides were encumbered by sands, so much so that the small boat in which the Admiralty Surveyor landed had to be continually pushed outside the piers to remain afloat. This situation was due to the alum bar at the harbour mouth, the narrowness of the Esk in its upper reaches and the mill at Ruswarp interrupting the flow of water, the throwing of rubbish and ballast at the back of the West Pier, and the inequality in the length of the piers at that time, which caused an eddy between the piers of danger to shipping.<sup>13</sup> Soundings measured in feet, taken at low water, show that immediately before the point of entry between the piers, the water was only between  $2\frac{1}{2}$  and  $1\frac{1}{2}$  feet deep. Out to sea, in a northerly direction, the depth rapidly increased to over twenty feet, but heading east, off Whitby Scar and Whitby Rock, depths of only three to eight feet are recorded.<sup>14</sup> In the winter, however, with land floods increasing the flow of the Esk, the conditions for shipping were much improved, the water level rising sixteen feet at Spring Tides and thirteen feet at Neap Tides.

James Walker, the Civil Engineer of Whitby harbour, reporting to the Tidal Harbours Commission in 1845, stated that 'a ship drawing about 15'6" got into the harbour about four years since, but this is a rare case; and it will be seen by the above figures that all circumstances had then conspired to place the entrance in the best condition'. He concluded by remarking that 'when the ports near you are being improved and enlarged, Whitby cannot be expected to maintain its trade and comparative importance, if it be allowed to remain subject to its present disadvantages'.<sup>15</sup>



There is little evidence, from subsequent maps and charts of Whitby, that many improvements were made. Soundings taken in 1862 barely reached half a fathom in the immediate approaches to Whitby harbour, and were rarely above a fathom before at least half a sea mile off the coast.<sup>16</sup> In 1876, the depth by Whitby piers was  $2\frac{1}{2}$  feet at the West Pier and  $1\frac{1}{2}$  feet by the East Pier. In Whitby Road, true north of the harbour entrance, vessels could wait in depths of between twelve and thirty feet for a tide, whilst small coasters ventured through the 'Sledway', a channel of up to seven feet deep, between Whitby Rocks and the Scar.<sup>17</sup> In a German survey of Whitby harbour in 1908, the depths off the East and West Piers were 0.3 metres and 0.6 metres respectively.<sup>18</sup> Deep water ports were comparatively rare: ships came up the Thames and Clyde only twice a day, as they could at Whitby, and Southampton's four tides a day were exceptional. Yet the navigational difficulties of Whitby harbour were particularly bad, and undoubtedly contributed to the decline in entrances and clearances at the port, which was especially evident in the late nineteenth century.

The limited harbour accommodation of the port of Whitby, in contrast with the importance of its shipbuilding industry and other shipping activities, resulted in the use of all parts of the waterfront for shipbuilding yards (as seen in Map One) and for quayage, warehousing and yards for the storage of timber and stone. A map of Whitby in 1740 shows quays and wharves on the East Cliff side of the town from Burgess Pier to the shipyard of the Dock Company; and on the West Cliff side, from the Battery to Jarvis Coates' yard.<sup>19</sup> A 1778 map, showing more of the inner harbour below Whitby bridge, includes further quays opposite Spital Bridge.<sup>20</sup> In 1790, according to the Port Books, there were 627 entries of vessels and 161 clearances, an average of two vessels per day entering or leaving Whitby harbour, in the coastwise trade alone.<sup>21</sup> By the time of the 1845 Tidal Harbours Commission, during which it was suggested that there were as many as 2,000 arrivals and sailings annually at Whitby,

the quayage and warehousing of the port had expanded considerably.<sup>22</sup>

Map Five shows how harbour facilities extended from the piers to Larpool Wood.

The Whitby and Pickering Railway, incorporated in 1833, was intended to extend the port facilities of Whitby further: it was hoped that an extension could then be built to York, connecting Whitby with the national rail network, so that it could act as an outlet by sea to London and the Continent for the manufactures of the West Riding.<sup>23</sup> The building of the railway began from the site of the old shipbuilding yard of Fishburn & Brodrick on the west side of the harbour, below Whitby bridge.<sup>24</sup> Its effects on the harbour were considerable. The consent of the Admiralty had to be obtained for the diversion of the Esk and the building of embankments and walls for the support of the railway line on the west side. The son of Thomas Fishburn, also named Thomas, was one of the principal directors of the Whitby and Pickering Railway Company, and received £2,400 from the sale of the old shipyard to the company, and £50 per year rent for the loan of his warehouses and old oil houses.<sup>25</sup> At the 1845 Commission, there were complaints that the new straight channel, resulting from work on the railway line, which had replaced the old circular course of the river, had made the Esk narrower at that point, and a tidal receptacle which had been formed by the old river course was now cut off.<sup>26</sup> Thus the waterway was further obstructed, preventing the maximum flow of water down the river to scour the harbour and clear out the build up of sand. The railway undoubtedly improved Whitby's landward communications, especially in the carriage of passengers and fish, but the harbour's problems remained.

The Whitby Gazette, published weekly from 1857, is the principal source of information in an analysis of the condition of the harbour in the second half of the nineteenth and early twentieth centuries. Local correspondents voiced fears that with the abolition of the harbour's

main source of revenue, the port facilities might collapse completely, or be taken over by the North East Railway Company.<sup>27</sup> One of the final achievements of the harbour engineer was the building of a public quay, 750 feet long and 25 feet wide, with flights of steps and landing places, to be used by fishing vessels and colliers. Pickernell's efforts had led to the erection of a lighthouse at each pier end with a new swivel bridge. But the only income of the trustees after 1861 was to be raised from a toll on vessels using the harbour and on all goods shipped and unshipped.<sup>28</sup> The decline of entrances and clearances into and from the port of Whitby by the latter half of the nineteenth century thus left the trustees with a small and irregular income.<sup>29</sup> They were faced by the dilemma that, for an adequate and regular income, the frequent and repeated entries of a considerable tonnage of shipping into Whitby harbour was required, yet the state of the harbour entrance, the silting up of the estuary, and the difficulties encountered by vessels in attempting to cross the bar at the harbour mouth, precluded such traffic at the port.

In attempting to make improvements, and preventing further deterioration of the harbour, with limited resources, the trustees charged and enforced a heavy penalty for the dumping of rubbish and ballast in the harbour, which was adding to existing problems of silting up.<sup>30</sup> A Town and Harbour Improvement Committee was formed to examine local opinion on the subject. Captain Thomas Jackson, a prominent master mariner of the port, pointed out that Whitby had a naturally good harbour, and just needed gates across it to make it into a dock, a system used successfully at Grimsby, where the fishing trade was flourishing as a consequence. Captain Jackson was of the opinion that if such gates were built to make a dock, forty to fifty smacks could easily be accommodated in the harbour at Whitby. William Burdon, the bridgekeeper, suggested that a dredger was needed to remove the shoals of silt in the harbour, and four feet of

rock would have to be blasted at the pier end. William Thompson, a pilot, revealed that the idea of gates across the harbour had been suggested previously, but the authorities with responsibilities for Whitby bridge, the North Riding of Yorkshire, had intervened and opposed such an idea when asked to contribute to the cost. A further finding of the Town and Harbour Improvement Committee was that despite the attempts of the trustees to reduce the dumping of rubbish in the harbour, they failed adequately to penalise the North East Railway Company, who were the worst offenders. A further effort to raise funds on the part of the trustees was the charging of vessels entering Whitby harbour to seek refuge from storms. 3½d per ton was levied upon such vessels, which, for a 300 ton coaster, represented an outlay of £4 7s 6d. By the late 1870's, many of the North East coast vessels seeking refuge would have been steamships, and for a 1200 ton steamer seeking refuge in Whitby harbour, a charge of £17. 10s would be made. The pilot Thompson was of the opinion that more vessels would enter Whitby harbour if this charge were reduced, further highlighting the financial dilemma of the trustees.<sup>31</sup>

The difficulties of the harbour trustees were particularly emphasised in the publication of the harbour dues received from 1 January to 31 August 1879, which amounted to only £538 1s 4d,<sup>32</sup> yet the expenses of the 1879 Act alone were £673 18s 9d.<sup>33</sup> It was estimated that £40,000 was required to make substantial improvements, the cost of increasing the width and depth of the harbour entrance, clearing sand obstructions, making a straight channel, increasing the backwater and enlarging the facilities for loading and discharge. Many ratepayers in Whitby refused to accept the need for any alterations to the harbour beyond occasional dredging, fearing an increase in the local rates, and having no confidence in a growth in numbers of vessels using the harbour and providing more revenue to pay for the improvements.<sup>34</sup>

Meanwhile, the harbour trustees became insistent upon the need for a dredger,<sup>35</sup> costing £7,000,<sup>36</sup> and considered that Whitby bridge, built in 1834, required a further expenditure of £7,000.<sup>37</sup> The harbour dues for 1883 totalled only £886 9s 9d, representing a very limited traffic in the port. The most important vessels for the revenue of the harbour were fishing boats, which were charged over £274 in 1883, followed by coasting vessels and colliers. There were so few foreign and colonial traders that more funds were raised by the levy on tugs. The income of the trustees barely repaid the interest charged on the money borrowed.<sup>38</sup> The lack of harbour traffic to supply revenue was not the sole factor frustrating the efforts of the harbour trustees. Local shipbuilders were also responsible for the poor state of the quayside; Henry Barrick, then a builder of small coasters, had done nothing to prevent soil falling from his dock and shipyard into the harbour.<sup>39</sup> The Lord of the Manor of Whitby, Sir Charles Strickland, also proved a difficult obstacle for the trustees. He considered that his rights over Whitby harbour were being threatened, yet refused to stand as a trustee himself.<sup>40</sup> He claimed the foreshore of Whitby harbour as his own private property and provoked a controversy in which the local Member of Parliament was in correspondence with the Board of Trade, the case finally being sent to the Attorney General.<sup>41</sup> It took over two years to finally establish details of the rights of the Lord of the Manor,<sup>42</sup> and meanwhile the old shipyard owned by the Hobkirk family, builders of fishing boats and small coasting vessels, had fallen apart, and the smell of mussels used as bait by local fishermen during the hot weather had succeeded in driving away many of the lucrative summer visitors.<sup>43</sup>

Inevitably, the local ratepayers bore the brunt of the loan repayments, facing an increase in rates of 50%, which was immediately mortgaged to help pay for the harbour improvements.<sup>44</sup> This trend became

increasingly apparent when the N.E.R., who suffered declining revenue with falling amounts of fish caught, cancelled their plans in financially assisting with the improvements.<sup>45</sup> A further loan of £10,000 was finally secured in 1887, after three years of negotiation with the Public Works Loans Commissioners.<sup>46</sup> This was regarded as long overdue, as the Jubilee issue of the Whitby Gazette, looking back over the last thirty years, saw very few improvements in the harbour over that time.<sup>47</sup>

Such a situation was not surprising in view of the difficulties experienced by the trustees in raising even small sums. In 1888 the collier Jehu entered for refuge. The master was called upon to pay 3d per ton for the coals on board, which was three times as much as if the coal was consigned for Whitby itself. It was finally agreed that if the coal was not for the town, the vessel need not pay the duty, and the harbour trustees were accused of taking advantage of the misfortune of others.<sup>48</sup> The dues charged on pleasure boats moored in Whitby harbour were only 2s 6d per year, yet over 300 persons defaulted on their payments.<sup>49</sup> The trustees received no local sympathy for their efforts: although by the end of 1887 the dredger had raised 11,405 tons of silt and rubbish,<sup>50</sup> the master of a 3,600 ton steamer about to leave by the still dangerous channel held the trustees personally liable for any damage, which fortunately did not occur.<sup>51</sup> The increased revenue hoped for by the trustees with the carriage of pig iron by sea rather than by rail made no significant difference to their perilous financial situation.<sup>52</sup>

As suggested before, it was realised that even continual dredging could not maintain an adequate channel, and structural works were needed for the substantial improvement of the harbour. The plans of the trustees met immediate opposition from the pilots who considered that any structural feature within the harbour would be detrimental to shipping.<sup>53</sup> The main problem was that the force of water down the channel

from the Esk was insufficient to maintain its depth. If walls were installed in the harbour, the flow of water could be concentrated to increase its scouring power and maintain a deep channel of water for ease of entry and clearance of vessels. The estimated cost of such 'training walls' was £3,047 12s; revenue from the harbour was obviously inadequate and the Local Board, with more general authority throughout the town, was called in to advise, although notably lacking enthusiasm for the project.<sup>54</sup> The division of opinion on the need for structural alterations to the harbour among the trustees provoked the resignation of James Gray, and Thomas Turnbull junior and senior, the former an auctioneer and steamship share broker, and the latter the port's most prominent shipbuilders.<sup>55</sup> They were followed by Thomas Marwood and John Henry Harrowing, important Whitby shipowners, when notified that they were unable to vote on the joint meetings of the trustees and the local harbour board.<sup>56</sup> The trustees were forced to become dependent on the Local Board for financial support when the former became unable to continue repayments on a loan of £10,000 from the Public Works Loans Commissioners.<sup>57</sup>

It was not until 1907 that the Harbour Improvement Scheme finally came into operation,<sup>58</sup> and then only as a result of the termination of the authority of the harbour trustees and the assumption of responsibility for the harbour by the Whitby Urban District Council, who were also behind the building of the new bridge which was opened in 1908.<sup>59</sup> The loan required for these improvements was spread over thirty years in an attempt to prevent a large increase in the rates.<sup>60</sup> The trustees thus failed to bring about substantial harbour improvements during their two hundred year existence, and it has been suggested that the particular physical difficulties of Whitby harbour, and the continuing shortage of funds, played a large part in their failure. The Whitby Gazette editorials suggested further reasons: that 'several attempts have been made to

raise it [Whitby harbour] from the low and stagnant position it has occupied for so many years. But these attempts have been met, not with outspoken opposition, but with frosty and callous indifference. . .<sup>61</sup> The trustees were accused of wasting money.<sup>62</sup> One of the most important considerations in the reluctance to invest heavily in an improved harbour, and a factor behind the collapse of the revenue of the port, was pointed out in an editorial of 1893:

It is painful, however, to reflect that no improvement of any consequence has been made in the trade of the port after spending the great amount of money which the town is now called upon to meet. . . Thus it follows the ratepayers have to pay for practically the whole of the cost of a scheme which originally was expected to be in a large degree supported by the creation or development of a maritime trade which is not in existence, and the realisation of which is as far off as ever it was.<sup>63</sup>

In the public meeting held to discuss the Whitby Urban District Council Parliamentary Bill, Councillor Henry Walker, a prominent investor in the steam shipping of the port, declared that the trustees 'had no means whatever of raising capital', a statement which was greeted by applause. He suggested that if that fact was acceptable, then so was the Bill. Another councillor declared that he had been in Whitby for twelve years and had seen no improvement in the harbour. Mr. R.E. Turnbull from Ruswarp, a small village adjoining Whitby, had known Whitby for forty years, said that 'he was delighted when he first stayed at Whitby, and he used to speak of it as the most beautiful town in England, a place where every prospect pleases, and only the harbour is vile'.<sup>64</sup>

Thus, in the preceding survey, it is clear that the trustees faced an enormous task with a very small income and achieved correspondingly little. It was not until the Whitby U.D.C. assumed responsibility that the pier extensions were built with their lighthouses, that a new bridge was erected, a new quay was built and the channel effectively dredged so that Whitby could assume its present appearance. But was the lack of progress achieved by the trustees due only to a lack of funds? It was significant



that the majority of the trustees throughout the period were major shipowners and shipbuilders (see Appendix 2), and by the end of the nineteenth century, the Whitby harbour trustees also represented the bulk of investment in steam shipping at the port.<sup>65</sup> Perhaps their relative indifference to the harbour may be explained by the infrequency of use by their vessels of the harbour facilities. By the end of the period under discussion, Whitby shipowners regarded this port as the place of registration of their vessels, and as their place of residence only; in the latter event it is notable that the most prominent of these shipowners were moving to the environs of the port, further away from the harbour.<sup>66</sup> When the port facilities of Whitby declined in importance in relation to the shipping owned at the port, a circumstance particularly applicable to the late nineteenth century, it is clear that those individuals with a prominent place among the shipping interest of Whitby regarded the harbour itself as irrelevant to their principal concerns.

The number of persons employed in Whitby harbour was never large. In a directory of 1784, only John Douglas, of the Custom House, is mentioned,<sup>67</sup> and in 1798, only Francis Gibson, the Collector of Customs and James Lowrie, a lighterman, are listed.<sup>68</sup> In 1811, Andrew Allon was employed as a wharfinger, Robert Lines and William Race as lightermen, Jonathan Pickernell was the engineer to the port and John Pitts the Collector of Customs.<sup>69</sup> In 1823, in addition to the Collectors of Excise and Customs, four lightermen and four wharfingers, twelve pilots operated from a Pilot Office near the Battery, within the jurisdiction of Newcastle Trinity House.<sup>70</sup> A directory of 1828-9 lists those employed at Whitby Custom House: Christopher Coulson, the collector, Isiah Moorsom, the comptroller and surveyor, William Patton, the landing waiter, George Fern, the riding officer, Thomas Beaumont, the clerk to the collector, Captain James Morgan, R.N., inspecting commander of the coast guard, Lieut.

Sydney King, R.N., chief officer of the preventive station, John Brown, the collector of excise, Robert Jennings, the supervisor of excise, and eleven tide waiters and boatmen, a total of twenty persons.<sup>71</sup> An analysis of the 1841 census shows that forty-one persons were employed in Whitby harbour, and fifty-eight in 1851. By 1861, this number had declined to 28, and by 1871, only eighteen.<sup>72</sup> With the decline in entrances and clearances at Whitby harbour, and the continuing poor state of its accommodation until the early twentieth century, the personnel employed there also decreased.

The state of Whitby harbour throughout the eighteenth and nineteenth centuries and its relationship with the shipping industry of the port requires further consideration. Five aspects of the maritime activity of the port of Whitby to which the condition of the harbour was of importance may be identified: the beginnings of the Whitby shipping industry in the seventeenth and eighteenth centuries, the shipping traffic of the port, the use of Whitby as a port of refuge, fishing from the port, and the tourist trade which developed in the latter half of the nineteenth century. The petition from Whitby collier owners in the mid eighteenth century arguing that repairs to the harbour would result in a higher shipbuilding output of the port, discussed in Chapter One, shows that the early shipping industry of Whitby revolved around its harbour, which was especially true of entrances and clearances into and from Whitby. As shown in the introductory section of Chapter Five, the traffic in Whitby harbour in the eighteenth and early nineteenth centuries was far in excess of later periods, and this was dependent on the harbour being at least navigable and fairly commodious. When the wooden shipbuilding industry of Whitby flourished, with its concomitant need for the import of shipbuilding materials, and before the Whitby and Pickering Railway (later taken over by the N.E.R.) when the majority of local consumer goods came by sea, the use of the harbour facilities of Whitby, although slight in relation to

the tonnage of vessels built and owned there, was considerable.

In the latter half of the nineteenth century, the question of the prevention of shipwrecks, and safety at sea generally, was discussed at length in parliamentary circles. An average of 780 persons per year were killed in coastal wrecks in the period 1852-7; there were as many as 1549 deaths from drowning in 1854 alone. The North East coast was regarded as particularly hazardous; in 1859, a total of 273 persons were saved by the Redcar lifeboat.<sup>73</sup> Five vessels were noted in the official wreck returns as a total loss off the coast from Whitby in 1816-17, and a further twelve ships foundered or went aground, to be lost entirely, in 1833-5.<sup>74</sup> The provision of adequate ports of refuge was seen as a possible way to reduce the danger of shipwreck, and among other ports situated along treacherous coastlines of the British Isles, Whitby received considerable attention in numerous parliamentary enquiries. In 1836 the need for a Harbour of Refuge on the North East coast was officially recognised, and Whitby, Scarborough and Bridlington were considered.<sup>75</sup> A local master mariner, Captain William Hewitt, pointed out the navigational problems of entering Whitby:

I consider Whitby a very dangerous harbour to attempt to navigate in a gale of wind upon the shore. . . . The only way in which vessels can take the harbour of Whitby with safety is by the assistance of boats, ropes and all sort of preparations made for them on the shore previous to their entering between the piers.<sup>76</sup>

Aaron Chapman, a Whitby shipowner and elder brother of Trinity House, regarded tolls charged upon vessels entering Whitby harbour for trading purposes as totally inadequate for the maintenance of the harbour as 'so few are the ships that go there, it being merely a shipbuilding port, where ships once built may never go again'. The passing toll was the most important source of revenue for Whitby harbour until the 1860's: in an expenditure of £3,453 on the upkeep of Whitby piers between 1833-4, over £2,549 were collected as duty on coals loaded at Newcastle, Sunderland and

Blythnook. These dues were passed on to the consumer rather than borne by the shipping industry, and were inadequate to provide a harbour suitable for the protection of shipping, which was vital to the coal trade, especially in the winter months.<sup>77</sup>

The total income of the port of Whitby collected from the passing tolls was estimated at £3,600 per year in 1846.<sup>78</sup> Further witnesses, including Francis Pickernell, the harbour engineer, were brought in to attest to the condition of the harbour and its suitability as a harbour of refuge. Many local shipowners and traders had pecuniary interests in the selection of Whitby for Government improvement grants, and if the port had been in receipt of financial aid as a harbour of refuge, the period of its management by the trustees may have been more successful. The principal drawback of Whitby harbour was identified as on the one hand, the need for a narrow entrance due to the heavy swell of the sea on that coast, and secondly, the small tide of water running into the harbour from the Esk, resulting in the total silting up of the area within the piers. The installations of the Whitby and Pickering Railway Company as discussed earlier further reduced the flow of water into the harbour. Pickernell suggested the building of a groyne to prevent the movement of sand, and the ruler of the pilots, James Wood, considered that an extension of the piers would reduce the swell, but no major decisions affecting Whitby harbour itself were taken.<sup>79</sup> The Passing Toll was further investigated in 1854, and it was considered that such a toll was unjust unless it was 'levied for the construction, maintenance or improvement of a harbour of refuge in the strict sense of the term'. The right of Whitby to collect passing tolls was thus brought into question when the commissioners concluded that 'no harbour can be correctly regarded as a harbour of refuge to which access was difficult or dangerous', and it was clear that many considered Whitby as inappropriate.<sup>80</sup>

In 1857 the incidence of shipwrecks on the North East coast was further examined. Wreck returns of 1852 showed that one quarter of all recorded wrecks occurred within a seventy-mile radius of the Tyne.<sup>81</sup> The harbour of Hartlepool was most favoured as a Harbour of Refuge, but it was decided to leave final decisions to a Royal Commission on the subject.<sup>82</sup> When the Royal Commission on Harbours of Refuge<sup>83</sup> sat, in 1858-9, despite the enthusiasm of local shipowners, masters, pilots and harbour officials, the case for Whitby as a major Harbour of Refuge remained weak. It was argued that the site of Whitby was inappropriate for refuge purposes for vessels leaving the Tyne, because if the state of the weather suggested that a vessel would not make Whitby harbour, she would not have left the Tyne. A port in a more suitable position near the half way mark between the Tyne and the Thames could protect vessels when weather conditions gradually worsened on a voyage.<sup>84</sup>

The concept of harbours of refuge generally was not admitted by all to be the panacea for the prevention of shipwrecks. Many seamen believed that rather than attempting to enter a possibly inaccessible harbour in the event of a storm, it was preferable to keep clear of coasts, and to maintain plenty of sea room.<sup>85</sup> In an analysis of twenty-seven vessels that were wrecked off Whitby in 1856-7, it was considered that if Whitby was endowed with all the facilities of a harbour of refuge, only thirteen of these vessels, or less than half, would have been saved. The other vessels were lost due to the poor condition of the ships themselves (in five cases), to incorrect or inadequate navigation by the masters and crew (in five cases), to overwhelming stress of weather (in two cases) and due to a collision with another vessel. In three cases, confusion over which were the lights of Whitby harbour as opposed to Runswick furnace or another local settlement led to stranding, in the case of the brig Kathleen of 158 tons, and to the total loss of the schooner Mary 61 tons and the brig Traveller,

113 tons.

Evidence was presented to the Commission by the shipowners, Gideon Smales, Henry Robinson, William Broderick Smith and others, the ship-builder George Barrick, six masters, a civil engineer, a pilot, the harbour master and two fishermen, representing those whose work involved the use of the harbour, and a number of prominent trustees. All were unanimous in arguing for the suitability of Whitby, Smales claiming that 'the object of these remarks is purely to facilitate the trade of the coast; I do not think the trade of the town would benefit at all, for, unfortunately, we have not a very extensive trade. But my principal desire is to save life and property.'<sup>86</sup> However, it is significant that he always advised the masters of his ships to keep to the sea rather than enter ports.<sup>87</sup> One of the main features of Whitby used to forward the case of the port for refuge purposes was its central position between Flamborough Head and the Tyne and Tees, yet the repetitive and contradictory nature of much of the evidence presented failed to convince the Commissioners. William Tose, the harbour master of Whitby, pointed to the poor condition of many colliers, especially in comparison with foreign-going vessels, a matter of some interest to the Commission, showing that many cases of shipwreck were indeed not due to neglect in the provision of harbours of refuge. Despite its ideal site and the large number of wrecks occurring very close to Whitby, the considerable navigational disadvantages of the harbour, its narrow entrance, silt-covered bar and rocky approaches meant that a substantial loan or grant would be required to effect much improvement, whilst Hartlepool, Filey, Runswick and many other East coast ports could be rendered more suitable for refuge for vessels in bad weather with less expenditure. Two examples of the difficulties of entering Whitby harbour were given by the harbour master, when he drew attention to the case of the Colony, which waited five days in Whitby

roads attempting to gain admission to the harbour, only to be wrecked entering Shields, and the Zephyrus which, having abandoned attempts to enter Whitby, the port to which she was bound, struck the bar at Hartlepool, becoming a total loss.<sup>88</sup>

In 1860 the possibility of erecting floating breakwaters in the improvement of harbours was considered, and it was estimated that the devices represented only one eighth or one tenth of the cost of solid masonry. The suggestion that harbours of refuge would only serve to tempt unscrupulous shipowners to send unseaworthy ships to sea reflects official hesitation to intervene in the workings of the shipping industry, an opinion prevalent during the mid to late nineteenth century.<sup>89</sup> The attempts of the Government to provide refuge harbours against shipwreck may be seen overall as a failure,<sup>90</sup> especially for Whitby, with the loss of its passing toll and inability to repay even the low interest loans offered. Whitby as a port of refuge was resorted to only in times of great emergency, as a function of its situation on the North East coast rather than any intrinsic merits for the protection of vessels in bad weather.

The condition of Whitby harbour was of consequence to two further aspects of maritime activity at Whitby: fishing, and the tourist trade. It has been argued that the poor state of the harbour served to dissuade fishing boat owners from other ports from using Whitby as a base during the fishing season, and influenced the decline in the numbers of fishing boats registered at the port. The small harbours and coastal villages surrounding Whitby were favoured more than the head port as a base for fishing boats, especially in ease of mooring, entry and clearance.<sup>91</sup> In the last quarter of the nineteenth century, the tourist trade became increasingly important to the economy of the port, the Whitby Gazette featuring long lists of current visitors staying in the town each season, and describing the

many attractions of the locality. However, the annual harbour master's report recorded regular complaints that the harbour was offensive, smelly and dirty, when Whitby advertised itself as a health resort. This was especially true in hot weather, which tended to accentuate the noisome qualities of the harbour, through the dumping of rotting rubbish and the collection of bait by fishermen. The condition of the harbour fortunately had no long term ill effects on this trade which, at the end of the period under discussion, was one of the most profitable activities of the port.

In considering the condition of Whitby harbour in relation to the maritime enterprise of the port in all its aspects throughout the eighteenth and nineteenth centuries, a case may be made for its relative insignificance. The large merchant fleet registered at the port was a feature achieved by its inhabitants with little recourse to the harbour by the majority of these vessels. The irony of a quiet, rather moribund harbour, combined with an impressive steam fleet did not go unnoticed by contemporaries.<sup>92</sup> The Whitby shipbuilding industry required space for the construction of vessels, and a means of importing necessary materials, but it is well known that ships could be built in relatively unlikely places, even far inland. If the peak of shipping investment and enterprise at Whitby may be regarded as occurring at the end of the nineteenth century, with the ownership of over a hundred steamships and the construction of several modern screw steamers each year at the Whitehall yard, the lack of importance of Whitby's harbour facilities in the maritime development of the port may be more fully appreciated. The prosperity of the shipping industry at Whitby was such that, if the further success of the industry had depended upon harbour facilities of a high standard, then local shipowning capital was sufficient to provide the requisite finance for improvements. That shipping at Whitby flourished despite the neglect of its home port shows that its shipowners and shipbuilders who, as trustees, governed the harbour for over two hundred years,



considered that such investment in the harbour was inappropriate, unnecessary, and would not add substantially to their profits.

## REFERENCES: CHAPTER SIX

1. See Chapter Four
2. Whitby Gazette, 1 Dec. 1899
3. Robert Tate Gaskin, The Old Seaport of Whitby (Whitby, 1909). House of Commons Journals, Vol. XI, 8 Dec. 1696. See also The Case of the Town and Port of Whitby (London ?, 1710). B.L. Tracts, 816, p.59 m.8 (73)
4. Lionel Charlton, A History of Whitby, etc..., (York, 1779), p.327. George Young, A History of Whitby, etc... (Whitby, 1817), p.533
5. Gaskin, p.336
6. Wh.Gaz., 13 Feb. 1858. It has not been possible to trace annual series of revenue of Whitby harbour
7. G. Young, A History of Whitby etc..., (Whitby, 1817), opposite p.556
8. By 1778, according to a map included in Charlton, Whitby, frontispiece
9. Admiralty Hydrographic Office report on lighthouses, (1836), in B.L. Tracts, 2151, 1832 etc., England, Admiralty
10. Ordnance Survey of Whitby, five feet to one mile, published 1852. B.L. Maps, O.S.T. (100)
11. Bartholomew's Imperial Gazetteer of England and Wales 1866-69, (London, 1870). Map of Whitby, Scale 1:10,800, p.1054
12. See Map Four
13. Tidal Harbours: First Report of the Commissioners appointed to inquire into the State and Conditions of the Harbours, Shores and Navigable Rivers of the U.K., P.P., 1845, XVI, (665.), Appendix 24, pp.461-462, Report of the Admiralty Surveyor, Capt. John Washington of H.M.S. Blazer
14. Survey of Whitby Harbour and the River Esk by A. Comrie and Thos. Drane, 1845, from Second Report of the Tidal Harbours Commission, P.P., 1846, XVIII pt. 1, (692.), map facing p.428
15. First Report of the Tidal Harbours Commission, P.P., 1845, XVI, (665.), Appendix 25, pp.463-7, Report of Mr. James Walker, C.E.
16. Admiralty chart of Whitby, 1½ inches to one sea mile, published 1863. B.L. Maps, S.E.C. 1 (2902.b.)
17. Richard Weatherill, The Ancient Port of Whitby and its Shipping, (Whitby, 1908). Map of Whitby in 1876, opposite preface
18. Nordsee, England, Ostküste. Inset of Whitby Harbour, Scale 1:25000. Published Berlin, 1908. B.L. Maps, G.A.C. (217)
19. See note 7
20. See note 8. In 1808, a Board to Collector Letter Book includes a list of wharves, etc.: Jn. Sanders' wharf (legal quay), Old Shipping Co. Wharf, Bond Warehouse No. 1 (for spirits), Bond Yard No. 1, Bond Yard No. 2, and four Oil Houses (for whale oil) owned by Skinner Campion, Moorsom, and Brodrick. P.R.O. CUST 90 / 70 inside front cover
21. See Chapter Five, Section One
22. First Report of the Tidal Harbours Commission, P.P., 1845, XVI, (665.), App.24. In 1840 Whitby obtained the privilege of having a bonded

warehouse, where 'the business is conducted by a company under the inspection of the Custom House.' Guide to Whitby and the Neighbourhood (Whitby, 1850), p.48

23. George Andrew Hobson, The Life of Sir James Falshaw, (London, 1905), p.50
24. G.W.J. Potter, A History of the Whitby and Pickering Railway, (London, 1906), p.20
25. P.R.O. RAIL 742 / 1 Orders and Proceedings of the Directors of the Whitby and Pickering Railway Co., 1833-1845, pp.5, 8, 61, 103, 115
26. First Report of the Tidal Harbours Commission, P.P., 1845, XVI, (665.), App. 25
27. Wh.Gaz., 30 Mar. 1861
28. Wh.Gaz., 28 Dec. 1861
29. See Chapter Five, Section One
30. Wh.Gaz., 11 Jul. 1863
31. Wh.Gaz., 16 Feb. 1878
32. Wh.Gaz., 6 Sept. 1879
33. Wh.Gaz., 13 Sept. 1879
34. Wh.Gaz., 10 Apr. 1880, 5 Nov. 1881
35. Wh.Gaz., 6 Aug. 1881
36. Wh.Gaz., 7 Jul. 1883
37. Wh.Gaz., 20 Oct. 1883
38. Wh.Gaz., 5 Apr. 1884
39. Wh.Gaz., 5 Jul. 1884
40. Wh.Gaz., 1 Nov. 1884
41. Wh.Gaz., 10 Jan. 1885
42. Wh.Gaz., 12 Sept. 1885
43. Wh.Gaz., 9 Jul. 1885
44. Wh.Gaz., 18 Apr. 1885
45. Wh.Gaz., 10 Apr. 1886
46. Wh.Gaz., 19 Mar. 1887
47. Wh.Gaz., 25 Jun. 1887
48. Wh.Gaz., 11 Feb. 1888
49. Wh.Gaz., 6 Aug. 1887
50. Wh.Gaz., 10 Sept. 1887
51. Wh.Gaz., 10 Dec. 1887
52. Wh.Gaz., 4 Jan. 1889
53. Wh.Gaz., 10 May 1889
54. Wh.Gaz., 7 Jun. 1889
55. Wh.Gaz., 3 Jan. 1890

56. Wh.Gaz., 11 Mar. 1892
57. Wh.Gaz., 9 Dec. 1892. It has not been possible to list the total expenditure on new works, through the constant changes in estimates and, with varying repayment schemes, the amounts actually paid.
58. Wh.Gaz., 6 Dec. 1907
59. Wh.Gaz., 30 Jul. 1908
60. Wh.Gaz., 16 Apr. 1909
61. Wh.Gaz., 2 Jan. 1891
62. Wh.Gaz., 31 Dec. 1891
63. Wh.Gaz., 6 Jan. 1893
64. Wh.Gaz., 13 Jan. 1913
65. See Chapter Four
66. See Chapter Seven
67. Bailey's British Directory, (London, 1784), 3, p.729
68. Universal British Directory, (London, 1798), 4, pp.738-794
69. Holden's Directory, (London, 1811). In an Admiralty Return of 1804, quoted in Chapter One, William Race was listed as a shipbuilder.
70. Baines' History, Directory and Gazetteer of the County of York, (Leeds, 1823), II, pp.576-584
71. Pigot & Co.'s Directory, (London, 1829), pp.1125-1130
72. P.R.O. HO/107/1265; P.R.O. HO/107/2374; P.R.O. RG/9/3647-8; P.R.O. RG/10/4847-8
73. Baron F. Duckham, 'Wrecks and Refuge Harbours 1856-61: a Reform That Failed', Transport History, 6 (1973), pp. 150, 152, 153
74. Report from the Select Committee on the causes of Shipwrecks, P.P., 1836, XVII, (567.) Appendix 7
75. Select Committee on Harbours of Refuge, P.P., 1836, XX, (334.)
76. S.C. on Harbours of Refuge, P.P., 1836, XX (334.), qq. 45-58
77. S.C. on Harbours of Refuge, P.P., 1836, XX, (334.), qq.1046-1074
78. Tidal Harbours Commission, P.P., 1846, XVIII, pt. 1., (692.)  
Second Report p. xii
79. Tidal Harbours Commission, P.P., 1846, XVIII, pt. 1, (692.), ms pp. 372-381
80. Report of the Commissioners on Local Charges on Shipping in the U.K., P.P. 1854, XXVIII, (1836.), Report p. xix
81. Select Committee on Harbours of Refuge, P.P., 1857, XIV, sess. 2, (262.)
82. Select Committee on Harbours of Refuge, P.P., 1857-8, XVII, (394)
83. Royal Commission on Harbours of Refuge, P.P., 1859, X, pt. 1, (2474) and (2506-I) continued in P.P., 1859, X, pt. II, (2506-II)
84. R.C. on Harbours of Refuge, P.P., 1859, X, pt. 1, (2474), first report.
85. Duckham, 'Wrecks and Refuge Harbours', pp. 156-7

86. Royal Commission on Harbours of Refuge, P.P., 1859, X, pt. II, (2506-II) Evidence of Gideon Smales, q.20612-5
87. R.C. on Harbours of Refuge, P.P., 1859, X, pt. II, (2506-II), q.20682
88. R.C. on Harbours of Refuge, P.P., 1859, X, pt. II, (2506-II), q.20788
89. Select Committee on Breakwaters and Harbours, P.P., 1860, XV, (45.)
90. Duckham, p. 163
91. See Chapter Five Section Four, 1
92. Richard Weatherill, The Ancient Port of Whitby and its Shipping, (Whitby, 1908), p.20

## APPENDIX 1

## ACTS OF PARLIAMENT RELATING TO WHITBY HARBOUR, 1701-1905

1701-2	1 Anne c. xix	Duty of $\frac{1}{4}$ d per chaldron - 'passing toll'
1709	7 Anne c. i	Continuation of above duty
1720-1	7 Geo. I c. xvi	For preserving the piers of Whitby
1734-5	8 Geo. II c. x	For lengthening Whitby piers
1749	23 Geo. II c. xxxix	Whitby Piers and Harbour Act
1765	6 Geo. III c. lxxxix	Extension of above Act
1780-1	21 Geo. III c. xii	Act to continue duty of $\frac{1}{4}$ d per chaldron
1795-6	36 Geo. III c. cxxi	Extension of Act above, $\frac{1}{2}$ d per chaldron
1821	52 Geo. III c. clxxxv	Act for preserving piers of Whitby
1827	7 & 8 Geo. IV c. lxxviii	Act for repairing, maintaining, improving the piers of Whitby
1847	10 & 11 Vic. c. xvi	Whitby Improvement Act
1847	10 & 11 Vic. c. xxvii	Whitby Piers and Harbour Act
1861	24 & 25 Vic. c. xxxv	Loan from P.W.L.C.
1879	42 & 43 Vic. c. xix	Whitby Port and Harbour Act
1883	46 & 47 Vic. c. xxxv	Pier and Harbour Orders (Confirmation) Act No. 2
1905	5 Edw. VII c. cxxxv	Whitby Urban District Council Act

---

Sources: Whitby Museum collection of Acts of Parliament relating to Whitby, Whitby Gazette, Papers relating to Whitby Harbour in the North Yorkshire County Record Office, various secondary sources referred to in References

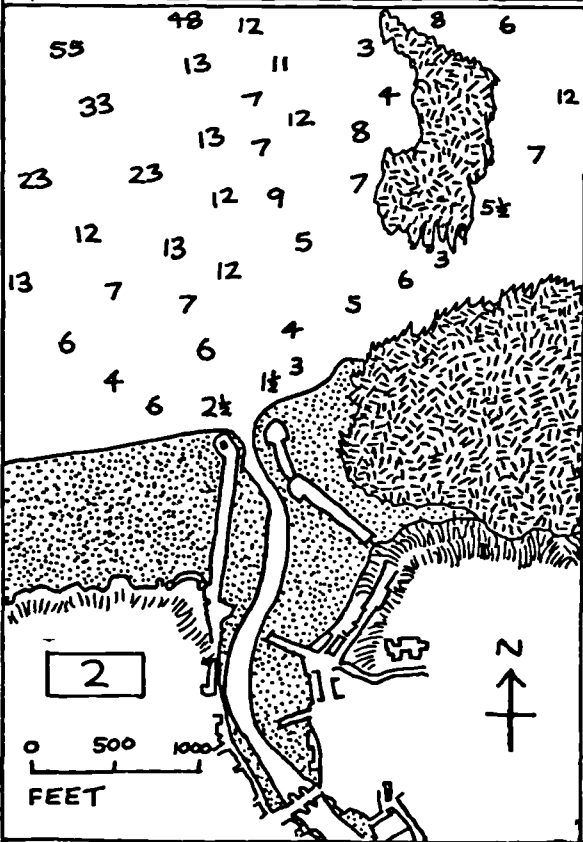
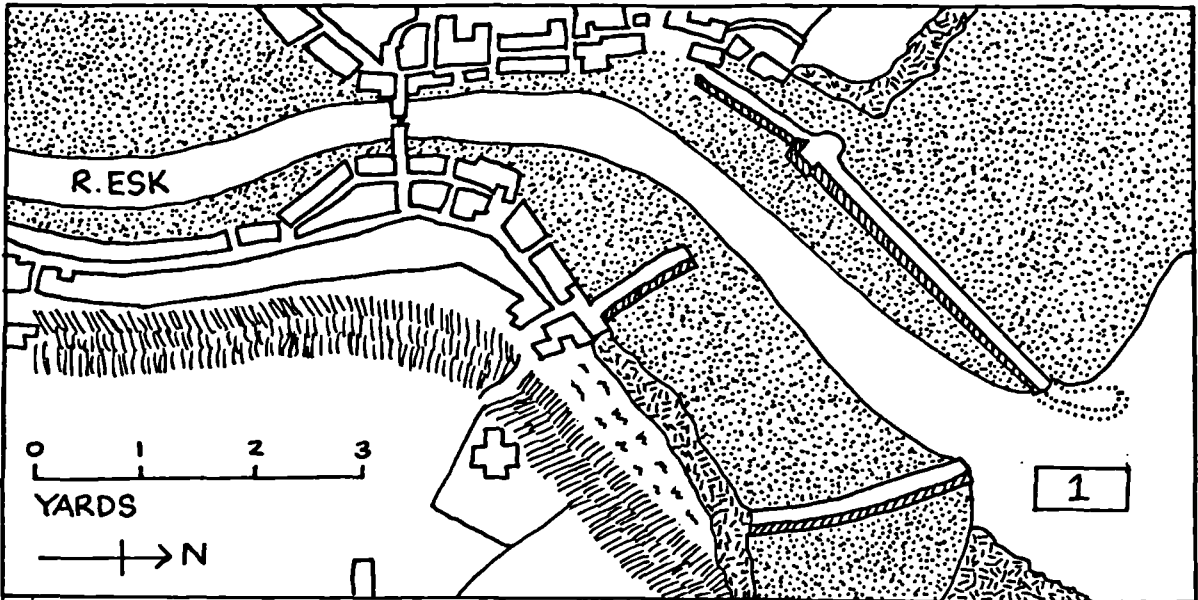
## APPENDIX 2

## THE TRUSTEES OF WHITBY HARBOUR, 1702-1905

- 1702      Ralph Boyes, Gideon Meggison, Henry Stonehouse, Henry Linskill, John Wilkinson, Matthew Thompson, John Langstaffe, Leonard Jefferson, William Fotherley
- 1777      Nathaniel Cholmley, William Cholmley, John Yeoman,\* William Linskill,\* Adam Boulby,\* William Barker, John Walker,\* Abel Chapman,\* John Kildale, Henry Clark\*
- 1817      Mrs. Cholmley, Earl Mulgrave,\* John Chapman,\* Henry Walker,\* Christopher Richardson,\* John Campion Coates,\* Henry Simpson,\* Richard Moorsom,\* William Barker, William Skinner\*
- 1846      Christopher Richardson,\* John Holt,\* Robert Campion,\* John Chapman,\* John Chapman Junior,\* Henry Simpson\* and others
- 1879      Sir George Elliot, Thomas Turnbull,\* Thomas Turnbull Junior,\* James Gray,\* John Weighill,\* Robert Harrowing,\* William Falkingbridge,\* J. Maule
- 1883      Charles Bagnall, Robert Harrowing,\* Captain Copperthwaite, John Weighill,\* J.S. Moss, Robert Hutton,\* Thomas Turnbull,\* John Turnbull,\* James Gray\*

\*Mentioned in the Statutory Registers of Shipping as owning shares in vessels registered at the port of Whitby

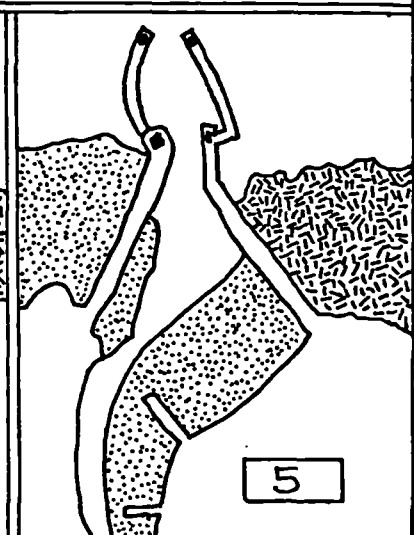
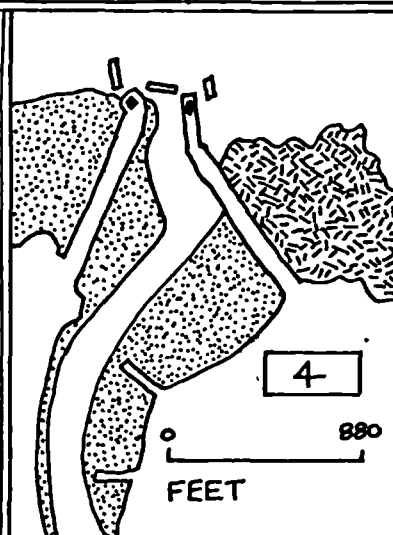
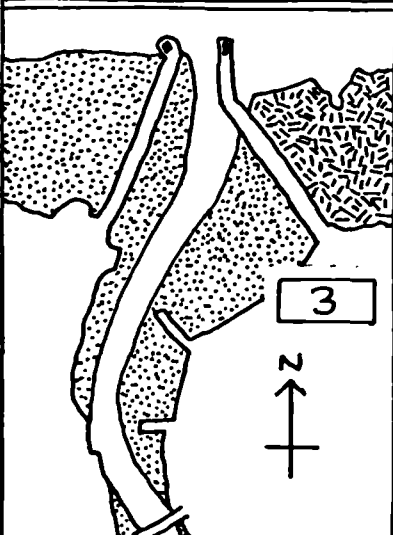
Sources: 1702, 1777 - Lionel Charlton, A History of Whitby, etc..., (York, 1779), pp. 328, 332; 1817 - George Young, A History of Whitby, etc.. (Whitby, 1817), p.540; 1846 - P.P. 1846 XVIII pt. I (692.) pp. 372-381, see Note 78; 1879 - Whitby Gazette, 13 Sept. 1879; 1883 - Whitby Gazette, 7 Jul. 1883



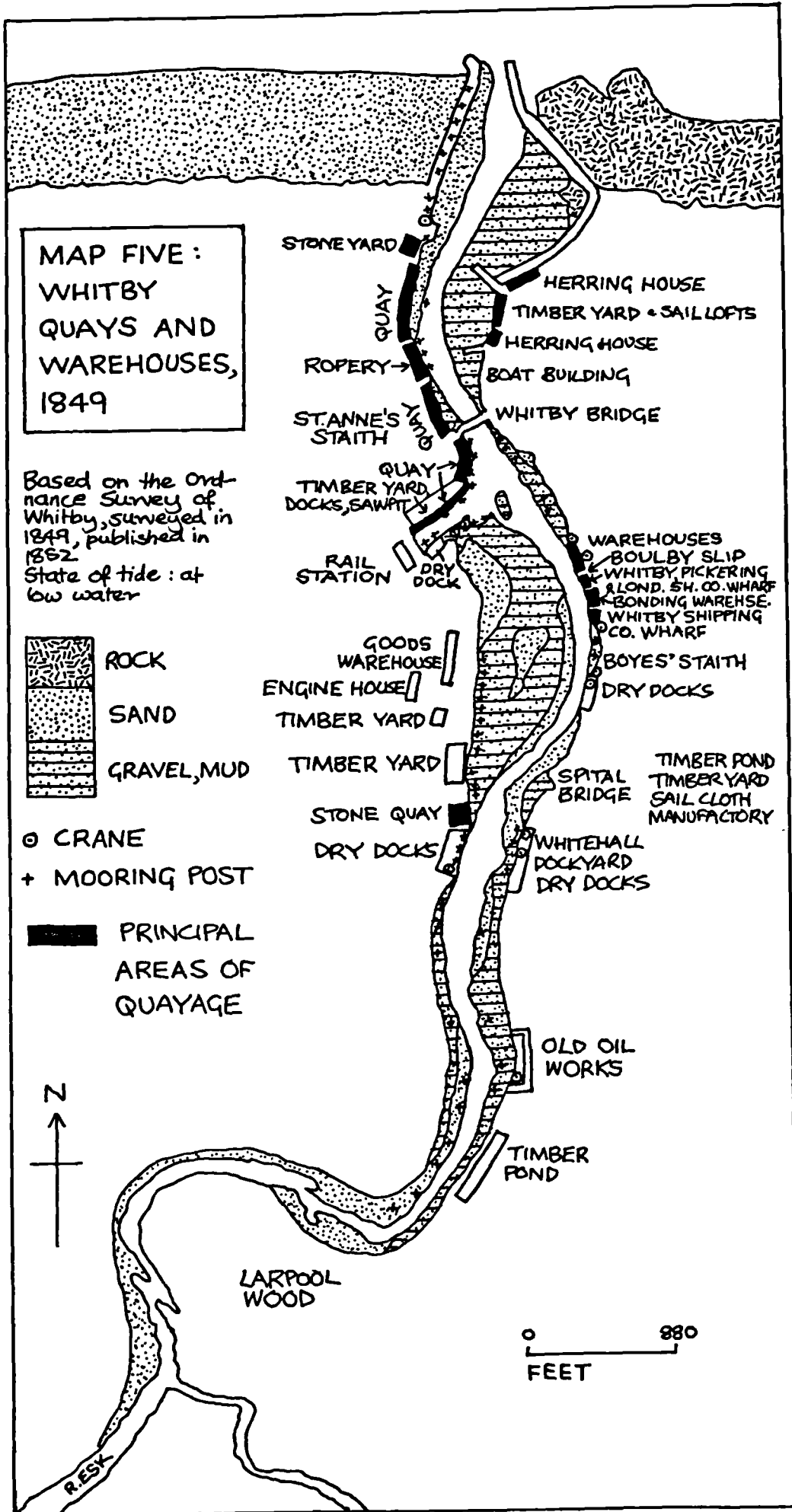
**MAP FOUR :  
WHITBY PIERS AND  
HARBOUR, 1740-1908**

1. Based on Wooler's plan of 1740, reproduced in G. Young, *A History of Whitby, etc...*, (Whitby, 1817), p. 558
2. From a survey by A. Corrie and Thos. Drane 1845, published in *Second Report of the Tidal Harbours Commission*, P.P., 1846, XVIII pt. 1, (692), p. 428. Soundings at low water in feet
3. Taken from *Bartholomew's Imperial Gazetteer of England and Wales*, (London, 1869), p. 1064
4. Based on the Ordnance Survey of Whitby, published in 1911
5. From the Ordnance Survey of Whitby published in 1927. Full pier extensions are also shown in a plan of Whitby in *Nordsee. England Ostkuste, etc...*, (Berlin, 1908)

 Rock  
 Sand, Gravel, Mud  
 Lighthouses







## CHAPTER SEVEN: THE MARITIME COMMUNITY OF WHITBY 1700-1914

Until now, the shipping and the trade of the port of Whitby has been considered within an economic framework, in an attempt to analyse the workings of a particular industry. The community in which these activities prospered and declined, and the social background of those involved in the industry, adds a final dimension to this study, and further helps to explain the economic features of the port. It is proposed to examine the occupational structure of the town of Whitby during the eighteenth and nineteenth centuries, placing the shipping industry within the context of the other activities of the port and town, noting changes in this structure and how they reflected the prosperity of the local economy. Changes in the economic and social aspects of the community were affected by not only seaward trade and communications but by the development of land transport networks in the locality, especially in view of the landward isolation of the port for much of the period under discussion. In considering the shipping industry of an entire port, rather than an individual company, partnership or family, particularly where relatively few private papers have survived,<sup>1</sup> many of the personalities of the port of Whitby have appeared as only shadowy figures among the attempts at quantification of vessels built and owned at the port and discussion of their employment. The personalities and families of Whitby and their involvement in the activities of the port may lend further insight into the social aspects of this eighteenth and nineteenth century shipping community.

In considering the personnel of the Whitby shipping industry, previous chapters have largely concentrated on the role of the shipowner and shipbuilder, those investing in the fixed capital of this activity. Masters and crew of Whitby ships have been seen principally as items of

expenditure for the shipowner, in terms of wages and victuals. The masters particularly played a unique part in the profitable operation of their vessels, in negotiating remunerative freights, in reducing costs and in safe navigation. The masters and crews of Whitby ships not only formed a vital element in the operation of Whitby shipping but also may be seen as a link between the shipping industry and the ordinary working population of the town, rather than considering the industry only in relation to its manufacturers and capitalists. The shipping industry of Whitby may be seen as providing an investment opportunity for entrepreneurs and tradespeople of the port, but also as a continuing means of livelihood for even the most humble of the population.

Table 1 shows a summary of the listings of occupations in a sample of eighteenth, nineteenth and twentieth century commercial directories, with the maritime activities shown as a proportion of the whole. Each number refers to one individual.<sup>2</sup> The principal difficulty in using directories is the selective nature of the entries, with the inclusion of only those persons who would interest a visiting merchant or commercial traveller. These listings were usually entitled 'the principal inhabitants', thus excluding labourers, fishermen, the unemployed, and most women and children.<sup>3</sup> The total number of persons recorded in each directory varied each year, not necessarily with the population but with inclusion of new occupations and exclusion, or disappearance, of others. To consider the occupations of these inhabitants of Whitby over this period, a variety of directories have been consulted, with varying functions and thus varying listings. However, the trend of decline in the maritime occupations is clear. Many shipowners would have been included as 'Gentry' or 'Professional', and many shipyard workers as carpenters, joiners and painters, yet it is possible to suggest that the general trend shown by this summary is accurate. Shipbuilding in Whitby suffered a serious

recession in the 1830's,<sup>4</sup> and many workers from the shipbuilding yards may have turned to house and furniture building and construction. The fall in registrations of shipping, of wooden sailing ships, from the late 1860's onwards, may have contributed to the decline in the number of master mariners recorded in the directories. The increased capital costs involved in shipowning in the age of steam led to a concentration of investment in shipping in fewer hands, to a small number of large shipowners rather than many small master mariners, and the still large number of passive investors in Whitby steamshipping at the end of the period under discussion probably fell under other categories in the directories.<sup>5</sup>

This trend may be seen as not so much a decline in maritime occupations but as a rise in other activities at the port. Table 2 shows a more detailed analysis of the pre 1841 census period. The maritime sector thus may be seen as most important in the late eighteenth century, to be replaced by 'services' in the nineteenth century. As suggested before, many of these occupations may be more accurately described as 'maritime', or were displaced from this sector, or like tavern-keepers, curriers and leather cutters, were not mentioned in earlier directories. No completely satisfactory conclusion, besides the overall decline of the 'maritime' sector of occupations, is clear from a study of directories, and it is not until a detailed record of the occupations of all the inhabitants of the town began, with decadal intervals, in 1841, that more positive conclusions may be drawn. Between 1801 and 1831, a less detailed census records the population of the towns and villages of Britain, divided into three categories only: agriculture, trade manufactures or handicraft, and others. The agricultural occupations sector grew from eleven persons in 1801 to 54 by 1811, yet was recorded as 24 in 1821 and 27 in 1831.<sup>6</sup> The trades sector declined from 1130 and 1037 in 1801 and 1811 respectively

to 676 and 698 in 1821 and 1831, yet the occupations included in this grouping are so varied that no detailed pattern emerges until the analysis of the 1841, 1851, 1861 and 1871 censuses shown in Table 3.<sup>7</sup>

A study of the maritime sector shows that only the numbers employed in fishing showed an increase over the four decades, and that the number of seafarers, those working in shipyards and those employed in activities connected with the harbour declined considerably. The census inevitably excludes seamen whilst at sea on census night, a point to be considered later, not necessarily reflecting the true number of seamen based at the port, but the decline in shipbuilding and the traffic of the port is clearly shown by the decrease in numbers employed in these activities. With the demise of the passing tolls,<sup>8</sup> those working in the harbour were reduced along with the income of the Harbour Trustees. However, despite its diminishing importance, the maritime sector employed a larger number of the inhabitants of Whitby than any other single occupation, excepting the rise of the jet industry in the late nineteenth century. Occupations remaining relatively static over the period were shopkeepers, professional persons, manufacturing tradesmen and the percentage employed generally. More violent fluctuations are to be seen in agriculture, and in the lists of those of independent means. Only a small number of agricultural workers lived in Whitby itself, more generally to be found in the surrounding villages, and many of the wealthiest inhabitants of Whitby moved from the township itself to country estates by the late nineteenth century.<sup>9</sup> The building trades of Whitby also declined, through a possible lack of demand due to small decline in the population, and the building of stone houses, which needed less frequent replacement.<sup>10</sup> Service occupations rose, employing persons previously engaged in the shipyards and in building, and the number of servants shows a slight increase, but the most dramatic increase in a single activity was in the jet trade.

The shaping and carving of objects from the jet rock, an activity

peculiar to Whitby, reached a height in the early 1870's, after a limited popularity for many centuries. Its rise is associated with the introduction by Queen Victoria of jet jewellery and ornaments into court circles and the growth of national demand thus followed, especially with mourning wear. The manufacture of jet ornaments was carried out in a large number of small workshops. Frank Meadow Sutcliffe's photograph of a jetworkers' shop of 1890 shows eight workers, probably a larger number than was common in the 1860's and 1870's, when many establishments were formed by only two or three persons. Many jet workers were drawn from the maritime sector: Thomas Falkingbridge and R. Headlam, names well known in shipowning circles, were among the most skilled jet engravers in the town.<sup>11</sup> Thomas Turnbull was originally a watchmaker and jeweller, and was listed in local directories as a jet ornament manufacturer in the middle decades of the nineteenth century, before his sons continued in the trade. Many of the large Whitby merchants and tradesmen invested in the production of jet through running small workshops, and Whitby families traditionally engaged in shipbuilding also became prominent in this activity, such as the Eskdales, Marshalls, Barrys and Smales. The carving of jet, a derivative of wood, must have been regarded as a convenient source of livelihood after the decline of shipbuilding activity at the port. The importation of cheap jet substitute from Spain and changes in fashion away from these bulky and sombre objects led to a fall in demand and disappearance of these many small workshops. The profitability of this activity is difficult to quantify, but it has been suggested that £3-£4 per week could be earned when the trade was at its height.<sup>12</sup> This helps to explain the exodus from other occupations in 1871: only the number of fishermen shows a substantial rise by that year, whilst the total number of all persons listed with an occupation in the census in that year actually increases, as does the percentage of the population which were employed as

a proportion of the whole. Overall, except for jet manufacture, 1851 shows the greatest increases over all the sectors. The numbers employed in shipbuilding reached a peak, as did those involved in building, services, manufacturing tradesmen and, significantly, the number of servants. In times of prosperity it is likely that more servants were engaged than at other times, a common criterion of the wealth of households. The occupational structure of Whitby in the 1890's, another period of prosperity for the town, might also show a general increase in employment, especially in the services sector. Table 4 shows the individual occupations that have been arranged into sectors, comparing 1841 directly with 1871. There was a larger number of different occupations in 1841 than in 1871, despite a smaller population, and it would appear that activities such as nail making, quill dressing, match-making, and employment in the preventive service were dying out in the town, with many new occupations, such as those associated with the railway.

The census may also be used for details of the population of the port. Table 5 shows a summary, including figures for Whitby parliamentary borough, Whitby registration area and Whitby rural district.<sup>13</sup> The varying definition of Whitby for demographic purposes makes comparison difficult, but in each case the population of Whitby township as defined by the census Act has been used as far as possible, showing a relatively stable population. It would appear that there was only a slight influx of people from elsewhere, and only a small number migrating from the town. In 1841, for example, only 8% of the inhabitants of Whitby township were born outside Yorkshire, the vast majority hailing from Whitby and the surrounding villages. The streets of Whitby were certainly more crowded in the mid nineteenth century: in 1851, 292 persons lived in St. Anne's Staithe, the short road on the west side before Whitby Bridge,

which in the late twentieth century was the scene of only twelve properties. In 1851, there were 63 dwellings in this street, including three inns. The average size of most Whitby households in 1851 was only four, but 150 households (of a total of over 2,000) were inhabited by between eight and twenty persons.<sup>14</sup> Young, in his survey of the population of Whitby in 1817, wrote that 'the author, when engaged in this part of his labours, was forcibly struck with the shortness of life, and the mutability of all human affairs'.<sup>15</sup> This was still largely true in 1851, with children and teenagers comprising 43.7% of the total population, with only 10.3% of the population over sixty years of age. Nearly three-quarters of the population of Whitby in this year were under forty. The census also records the inhabitants of the local workhouse, a total of 124 persons, comprising old persons, a number of unemployed labourers, unmarried mothers and illegitimate children.

Thus the local economy has been considered in the light of evidence from directories and the census, and it is clear that the mid nineteenth century was a period of prosperity in the town, with an especially notable increase in the occupations providing services to the local inhabitants. This may be seen partly as a function of the improvements in transport and communications. The coach service described by Young in 1817 consisted of a thrice-weekly service to York, and to Scarborough and Sunderland twice per week, with a waggon to York and a carrier service to the most important surrounding villages and towns.<sup>16</sup> It is probable that the shipment of goods in this period was, where possible, by sea.

The carrier service between Whitby and the surrounding villages was considerably extended throughout the nineteenth century.<sup>17</sup> In 1800 the moorland roads surrounding Whitby were in such a poor state that the growth of mosses, aggravated by the winter snows, 'render travelling at all times



dangerous to such strangers as are under the necessity of traversing them'. Furthermore, bridges in parts were non-existent and in wet weather, streams became virtually impassable, causing death by drowning to many of the men and horses who attempted to cross.<sup>18</sup> At this time, 50% of the carrier services were within a distance of twenty-five miles of Whitby; by 1822, half the services were within an eighteen mile radius; by 1830 it was sixteen miles, by 1841 8 miles and by 1848, all the services by carrier for which data is available, were to places no more than 29 miles distant from Whitby.<sup>19</sup>

The improvements in local communications influenced the development of Whitby's tourist trade in the late nineteenth century, but long before this period, the marketing function of Whitby had enjoyed great expansion. After the local roads had been turnpiked, it was remarked that 'the town of Whitby receives considerable advantages therefrom, as it enables the country people to bring many commodities weekly to our market, which otherwise we should be deprived of'.<sup>20</sup> Young, in commenting on Whitby's weekly market, held every Saturday since 1445, asserted that

Inland towns, surrounded by fertile plains, enjoy a greater abundance of agricultural produce than towns which, like Whitby, have the sea on one side and moors on the other; yet the supply at our market is by no means scanty, much being brought from the numerous dales with which the moors are intersected, and even from the plains beyond them; so that the prices are generally moderate.<sup>21</sup>

It would appear that the area around Whitby, particularly the Esk valley, had participated to only a very limited extent in the market economy, despite its proximity to a market town. The improvement in roads from the early 1800's meant that the Whitby market was more accessible, especially in winter, and goods could be moved by wagon rather than by pack horse, and produce could be moved in greater quantities. Thus the changes in the occupational structure noted in Table 2, with the

growth in the numbers employed in 'service' occupations, may be partly explained by the additional demand from the environs of the town, brought by the improvements in roads. The increase in almost every sector of activities in the economy of Whitby in 1851, in comparison with 1841, especially the four-fold increase in those providing services, was in many respects the result of the inclusion of Whitby in the growing rail network of Britain.

The inhabitants of Whitby had subscribed £8,500 to the Stockton and Darlington Railway, and obtained the services of George Stephenson in preparing a study for the Whitby and Pickering Railway, which was incorporated in 1833 and completed in 1838. Most of the capital was provided locally, and of twenty-six directors of the company, twenty were connected with the shipping interest.<sup>22</sup> The route crossed the Moorland barrier, following river valleys, rising over 300 feet in less than a mile at Goathland, where the railway vehicles had to be hauled up with rope, but when the line was opened it traversed the 'most difficult ground ever covered by a railway'.<sup>23</sup>

In a settlement of small population, and with limited contacts with the surrounding area, it would be expected that the mobility of the population was slight, and that many Whitby families would remain in the town for many generations, possibly engaged in the same activity. The families and individuals with shares in the shipping registered at the port have been discussed, especially in terms of their occupations given on the certificates of registry, in the first main section of this study. They are also to be found in local directories and the census. In the widest sense, any person investing in shipping may be regarded as a 'shipowner', irrespective of the extent of their holdings, and many may have used such a term as a description of their occupation in preference to a more lowly activity, yet it would appear, from a study of early directories, that a distinct body of 'shipowners' existed in

Whitby, probably those in the town who received the larger part of their income from the ownership and management of vessels.

In 1784, the principal shipowners of Whitby, according to a directory of that year,<sup>24</sup> were Henry Anderson, John and William Campion, William Jackson, Thomas Linskill, Christopher Richardson, Robert Robson and James Willis. James Atty, who features as the most prominent Whitby shipowner of the eighteenth century, whose shares in vessels are summarised in Chapter Two, appears in this list of 1784 as a sailmaker. Perhaps this suggests that, despite his large holdings in Whitby shipping, sailmaking provided him with the bulk of his income and took up the greater part of his time. In a 1791 directory, James Atty and his brother William are both listed as shipowners, with an additional entry of the former as a sailmaker. Such occupations were pursued jointly; it is clear by the end of the eighteenth century that the shipowners of the port were closely linked with the other maritime activities. Shipbuilders featured in the 1784 directory included Henry Barrick and Robert Barry; both these families were also important in the ownership of Whitby-registered vessels.

Other directories of the eighteenth century include the same names, adding many more. Five shipbuilders are listed, together with seventeen others in associated activities, and fifty-six shipowners. How many of the same family names appear in similar listings of later generations? In 1823, the Barricks, Barrys and Langbornes still carried on their shipbuilding activities, joined by Robert Campion and Jackson & Cato. Ingram Eskdale and Thomas Fishburn were no longer recorded as shipbuilders. The Atty family also disappear from the records, and the local boatbuilders were now Falkingbridge, Gale and Marshall. Of the seventy-one shipowners recorded in 1823, twenty-four were from families owning vessels in 1791, and a further seven from eighteenth century shipbuilding families, totalling approximately half the 1823 figure. Three of the shipowners

recorded in the 1851 census were from eighteenth century shipowning families.

The difficulties of an analysis of the identities of the shipowners of Whitby throughout this period is shown by not only the differences between the Statutory Registers of Shipping and local directories, but between both these sources and the census. A list of shipowners compiled from the 1851 census, for example, has little in common with a directory of 1855. Twenty-five persons are recorded in the former, and 109 in the latter, with only twelve names appearing in both lists. In a directory of the end of our period, the Barry family, shipbuilders of Whitby from the eighteenth century, still appear, and Smales and Turnbull were also listed, names which had featured in lists of shipbuilders and shipowners in the 1830's. Many of the families noted for sailmaking and ropemaking in the eighteenth century are no longer in evidence by the mid nineteenth century, but Thomas Hustler, a ropemaker of 1855, and two sailmakers of the same date, G.T. Knaggs and George Pyman, were also investors in local shipping. Although it is evident that the allocation of an occupation to a person by themselves, by the Registrar of Shipping, by those compiling directories and by the census enumerator, was somewhat arbitrary, the names of certain families, especially Barrick, Barry, Champion, Chapman, Holt, Marwood, Smales and Turnbull were identified with the shipping industry of Whitby for many generations.

The Turnbull family, for example, were first established in Whitby when Thomas Turnbull, a sailor and clockmaker of Darlington, married Ann Webster of Whitby in 1784. Of their six children, two were clockmakers and one a block and mastmaker. Thomas Turnbull of Whitehall, who lived until 1867, laid the foundations of a shipbuilding and shipowning business, and Thomas Turnbull of the Mount, one of his six children, pioneered steamship building at Whitby. He had eight children, the six

sons all entering the family business, including Philip and Lewis, who set up business as Turnbull Brothers in Cardiff, and Reginald March, who was a founder partner of Turnbull Scott of London. Thomas Turnbull of Airy Hill continued managing the firm until his death in 1924.<sup>25</sup> The Jubilee issue of the Whitby Gazette in 1887 included a short biography of Thomas Turnbull of the Mount, regarded as one of the town's most illustrious inhabitants. Apprenticed to Henry Barrick to learn the art of practical shipbuilding, in 1840 he helped his father establish a shipyard at Larpool and then at Whitehall. He turned down an offer to stand as Member of Parliament for Whitby, but became a Harbour Trustee and a local Justice of the Peace.<sup>26</sup>

Robert Harrowing first introduced the ownership of steamers at Whitby, and his business was continued by his son, John Henry Harrowing. His father was wealthy enough to send him to King's College London, to be trained as a doctor, but he abandoned this career on the death of his elder brother to become a partner in Dillon, Harrowing & Co. and to help in the management of R. Harrowing & Co.'s steamers. He was a member of the Local Board, representing the Whitby ward, and a Harbour Trustee.<sup>27</sup>

Arthur Harrowing, the youngest son of Robert Harrowing, had been brought up to take over the family business of steamship management, working in a shipping office in Rouen as a young man. He managed the Masonic, North Sands and the Aislaby, and acted as a Harbour Trustee before his death aged only thirty-five.<sup>28</sup>

T.N. Marwood was another prominent figure in local shipping circles. He was the third son of Thomas Marwood, shipowner and marine insurance manager, and continued the latter part of his father's business, establishing the Whitby Iron Steamship Insurance Association. Born in 1842, he first ran a wine and spirit business which developed into shipowning and marine insurance. W.H. Marwood, his brother, was also a shipowner, and they were

among the first to join the Whitby Volunteer Corps. Whitby shipowners were traditionally closely involved in local affairs, as T.N. Marwood was also a member of the Local Board and represented shipowners on the Harbour Board Committee.<sup>29</sup>

The development of a career from seaman to shipowner may be seen in the life of Captain Thomas Smailes. Born in 1821, the son of a schoolmaster, he went to sea aged only twelve years, working for the Turnbull family. In 1871 he took command of the Whitehall, the first iron steamship to be built at Whitby. When he retired from the sea, he became the Turnbulls' marine superintendent, and undertook the management of the John Stevenson. He purchased the steamer Concord, commanded by his son Richard Smailes, which became a limited liability company in 1905. Captain Thomas Smailes died in 1909, regarded throughout Whitby as a good master, shipowner, and manager.<sup>30</sup> The wealth derived from shipping by many Whitby shipowners is indicated by the value of their personal effects at death, as seen in Appendix 1.

In addition to those employed directly in the shipping industry, many Whitby merchants and shopkeepers also invested in shipping: in some cases perhaps to carry their own goods, but generally as passive shareholders. Prominent merchants of 1784 were William Barker, William Benson, Jonas Brown, John and William Chapman, Christopher Hodgson, Thomas Pierson and Wakefield Simpson. By the 1830's the general category of merchant was no longer used in directories, but members of the Barker family appear as timber merchants, the Simpsons as bankers and the Chapmans as shipowners. The Cole family were bakers for generations, as were the Aldersons butchers. The Andersons, Cravens, Greens, Morleys, Robinsons, Sanders and Taylors were grocers in 1823 and still in this business in 1855. Grocers of 1855, Atkinson, Gibson, Hall, Miller and Wilson were names which also appear under the appropriate listing of 1899.

Persons working in 'services' which saw a large increase in numbers in the mid-nineteenth century were indeed from building and shipbuilding. Ship carpenters in 1823, William Langdale and George Vasey had become joiners by 1855. The Falkingbridge family, traditionally boatbuilders, also became joiners. The Brodericks, Campions, Jacksons and Langbornes, who had been shipbuilders in the 1820's, do not appear at all in a directory of 1855, and it would seem they left the town. Whitby had a single ironmonger in 1823, but ten in 1855, three of which had previously dealt in ship chandlery, or in fishing tackle. The increase in the number of lodging houses after the mid nineteenth century is one of the most important areas of growth in the service sector among the occupations of Whitby, associated with the rise of the tourist industry in the town, and these were run primarily by married ladies who did not figure before in lists of occupations. This perhaps helps to account for the increase in persons employed as a proportion of the population as a whole which took place in this period.

Manufacturing in Whitby, besides manufacturing tradesmen such as cabinet makers, dressmakers and shoemakers, was limited, due mainly to a lack of local raw materials such as coal and iron, and centred principally round the shipbuilding industry. Besides the manufacture of jet items, housebuilding and consumer goods were the only local industries. As late as 1899 there were no major factories in the town, only some iron-founding and mineral water manufacture, so it is not possible to discuss families or traditions in manufacturing in Whitby outside the shipping industry.

The commercial directories of Whitby also tended to record details of the local gentry. In 1798 they were listed as Henry Clarke and Thomas Fishburn, both prominent men in the shipowning and shipbuilding industry of the town. Many of the gentry of Whitby in 1823 were also of a maritime background: the Barkers, Campions, Gowlands, Harrisons, Holts,

Jacksons, Knaggs, Marwoods, Moorsoms, Smailes and Yeomans. Of the eighty-eight persons of independent means living in Whitby in 1823, twenty-six were from families associated with shipowning and shipbuilding in Whitby, suggesting that this activity, in addition to providing employment for a large proportion of the population, also brought wealth to many of the inhabitants. This was also largely true of the Whitby gentry of 1840. The shipowners of Whitby in the eighteenth and early nineteenth centuries were also shipbuilders, ropemakers, sailmakers and merchants, but by the end of the period under review the most prominent personalities in the shipping interest of Whitby, such as the Turnbulls, Harrowings, Robinsons and Smailes, were members of the local gentry, and among the most respected of the local community.<sup>31</sup>

The seamen of Whitby, as a feature of the maritime community, and as the labour force of the Whitby shipping industry, do not appear in commercial directories of the port and many, through their absence at sea, fail to be included in the census returns. The number of seamen serving on the vessels of specific ports was recorded officially for the years from 1772 to 1808,<sup>32</sup> when interest in the number of merchant seamen was occasioned by wartime manning requirements. In 1789 it was officially noted and regretted that so many seamen were based at the North East ports rather than in naval towns, as discussed in the fifth section of Chapter Five. In 1788-9, the number of seamen 'belonging' to Whitby was 3.7% of the total: 2,988 of Whitby compared with a total for England of 79,859. Thereafter the proportion declined to 1.9% by 1808, possibly reflecting the service of Whitby seamen aboard transports.<sup>33</sup> In the later nineteenth century, the task of discovering the number of seamen coming from Whitby becomes more difficult: no port by port details of seamen were kept by the Board of Trade, for example. The Muster Rolls,<sup>34</sup> and later Crew Agreements,<sup>35</sup> list the crews of each vessel half yearly in



the coasting trade and for each voyage of foreign-going vessels, giving place of birth, but an analysis of every Whitby-born seaman, not necessarily confined to Whitby-registered tonnage, is not possible in the context of this study.<sup>36</sup> The Registers of Seamen's Service, and the Register Tickets, covering the periods 1835 to 1844 and 1844 to 1856 respectively, are indexed only by names and not by place of origin.<sup>37</sup> An estimate may be made from the census, however, in relation to the numbers of seamen's wives and apprentices, and the number of masters recorded in the directories. In 1841, the census records 219 seafarers, those at home on census night, and a directory of 1840 lists 35 Master Mariners. The total number of British seamen in 1841 was 239,761,<sup>38</sup> an increase of almost exactly 100% from the 1808 figure of 119,881. The number of Whitby seamen in 1808 was 2,295, and if a similar increase had taken place at this port, one could expect a total of over 4,500 mariners at Whitby - born at the port or based there. It has been noted that the population of the port remained relatively unchanged, so such an expansion in seamen at Whitby would seem unlikely. It is probable that the period of Whitby's role as a source of supply of seamen reached its peak at the end of the eighteenth century.

Recent discussion of labour in the shipping industry has included the concept of crew size, expressed as a man/ton ratio. An analysis of the crews of ships calling at Liverpool in the transatlantic trades in the mid-nineteenth century concluded that there was a direct relationship between vessel size and man/ton ratios, and that this trade was remarkable for efficiency in manning.<sup>39</sup> In considering the size of crew recorded in Whitby-owned vessels appearing in the Seamen's Sixpence Returns, for the period 1725 to 1830, it would appear to differ from the conclusions made for ships trading from Liverpool, especially in the statement that increased distance saw greater manning efficiency.

In the period before the mid nineteenth century it would appear that more men were required on longer voyages, irrespective of the tonnage of the vessel, perhaps for purposes of unloading and discharge, in the event of death or desertion on long voyages, and as a form of 'disguised emigration' by the crew. In 1740, the average of man/ton ratios in the coal trade was 4.5, in the Baltic trades 4.9, and of vessels trading foreign, 8 men per hundred tons. By 1830 the averages declined to 3.8, 4.2 and 4.9 men per hundred tons respectively, so that manning levels were reduced considerably by the early nineteenth century, but the tonnage of Whitby vessels over this period, from this sample, do not increase markedly.<sup>40</sup>

In an analysis of the crews of 35 Whitby owned vessels in 371 voyages between 1835 and 1850, the size of the vessel appeared to have little impact on the man/ton ratio.<sup>41</sup> A vessel of over 400 tons often had the same ratio as a 173 ton schooner. In twenty voyages to Quebec, some particularly large crews were found, which may have been required to handle the timber cargoes.<sup>42</sup> It is not until the later nineteenth century that clear patterns of diminished man/ton ratios occur according to tonnage and distance.

In a sample study of the Crew Agreements of Whitby registered vessels from the mid nineteenth century to 1913, foreign-going steamships averaged 2.2 men per hundred tons, steamers voyaging coastwise and to the Baltic 2.3 men, and sailing ships on foreign voyages averaged 3.6 men per hundred tons. Smaller vessels in more local trades tended to show higher man/ton ratios by this period. Sailing vessels operating in the Baltic averaged 4.0 men and coastal sail 4.1. Colliers were on average more efficiently manned, with 3.8 but local traders, vessels plying out of Whitby and nearby ports and generally among the smallest of Whitby registered vessels in this period averaged 6.2 men per hundred tons. Small steamers, such as harbour tugs, required exceptionally high manning

levels, but it was in the largest steamships that the greatest manning efficiency was achieved. Fishing vessels and local traders were crewed by up to 7 men per hundred tons, and steamships of between 2500 and 3000 gross only between 0.6 and 1.5 men. Few vessels below 400 tons were manned by less than two men per hundred tons.<sup>43</sup>

The man/ton ratios of vessels calling at Liverpool in the trans-Atlantic trades in the mid nineteenth century varied from over ten men per hundred tons in the case of vessels up to a hundred tons, to 1.95 for vessels over 2000 tons.<sup>44</sup> Few very large sailing ships such as those sailing from Liverpool were owned at, or traded from, Whitby, and it was only at the end of the period under discussion that a link between increase in tonnage and decrease in man/ton ratios of the crew agreements of Whitby ships is summarised in Table 6a.

Table 6b shows the results of an official consideration of the 'Progress of British Merchant Shipping' in terms of crew nationality and size, whereby selected steamers were examined at ten year intervals, including six Whitby-owned steamers.<sup>45</sup> It is notable that half these vessels sailed with crews reduced in size when considered for a second time, and in only one case was the crew increased in number. Thus manning efficiency, seen in the example of Whitby-owned vessels, was a function of trades, tonnage, and period.

The place of origin of the crews of Whitby-owned vessels requires further consideration, in an attempt to discover the extent of local participation in the manning of the vessels of the port. Muster Rolls of Whitby ships for the period 1747 to 1795 show a majority of seamen from the locality. Of a total of 691 seamen in 55 voyages, 67.9% were from Whitby or within a fifteen mile radius.<sup>46</sup> A very similar picture was the result of an analysis of origins of seamen in the 371 voyage sample from Muster Rolls of 1835-50.<sup>47</sup> Seamen serving on Whitby ships not from the immediate locality tended to join from ports of loading and

discharge, such as the Tyne and London.

Table 7 shows the results of an analysis of the crews of 183 voyages of six categories of trading areas. Vessels trading foreign, sail and steam, had the smallest proportion of local men on board, and the highest proportion of foreign seamen. These categories included the largest Whitby steamers and sailing vessels and, with larger crews, recruitment was inevitably further afield. The crew agreements include many cases of the desertion of seamen at foreign ports, and the need to replace them with local labour, and often foreign seamen could be hired at a lower wage rate. The largest proportion of Whitby crewmen were to be found in sailing coasters and local traders, where the foreign seaman was a rarity. The importance of seamen from the locality serving on board Whitby ships continued, despite the transition from sail to steam, probably because they were well-known to the owners, or in some cases related to them. Early Whitby steamers tended to be crewed by specialist engineers and firemen recruited elsewhere, until local seamen were trained. Many of the foreign seamen employed were Scandinavian or Chinese, who were recruited at one foreign port and paid off at another. In many cases it is difficult to assess the crew of a ship in one voyage as many changes of crew took place, through desertion and failure to join, and the taking on of extra men for the loading and discharge of specific cargoes. Traditionally, many small Whitby coasters were manned almost entirely by Whitby seamen, but the advent of the steamship led to a diversification in nationality of crew members which had been rare in the days of sail.

The Crew Agreements also recorded the age of each crew member. The coasting trade attracted older seamen, as shorter voyages enabled them to more frequently visit their homes and families. The lowest average age of crew members, twenty-five years compared with thirty-two, were found in foreign-going steamers and sailing vessels and were principally

men with few ties. The average age of the crews of Whitby steamships was gradually reduced over time. Twenty-seven was the average age of Whitby fishermen, but relatively few were of this age, as fishing attracted some of the oldest inhabitants, together with boys and very young apprentices.

Finally, the masters of Whitby ships were also important members of the maritime community of Whitby. Their names are recorded when their vessels called at the Thames between 1725 and 1830, and it is remarkable that the same family names occur throughout the period.<sup>48</sup> The names Brown, Chapman, Hall and Storm appear in a list of masters compiled from this source in 1725 and again in 1828. Nine such lists have been considered, at approximately ten yearly intervals, and names appearing in five of these lists or more were Chapman, Coates, Campion, Gallilee, Lotherington, Harrison, Storr and Storm, the latter a family based in Robin Hood's Bay. A register of masters was kept by Lloyd's, including all service records, from 1868 to 1947, and an analysis has been made of all masters born in Whitby serving in British vessels for the first five years of this register.<sup>49</sup> Of a total of 216 masters, 62 were from shipowning and shipbuilding families of Whitby. In addition to many of the names mentioned above, masters from the Marshall, Garbutt, Cato, Corner, Eskdale, Walker, Vasey and Spencelayh families were commanding vessels in the late nineteenth century just as they had been up to a hundred years previously.

The age of each master in 1870 was calculated as an average of 46.1 years, an average considerably higher than in the case of the crews. This is also notable in the crew agreements, where the average age of forty-seven masters was calculated at 39.5 years. This may be explained as the requirement of the owner, wanting an experienced and responsible person, especially in large steamships. Most of the senior officers of Whitby vessels were from the locality; of forty-seven masters of Whitby vessels in

the late nineteenth century, thirty-six, or 76.6% were from Whitby and its environs.<sup>50</sup> In considering the 216 Whitby masters at sea from 1868 to 1873, the average number of vessels commanded by each master in this five year period was 6.9, indicating a change of command every year at least. It would seem that masters were keen to widen their experience, and this is also indicative of many masters eager for a vessel at a time of a smaller amount of tonnage. By the mid nineteenth century, approximately 25,000 masters were registered,<sup>51</sup> those born in Whitby amounting to nearly one per cent of the total. As many of the Captains' Registers only vaguely record place of birth, as England, or Yorkshire, the total could be twice that suggested, but it seems unlikely that, by the late nineteenth century, Whitby can be seen as a major source for the supply of masters.

In conclusion, the analysis of the occupational structure of Whitby throughout the period under review suggests that, besides the manufacture and trading of local consumer goods, and the later jet and tourist industries, the economy of the town was based around the shipping industry, especially in shipbuilding. In the late eighteenth century, nearly half of the occupations listed of the 'principal inhabitants' were directly related to the ownership and construction of vessels, and the decline in the shipbuilding output of the port in the 1820's and 1830's is reflected in the proportion employed in that sector. This inevitably influenced the state of the economy of the town, as the first detailed census shows that only 32.6% of the population were employed. In terms of local employment, Whitby also prospered with the advent of improved communications and the development of the town as a tourist resort. No substantial industrial growth replaced ship-building after 1902, and there was no large incursion or migration of people from or to the area, and the families that rose to prominence in the town in the early eighteenth century survived many generations and still feature in the older quarters of the town. Similarly, the masters and crews of

Whitby ships at the end of our period were often descendants of those men who commanded and served on board eighteenth century Whitby colliers.

## REFERENCES: CHAPTER SEVEN

1. The surviving private papers relating to Whitby shipowners and shipbuilders includes the Barry Bequest, papers of the Chapman family (including the Hannah accounts) and the Scoresby collection (with the Henrietta accounts), in the care of Whitby Museum. None, however, are as detailed or complete as, for example, the Henley collection of the National Maritime Museum
2. Bailey's British Directory, (London, 1784), 3, p.729; Universal British Directory, (London, 1798), 4, pp.738-744; Holden's Directory, (London, 1811); Pigot's Directory, (London, 1823), pp.710-713; Baines' History, Directory and Gazetteer of the County of York, (Leeds, 1823), II, pp.576-584; Pigot & Co.'s Directory, (London, 1829), pp.1125-1130; Pigot & Co.'s Directory, (London, 1834), pp.1001-1007; Baines' History Directory and Gazetteer of the County of York, (Leeds, 1840), II, pp.508-514; Pigot & Co.'s Directory, (London, 1841), pp.393-398; Gillbanks' Directory, (Hull, 1855), pp.38-50; Baines' History, Directory and Gazetteer of the County of York, (Leeds, 1867), pp.489-501; Slater's Cleveland Directory, (1877), pp.56-67; Kelly's Directory, (London, 1889), pp.296-303; Cook's Whitby Directory, (Whitby, 1899), pp.62-81; Kelly's Directory, (London, 1905), pp.384-389; Kelly's Directory, (London, 1913), pp.407-415
3. C.R. Lewis, 'Trade Directories - A Data Source in Urban Analysis', National Library of Wales Journal, 19 (1976), pp.181-193; P. Wilde, 'Sources for Urban History: Commercial Directories and Market Towns', Local Historian, 12, Nos. 3 & 4, (November 1976), pp.152-6
4. Select Committee on Manufactures, Commerce and Shipping, P.P., 1833, VI, (690.), evidence of Robert Barry and Thomas Turnbull. See Chapter Three
5. See Chapter Four
6. British Library, Collection of Census and Population Material, 1801, 1811, 1821, 1831
7. 1841 Census, P.R.O. HO/107/1265; 1851 Census, P.R.O. HO/107/2374; 1861 Census, P.R.O. RG/9/3647-8; 1871 Census, P.R.O. RG/10/4847-8
8. See Chapter Six
9. By 1851, the Broderick, Turnbull, Smales, Barrick and Simpson shipowning families were living in Hawsker and Ruswarp townships rather than Whitby township, P.R.O. HO/107/2374
10. There is evidence of the building of brick houses at Whitby during the Napoleonic Wars, see Chapter Five Section Five
11. Hugh P. Kendall, The Story of Whitby Jet, (Whitby, 1936), pp.14, 23, 26, 27
12. Kendall, Jet, p.14
13. See note 6
14. Eric Rodway, Whitby in 1851, (Whitby, undated), p.4
15. Rev. George Young, History of Whitby, etc... (Whitby, 1817), p.517



16. Young, Whitby, pp.579-80
17. Helen M. Davenport, 'Transport and the Development of Whitby 1750-1850', unpublished B.A. dissertation, Leeds University, (April 1979), pp.10-17
18. John Tuke, A General View of the Agriculture of the North Riding of Yorkshire, (York, 1800)
19. Davenport, 'Transport and the Development of Whitby', pp.10-17
20. Lionel Charlton, History of Whitby, etc..., (York, 1779)
21. Young, Whitby, p.574
22. G.W.J. Potter, A History of the Whitby and Pickering Railway, (London, 1969), pp.2-18
23. G.A. Hobson, The Life of Sir James Falshaw, (London, 1905), pp.52-3. The Whitby and Pickering Railway was incorporated by an Act, 3 Wm. 4 c.35, and was abandoned in 1905. It was purchased by the York and North Midland Railway Co. in 1845 (8 & 9 Vic. c.57) which was taken over by the N.E.R. in 1854 (17 & 18 Vic. c.211). The present day railway at Whitby originated as the Whitby, Redcar and Middlesbrough Union Rail Company, incorporated in 1866 (29-30 Vic. c.195), which was leased to the N.E.R. in perpetuity from 1889. P.R.O. RAIL 742, RAIL 743
24. See note 2
25. Anne and Russell Long, A Shipping Venture: Turnbull Scott and Company, 1872-1972, (London, 1974), Family Tree, facing p.xvii
26. Whitby Gazette, 25 June 1887
27. Wh.Gaz., 25 March 1892
28. Wh.Gaz., 15 March 1901
29. Wh.Gaz., 9 Apr. 1897
30. Wh.Gaz., 6 Nov. 1909. No details of wills were given in these obituary notices
31. The country seats and other property of Whitby shipowners was extensive. In 1859, Field House was the seat of Christopher Richardson, Low Stakesby of John Chapman, Meadow Field of Henry Simpson and High Stakesby Hall of Wakefield Chapman. T. Whellan, History of Whitby etc..., (Beverley, 1859), p.316  
The Discussion of Table 11c in Chapter Two also illustrates the transition made by several investors from master mariner or ship-builder to Gentleman.
32. P.R.O. CUST 17 / 1-30
33. See Chapter Five, Section Five
34. Muster Rolls of Whitby Ships, 1747-1795, Whitby Museum; Muster Rolls 1822-1850, P.R.O. BT 98/136-7. These were kept as a result of the establishment of a Seaman's Hospital at Whitby in 1676. Seamen were also protected by membership of the Seamen's Loyal Standard Association of the Ports of Bridlington, Scarborough and Whitby. Articles of Agreement published North Shields, 1825. B.L. Tracts 8275. bb.4(i)
35. P.R.O. BT 98, 99, 100, includes approximately 10%, the National Maritime Museum a further 10%, and the bulk of the remainder is in the custody of the Maritime History Group, Memorial University of Newfoundland; the following crew agreements analysis is based upon the holdings of the latter

36. See K. Matthews, 'Crew Lists, Agreements, and Official Logs of the British Empire 1863-1913 now in the possession of the Maritime History Group, Memorial University, St. John's, Newfoundland', Business History XVI (1974), pp.78-80
37. P.R.O. BT 120, 112, 119, 113, 114, 115, 116
38. Select Committee on the Merchant Seaman's Fund, P.P., 1844, VIII, (431.), evidence of J.H. Brown, Registrar of the General Office of Merchant Seamen, q.306. 2,500 was the official estimate of the seafaring population of Whitby in 1845, First Report of the Tidal Harbours Commission, P.P., 1845, XVI, (665.), App. 24
39. David M. Williams, 'Crew Size in Trans-Atlantic Trades in the Mid Nineteenth Century', in eds. Rosemary Ommer and Gerald Panting, Working Men Who Got Wet, the Proceedings of the Fourth Conference of the Atlantic Canada Shipping Project July 24-26, 1980 Maritime History Group, Memorial University of Newfoundland (1980), pp.105-154
40. P.R.O. ADM 68/194-218
41. Eds. Ommer and Panting, Working Men, discussion, p.189
42. Muster Rolls 1822-1850, P.R.O. BT 98/136-7
43. From a sample of 1,421 voyages of 162 vessels registered at Whitby between 1863 and 1913. A further discussion of the value of crew agreements for the history of ports was given by the author in a paper presented to a symposium on local history in North Yorkshire and Cleveland, held at Teeside Polytechnic, January 1981
44. Williams, 'Crew Size', Appendix 3, based on the 'Customs Bills of Entry' for Liverpool, 1853
45. Tables showing the Progress of British Merchant Shipping, P.P., 1887, LXXIII, (207.); P.P., 1889, LXIX, (176.); P.P., 1892, LXXI, (227.); P.P., 1899, LXXXVII, (217.); P.P., 1901, LXVIII, (306.)
46. Muster Rolls, 1747-1795, Whitby Museum
47. Muster Rolls, 1822-1850, P.R.O. BT 98/136-7
48. P.R.O. ADM 68/194-218
49. Guildhall Library, MS 18567, 1868-1873, Vols. 1-15
50. Analysis based on a sample from the crew agreements. Of masters of Whitby foreign-going steamships, 56% were from the locality, as seen in Table 7. For example, the North Sands, official number 106102, 3526 gross tons, owned by Robert Harrowing in 1898-1909, had the following masters:-
  - Andrew Wanless of Leith, 1898
  - A.S. Hughson of Shetland, 1898-1901 (died on voyage)
  - W.N. Storm of Whitby, 1901
  - W.H. Boagey of Redcar, 1901
  - Geo. Theaker of Whitby, 1902-4
  - A.J. Long of Chichester, 1904-9
  - W. Trowsdale of Whitby, 1909
51. See note 38

TABLE 1:  
PROPORTION OF PRINCIPAL INHABITANTS WITH MARITIME OCCUPATIONS

<u>Date</u>	<u>Total individuals listed</u>	<u>No. Maritime</u>	<u>%</u>
1784	84	32/84	38.1
1798	135	59	43.7
1811	149	22	14.7
1822-3	369	77	20.8
1823	788	186	23.6
1828-9	876	101	11.5
1834	795	127	15.9
1840	720	154	21.4
1841	776	148	19.1
1855	938	196	20.9
1867	1564	215	13.7
1877	1291	148	11.5
1889	1179	78	6.6
1899	865	110	12.7
1905	836	70	8.4
1913	1134	68	5.9

Note: 'Maritime' - shipowner, sailmaker, s<sup>h</sup>builder, ropemaker, boatbuilder, anchorsmith, sailcloth maker, Custom House officers, block maker, ship chandler, pilots; (not fishing), (some shipowners under 'professional').

Sources: See note 2

.....

TABLE 2:  
FURTHER ANALYSIS OF PRE 1841 DIRECTORIES

<u>Date</u>	<u>Occupations</u>			
	<u>Merch./Shopkeepers</u>	<u>Services</u>	<u>Manuf.</u>	<u>Private/Pro</u>
1784	26	7	9	8
1798	29	23	7	16
1811	56	30	6	33
1822-3	100	105	51	40
1823	177	176	109	130
1825-9	167	259	133	211
1834	144	226	98	178

<u>Percentages</u>						
	<u>Total</u>	<u>Maritime</u>				
1784	84	38.1	30.1	8.3	10.7	9.5
1798	135	43.7	21.5	17.0	5.2	11.9
1811	149	14.7	37.6	20.0	4.0	22.1
1822-3	369	20.8	27.1	28.5	13.8	10.8
1823	788	23.6	22.5	22.3	13.8	16.5
1828-9	876	11.5	19.1	29.6	15.2	24.1
1834	795	15.9	18.1	28.4	12.3	22.4

Sources: See note 2

TABLE 3:

OCCUPATIONAL STRUCTURE OF THE POPULATION OF WHITBY 1841, 1851, 1861, 1871  
(WHITBY TOWNSHIP)

<u>Group</u>	<u>1841</u>	<u>1851</u>	<u>1861</u>	<u>1871</u>
Fishing	23	35(+)	53(+)	84(+)
Seafarers	219	304(+)	526(+)	280(?)
Shipbuilding	362	370(+)	162(-)	153(-)
Harbour	41	58(+)	28(-)	18(-)
	<u>645</u>	<u>767(+)</u>	<u>769(+)</u>	<u>535(-)</u>
Shopkeepers	221	363(+)	421(+)	326(-)
Building	232	238(+)	155(-)	94(-)
Agriculture	79	98(+)	63(-)	61(-)
Jet workers	16	128(+)	260(+)	795(+)
Professional	64	59(-)	82(+)	71(-)
Services	122	503(+)	394(-)	416(+)
Servants	229	372(+)	230(-)	272(+)
Manufacturing tradesmen	596	604(+)	456(-)	408(-)
Gents., independent means	201	181(-)	14(-)	13(-)
Total	<u>2405</u>	<u>3313(+)</u>	<u>2844(-)</u>	<u>2991(+)</u>
Total population	<u>7383</u>	<u>8040</u>	<u>8142</u>	<u>7886</u>
children, wives, unemployed retired, etc.	4978	4727	5298	4895
% employed	32.7	41.2	34.93	37.93

Note: It has not been possible to calculate the number of servants employed by, for example, leading shipowners, as few lived in with their employers

Source: See note 7

.....

TABLE 4:

## THE 1841 CENSUS COMPARED WITH THE 1871 CENSUS

<u>Occupation</u>	<u>1841</u>	<u>1871</u>
<u>Fishing</u>		
Fisherman	20	53
Fishmonger	2	3
Herring curer	1	1
<u>Seafarers</u>		
Mariner	160	56
Mariner's apprentice	13	-
Sailor	6	37
Master Mariner	5	24
Seaman	12	29
Seaman's apprentice	2	-
Sailor's apprentice	1	-
Sea apprentice	6	-
Ship carpenter	10	22
Ship carpenter apprentice	4	1
<u>Shipbuilding</u>		
Shipwright	119	53
Shipwright's apprentice	57	3
Block and mast maker	13	-
Boat builder	17	13
Block and mast maker's apprentice	3	-

TABLE 4: (contd.)

<u>Occupation</u>	<u>1841</u>	<u>1871</u>
Mastmaker	2	8
Ropemaker	23	5
Sailcloth weaver	21	-
Sailmaker's apprentice	6	-
Sailmaker	13	23
Boatbuilder's apprentice	6	-
Shipbuilder	2	1
Rigger	2	-
Ropemaker's apprentice	6	-
Cooper	7	6
Whitesmith	12	2
Whitesmith's apprentice	1	-
Cordwainer	15	6
Canvas weaver	4	-
Flax dresser	21	-
Ship painter	12	-
<u>Harbour</u>		
Custom House officer	2	6
Excise officer	1	-
Preventive service	1	-
Wharfinger	1	-
Coastguard	6	-
Tide waiter	1	-
Pilot	29	9
<u>Shopkeepers etc.</u>		
Grocer	46	53
Grocer's apprentice	22	20
Draper	16	54
Draper's apprentice	25	16
Chemist	3	6
Chemist's apprentice	2	-
Linen draper's apprentice	1	-
Leather seller	1	1
Shopkeeper	1	6
Butcher's apprentice	2	-
Coal merchant	3	4
Flower seller	2	-
Confectioner	5	16
Baker's apprentice	6	-
Baker	17	21
Butcher	21	29
Store merchant	2	-
Glass dealer	1	4
Tea dealer	2	-
Wine merchant	1	-
Spirit merchant	2	-
Fruiterer	1	1
Confectioner's apprentice	2	-
Timber merchant	2	-
Woollen draper	1	-
Merchant	1	18
China merchant	2	-
Linen draper	3	-
Toy dealer	1	-
Tallow chandler	1	1
Ship chandler	3	2

TABLE 4: (contd.)

<u>Occupation</u>	<u>1841</u>	<u>1871</u>
Ship chandler's apprentice	2	-
China merchant's apprentice	1	-
Jeweller	3	2
Factor	1	-
Insurance agent	1	2
Commercial traveller	5	6
Hatter	6	2
Bookseller	3	1
Pawnbroker	1	4
<u>Building</u>		
Bricklayer	4	15
Building labourer	97	110
Stonemason's apprentice	4	-
Joiner	59	41
Stonemason	23	20
Joiner's apprentice	22	3
Glazier	5	-
Glazier's apprentice	1	-
Painter's apprentice	3	22
Builder	13	2
Stonedresser	1	1
<u>Agriculture</u>		
Agricultural labourer	68	34
Gardener	10	20
Gardener's apprentice	1	-
<u>Jet workers</u>		
Jet miner	3	1
Jet cutter	2	-
Jet worker	2	623
Jet manufacturer	4	37
Jet turner	2	15
Jet turner's apprentice	3	-
<u>Professional</u>		
Teacher	11	25
Schoolmistress	4	-
Parish clerk	1	-
Physician	2	-
Surgeon	6	7
Schoolmaster	7	-
Police officer	2	-
Minister	5	-
Solicitor	2	4
Clerk	10	14
Postmaster	1	-
Surgeon's apprentice	2	-
Professor of Music	1	-
Attorney	1	-
Banker	1	2
Bank clerk	1	-
Army and Navy	5	1
Broker	2	-
<u>Services</u>		
Publican	30	17
Innkeeper	8	26
Currier	9	3
Carter	3	25
Auctioneer	3	-
Postman	1	6
Optician	1	1

TABLE 4: (contd.)

<u>Occupation</u>	<u>1841</u>	<u>1871</u>
Engineer	1	2
Plumber	4	8
Laundress	3	24
Coach guard	2	8
Carrier	3	-
Courier	1	-
Coachman	4	-
Ironmonger	1	11
Printer	2	10
Printer's apprentice	2	-
Waiter	1	2
Currier's apprentice	1	-
Ironmonger's apprentice	2	-
Chimney sweep	5	7
Hairdresser	11	10
Midwife	1	-
Bookbinder	4	3
Mason	18	11
Gas fitter	1	2
Gunsmith	1	1
Hairdresser's apprentice	2	-
<u>Manufacturing Tradesmen</u>		
Weaver	24	4
Tailor	64	47
Dressmaker	61	109
Broom maker	1	-
Hat box maker	2	-
Lath render	1	1
Nail maker	3	-
Stocking weaver	1	-
Quill dresser	1	-
Clog maker	2	5
Umbrella maker	1	1
Cabinet maker	33	19
Milliner	23	38
Millwright	2	-
Tailor's apprentice	22	-
Shoemaker	100	66
Cabinet maker's apprentice	16	2
Linen weaver	1	-
Cartwright	6	-
Cotton corder	1	-
Miner	5	22
Painter	25	20
Calico printer	1	-
Basket maker	2	5
Patter	2	-
Leather cutter	1	-
Watchmaker	7	8
Hosier	2	-
Seamstress	8	-
Tinner and brazier	13	2
Sawyer	24	7
Tin plate worker	1	5
Carpenter	13	23
Carpenter's apprentice	9	-
Saddler	9	2
Alum maker	1	-

TABLE 4: (contd.)

<u>Occupation</u>	<u>1841</u>	<u>1871</u>
Brazier's apprentice	3	-
Miller	5	1
Miller's apprentice	1	-
Blacksmith's apprentice	6	-
Blacksmith	34	29
Printer's apprentice	1	-
Cutler	1	1
Foundry maker	1	-
Wood turner	2	2
Clockmaker	1	-
Matchmaker	1	-
Millwright apprentice	1	-
Shoemaker's apprentice	23	-
Carver	2	-
Brewer	1	2
Yarn bleacher	2	-
Watchmaker's apprentice	1	-
Coachmaker	1	-
Pipemaker	2	3
Pipemaker's apprentice	3	-
Ironfounder	2	2
Saddler's apprentice	2	-
Wheelwright	2	-
Platemaker	1	-
Lath maker	1	-
Saddler (maker)	1	-
Hosier (maker)	1	-
Upholsterer	1	5
Weaver's apprentice	2	-
<u>Servants</u>	229	272
<u>Gents, Independent means</u>	201	13
<u>Total</u>	2405	2991
		(see list of other 1871 occ.)

Occupations in 1871 Census not in 1841

Accountant	4	Governess	4
Ballast heaver	1	Goldsmith	2
Bill poster	1	Greengrocer	6
Boatman	1	Groom	2
Boilermaker	1	Haberdasher	1
Bonecrusher	1	Hanker	13
Bookmaker	3	Ironstone miner	3
Brickmaker	3	Iron moulder	7
Brushmaker	1	Iron ship worker	11
Cab driver	3	Jet carver	6
Cellarman	1	Jet dealer	12
Clergy etc.	7	Jet maker	79
Drayman	1	Jet ornament man.	10
Dustman	2	Jet worker's app.	12
Dyer	1	Line baiter	4
Farmer	7	Lodginghouse keeper	4
Factory worker	1	Mangle keeper	3
Feather dresser	1	Maltster	1
Fireman	1	Marine store dealer	5
Fishbuyer	1	Mariner's wife	49



TABLE 4: (contd.)

Fish curer	1	Mason's labourer	10
Fish dealer	9	Needlewoman	3
Fish merchant	3	Net baiter	2
Fish seller	2	Newspaper worker	2
Fish woman	5	Nurse	24
Fossil dealer	2	Ostler	1
French polisher	1	Paper hanger	2
Game dealer	3	Parcel agent	1
General dealer	3	Photographer	2
Ginger beer maker	2	Plasterer	7
Coal porter	9	Poulterer	1
Prostitute	5	Rag gatherer	3
Railway worker	27	Rivetter (iron ship)	1
Sailor's wife	27	Scavenger	2
Seaman's wife	14	Sewing machinist	1
Ship carpenter's wife	12	Shipowner	9
Ship rigger	1	Shipsmith	1
Shipwright's wife	5	Shopman	9
Shopwoman	4	Slater	2
Surveyor	1	Taxidermist	1
Tobacconist	4	Trunk maker	1
Visitor	2	Wellsinker	1

.....

Source:  
See note 7

TABLE 5:

## CENSUS ANALYSIS - THE POPULATION OF WHITBY, 1801-1911

<u>Year</u>	<u>No. Persons</u>	<u>Area</u>
1801	7483	Whitby town
1811	6969	Whitby town
1821	8697	Whitby town
1831	7765	Whitby town
1841	7383	Whitby town
1851	8040	Whitby town
1861	8142	Whitby town
1861	12051	Parliamentary borough
1871	13094	Parliamentary borough
1871	7886	Whitby town
1881	8820	Whitby town
1881	16806	Reg. district
1891	15854	" "
1891	7501	Whitby town
1901	6349	Whitby town
1901	21743	Reg. area
1911	22131	" "
1901	8051	Whitby R.D.
1911	8501	Whitby R.D.

Source: See note 6 and note 7.

TABLE 6a:

## ANALYSIS OF MAN/TON RATIOS (MEN PER 100 TONS) OF WHITBY-REGISTERED VESSELS, 1863-1913

<u>Trading patterns</u>	<u>Sample No. voyages</u>	<u>Average No. Men/00 tons</u>
Steamships, foreign	48	2.23
Steamships, coastal, Baltic	18	2.35
Sail, foreign	8	3.58
Sail, Baltic, France	34	4.03
Sail, coasting	18	4.06
Sail, coal trade	7	3.82
Sail, local traders	15	6.15
Total	148	av.3.74

Source: Agreement and Account of Crew of a sample of Whitby ships, 1863-1913, see note 43

## ANALYSIS OF MAN/TON RATIOS OF WHITBY-REGISTERED VESSELS FROM THE CREW AGREEMENTS, 1863-1913 - AVERAGE RATIOS FOR EACH TONNAGE RANGE

<u>Gross tons</u>	<u>Average Men/00 tons</u>
20 - 30	6 - 9
30 - 50	4 - 7
50 - 100	5 - 6
100 - 150	3 - 5
150 - 200	3 - 4
200 - 250	3 - 4
250 - 300	3 - 4
300 - 350	3 - 4
350 - 400	2 - 4
400 - 500	2 - 5
500 - 600	2 - 5
600 - 700	2 - 3
700 - 900	2 - 3
900 - 1000	2 - 3
1000 - 1500	1 - 2.5
1500 - 2000	1 - 2.5
2000 - 2500	0.5 - 1.5
2500 - 3000	0.5 - 1.5

Source: Agreement and Account of Crew. A sample of Whitby ships - see note 43

TABLE 6b:

## NUMBER OF CREW OF SELECTED WHITBY STEAMSHIPS, 1875 - 1901

<u>Name</u>	<u>Net tons</u>	<u>Voyage</u>	<u>Year</u>	<u>No. crew</u>
Cosmopolitan	1017	Tyne --- Constantinople	1875	25
Cosmopolitan	1017	Cardiff--- Constantinople	1885	21
Ravenhill	924	Cardiff --- East Indies	1877	22
Ravenhill	924	Cardiff --- Havannah	1887	18
Rishanglys	777	Med.-- Black Sea	1880	19
Rishanglys	777	Med.-- Black Sea	1890	19
Sarah	969	Med.-- Black Sea	1885	19
Sarah	969	Med.-- Black Sea	1895	19
Ethelburga	1445	Brazils & R. Plate	1890	24
Ethelburga	1445	Brazils & R. Plate	1900	23
Ethelreda	1401	Med.	1890	23
Ethelreda	1401	Med.	1900	25

Source: See note 45  
 .....

TABLE 7:

ANALYSIS OF WHITBY-REGISTERED VESSELS FROM CREW AGREEMENTS: ORIGINS OF CREWS  
1863 - 1913

<u>Trading patterns</u>	<u>(Sample)</u>			
	<u>No.</u> <u>voyages</u>	<u>av. %</u> <u>Local</u>	<u>av. %</u> <u>British</u>	<u>av. %</u> <u>Foreign</u>
1. Steamships, foreign	55	13.8	65.7	20.5
2. Steamships, coasting, Baltic	33	20.2	65.0	14.8
3. Sail, foreign	13	6.9	69.1	24.0
4. Sail, Baltic, France	46	43.9	47.9	8.2
5. Sail, coasting, coal	30	47.0	48.4	4.6
6. Local traders	6	89.2	10.8	0.0
Total	183	av. 36.8	51.2	12.0

## ORIGINS OF MASTERS - PROPORTION FROM WHITBY

		<u>%</u>
1. Steamships, foreign	48	56.1
2. Steamships, coasting, Baltic	18	72.2
3. Sail, foreign	8	66.7
4. Sail, Baltic, France	34	80.9
5. Sail, coasting, coal	25	100.0
6. Local traders	15	83.3
Total	148	76.5

Source: Agreement and Account of Crew

## APPENDIX 1:

## THE WILLS OF PROMINENT WHITBY SHIPOWNERS, 1867-1943: VALUE OF PERSONAL EFFECTS AT TIME OF DEATH

<u>Name</u>	<u>Date of death</u>	<u>Personal effects</u>
Thomas Turnbull of Whitehall	5 July 1867	under £9,000
Thomas Turnbull of The Mount	24 April 1892	£177,066 13s 8d
Thomas Turnbull of Airy Hill	3 January 1924	£207,005 1s 3d
Robert Turnbull Scott	6 August 1903	£38,940 18s 6d
Reginald March Turnbull	27 July 1912	£56,519 16s 0d
Philip Turnbull	5 June 1925	£239,530 0s 5d
Lewis Robert Turnbull	25 January 1931	£149,921 1s 5d
Robert Harrowing	14 September 1900	£138,268 15s 7d
Arthur Harrowing	11 March 1901	£57,978 12s 4d
Sir John Henry Harrowing	20 February 1937	£635,005 4s 0d
William Henry Marwood	6 May 1892	£18,001 0s 2d
Thomas Nelthorpe Marwood	3 April 1897	£10,190 4s 6d
Christopher Marwood	22 July 1914	£33,862 5s 7d
John Henry Barry	23 May 1891	£17,343 16s 6d
John William Barry	26 September 1896	£6,262 5s 2d
Henry Ord Barry	25 November 1899	£2,787 19s 1d
Thomas Smailes	30 October 1908	£15,388
Richard Smailes	13 December 1943	£96,762 4s 7d
Benjamin Tindale Robinson	9 March 1888	£6,062 7s 9d
Wellburn Granger Robinson	26 March 1911	£29,220 12s 11d
John Foster	9 May 1911	£20,015 19s 4d
Richard Foster	20 January 1921	£7,266 12s 4d
Walter Grimshaw	27 December 1890	£9,499 2s 11d
John Rowland	3 September 1899	£27,531 19s 6d
Capt. Andrew Smith Hughson (of the North Sands)	20 February 1901	none stated
George Gallilee	29 July 1914	£17,914 12s 0d
James Gray	18 January 1917	£92,115 12s 1d
John Francis Lund	22 November 1918	£123,323 7s 7d
Thomas Trattles	19 March 1922	£10,696 8s 5d
Harrison Baxter	17 January 1926	£26,450 18s 0d
Charles Smales	23 October 1933	£102,344 3s 9d
George Pyman	23 November 1900	£142,285 17s 10d

---

Source: Probate Court Index, Somerset House

## CONCLUSION

The maritime enterprise of the inhabitants of the port of Whitby in the eighteenth, nineteenth and early twentieth centuries manifested itself in many diverse ways, not only in the construction and ownership of vessels, but in employing them to their best advantage. A remarkable feature of shipbuilding and shipowning at Whitby throughout this period was the manner in which it adapted to the changing demands for shipping. Despite what Defoe regarded as an obscure location and isolated site, ship-building at Whitby grew, earning a reputation for the construction of especially sturdy and capacious vessels, to the extent that in 1792 and 1793 it was the second shipbuilding port of England according to the output of tonnage. This industry was sustained by a heavy demand not only for colliers, coasters and foreign-going ships, but the needs of the Government for transports in wartime.

The flourishing of shipbuilding at Whitby gave rise to the growth of the tonnage owned at the port, which reached its highest point in the period before 1815, when over 53,000 tons were registered there in 1793. Davis considered that most eighteenth century vessels were owned by groups of large numbers of investors, but analysis of the statutory register of Whitby, with a consideration of similar work on other ports, has shown that this was not necessarily true, that single owners and partnerships of one or two persons was more common. Further analysis of the Whitby registers highlighted the importance of shipbuilding in the maritime economy of the port, in which a large proportion of investors in Whitby-owned vessels were engaged in shipbuilding and its associated activities. Despite the small population of the area and its remote setting, the majority of shipowners recorded in the Whitby registers resided at the port itself. Thus Whitby shipowning developed from the success of its shipbuilding,

rather than through the presence of an exportable bulk commodity or from the foundations of a financial and commercial centre.

The decline of wooden shipbuilding at Whitby after the Napoleonic Wars was part of a national phenomenon in this industry. This port was hit particularly badly through a decline in the demand for its high-quality ships in preference to the cheaper vessels built at the port of Sunderland, for example, which through the system of classification maintained by Lloyd's, were given an identical length of time on the first letter. Despite the complaints of a lack of remuneration from shipowning which were voiced in 1833 and 1844, in which the introduction of the reciprocity treaties was apportioned a good deal of blame, the ownership of merchant tonnage at Whitby survived the stagnation of the shipping industry and reached a peak in 1866, when nearly 75,000 tons of wooden sailing ships were registered at the port. This growth did not continue, however, through the poor level of freights in the late 1860's, the preference given to steamships especially with the opening of the Suez Canal, and banking crises and failures which discouraged new investment.

Whitby shipowners took only a limited interest in the final stage of development of the sailing ship, the large foreign-going barques. Yet the decline of sailing ship owning at Whitby did not lead to a decline in the shipping of the port, as many contemporaries believed. Investment in steamships, from modest beginnings with the ownership of small paddle steamers, developed to the scale of over 200,000 tons on the Whitby register in the years 1890-5. Steamships of an aggregate tonnage of up to 9,000 tons per year were launched from the yard of Thomas Turnbull & Son. Whitby was unique among small ports lacking nearby coal and iron resources which successfully achieved the transition from the building and ownership of wooden sailing ships to the construction and management of steamships of up to 5,000 tons gross. Despite such changes in the shipping industry

of Whitby, the majority of investors in Whitby-registered shipping continued to be drawn from the port itself and its immediate locality, and the traditional division of shares into sixty-fourths remained, in considerable contrast with the ports of Liverpool, Cardiff and Swansea, for example. Pollard and Robertson considered that a result of the change from sail to steam was the concentration of ship-building in large centres with the best facilities and nearby resources: the port of Whitby was an exception to this rule. Famous for its eighteenth century colliers and associations with Captain Cook, it may seem surprising that the shipping industry of Whitby reached its climax with the building and ownership of large steamships in the 1880's and 1890's. This was the result of the continued re-investment of shipping profits back into this industry, and the concentration of the capital of the locality in shipping, in an area which lacked other opportunities for the employment of surplus capital.

The contrast between the tonnage of vessels built and owned at Whitby and the entrances and clearances of shipping at Whitby harbour was already evident in the eighteenth century: many colliers, coasters and vessels trading to the Baltic and beyond returned to their home port only for repairs and laying-up. The gap between the scale of activities of Whitby-owned ships and their port of registry widened throughout the period. Early eighteenth century Whitby ships were particularly concentrated in the coal trade, before venturing into the Baltic, foreign and whaling trades in the course of the eighteenth century, and finding employment in the transport service during the American War of Independence and the Napoleonic Wars. The majority of Whitby-owned vessels were employed in short-sea voyages for the greater part of the nineteenth century, until the advent of the steamship at Whitby, in which the principal areas of deployment became the Mediterranean, the Black Sea, the United States and the Near and Far East. Whilst Whitby steamers traded all over the

world, cargoes entered and cleared at Whitby harbour were few and far between.

The coal trade provided a valuable impetus to shipbuilding and ship-owning at Whitby, and the continued demand for coal at the port of London ensured employment for a large proportion of Whitby shipping. When improved rail communications reduced the amount of coal carried by sea to the Metropolis, Whitby steamships carried coal overseas, to more distant customers. The trading accounts of Whitby ships in this trade show that it could not be relied upon for high profits, and colliers continued in this activity by keeping their expenses to a minimum. The whaling trade, in comparison, was carried out spasmodically, in large and expensively outfitted vessels, undertaking great risks but receiving large rewards. It considerably added to the traffic of the port of Whitby, supplying it with a much needed commodity for export: increased activity in the harbour resulted in the collection of more revenue for the maintenance and improvement of the harbour facilities. Of all ports in this trade, Whitby ships achieved the highest level of productivity, and contributed up to a quarter of the tonnage employed each year in the hunting of whales in the Greenland Seas. The whale fishery was abandoned when it became no longer profitable; it had been temporarily given up before with the prospect of large earnings in the transport service.

The inshore and offshore fishery was an activity more akin to the coal trade than whaling: it was a traditional means of livelihood from the earliest times of the Whitby shipping industry, and continued throughout the period without earning spectacular profits. It involved the smallest of the creeks and members of the port of registry of Whitby, and its smallest vessels; it employed the poorer members of the community, and did not attract investment from wealthy shipbuilders and shipowners. Suffering from the poor condition of Whitby harbour, it was one of the least successful aspects of Whitby's shipping industry. The dynamism



shown in the investment in steamships at Whitby is in considerable contrast with the lethargy of the fishing industry and the neglect of the harbour. At the end of this period, Whitby fishermen still persisted in the old-fashioned passive method of fishing with drift-nets, whilst their catch was being swept up by the trawlers of rival ports.

Whitby ships in the Baltic have received little attention from writers on this trade, yet an analysis of the Sound Toll Accounts, which list vessels according to port of origin of their master, show Whitby as the most important English port, in relation to the number of passages through the Sound in the years 1787 and 1791. Yet Whitby was much less significant as a port of departure or port of destination of vessels trading in this area. When, in the 1830's and 1840's, timber supplies were drawn from British North America rather than the Baltic, Whitby ships entered another trade: the carriage of emigrants outwards from Britain. Whitby ships embarked from their home port with emigrants and, in the hire of the Government, carried emigrants and convicts to Australia from Liverpool and London.

One of the most successful and profitable activities of Whitby ships was their employment in the transport service. By identifying each Whitby-owned and Whitby-built vessel which served as a transport, their significant contribution to the carriage of troops, stores and horses overseas becomes evident. Of the vessels serving as transports recorded in the Underwriters' 'Green Book' of 1807, nearly a quarter were built at Whitby. Thus the outbreak of war and the rise of shipbuilding at Whitby are closely linked. It has been suggested, by M.E. Condon, that British shipping during the wars with Napoleon was more advantageously employed in trading than in the hire of the Government, but many Whitby shipowners, who abandoned the whaling trade and employment in the Baltic or Mediterranean for the high rates offered for transports, cast doubt

on this assertion.

Whitby harbour was one of the few possible refuges for east coast traders when caught in a storm, but an outcrop of alum rock created a bar at the harbour mouth, and the sluggishness of the Esk left it dry at low water. Harbour trustees, appointed from the town's principal inhabitants, i.e. shipowners and shipbuilders, managed the income it received from a 'passing toll' between 1702 and 1861, when the piers were extended and lighthouses built at their ends. With the end of this levy, and the decline in revenue from traffic in the port, the harbour slowly decayed. If the prosperity of the shipping industry of Whitby had depended on the condition of the harbour, then the owners of Whitby steamships, who had invested several million pounds in steam tonnage, could have improved it. Its irrelevance to most aspects of the Whitby shipping industry by the late nineteenth century was such that it remained neglected. The number of persons employed in the harbour was never large: early directories show that the largest proportion of the inhabitants worked in the shipbuilding industry and its associated activities. When this declined, ship carpenters became house carpenters, and large numbers joined the flourishing jet industry, and in Whitby's growing tourist trade. The seafaring population did not increase with the national growth in the number of seamen in the mid nineteenth century; like the population of Whitby as a whole, it remained comparatively static. Analysis of the personalities of the Whitby shipping industry has shown that families continued in this business for several generations, such as the Turnbells, Harrowings, Smalles, Smales and Marwoods. The flourishing of the maritime economy of Whitby in the late eighteenth century is seen by the establishment of eight banks in the town which aided the financing of Whitby shipowning until taken over by national banks in the late nineteenth and early twentieth centuries. The advent of steamship owning at Whitby led to the development of several local

marine insurance clubs, associations and companies. Self-insurance and cover with small insurance bodies was replaced by protection from Lloyd's with the increasing size, and therefore value, of the steamships owned at Whitby in the years before the First World War.

This study has been based principally upon primary material: the ship registers of Whitby, and documents relating to particular men, and ships, of the port. The vast majority of records relating to the history of the port of Whitby have received little attention in print. Yet the aim of this study has not been limited to the discovery of the nature of the maritime history of Whitby alone but, by offering further means for regional comparison, attempts to add a further dimension in the contribution of British ports to the maritime history of this country.

## APPENDIX ONE: BANKING AND THE WHITBY SHIPPING INDUSTRY

An analysis of the ownership of Whitby-registered vessels in the eighteenth and nineteenth centuries has shown that the majority of investors resided locally, in Whitby itself and in Robin Hood's Bay and Staithes. The need for local banking facilities to support this investment was recognised as early as 1785,<sup>1</sup> and the flourishing of banks at Whitby was associated with the prosperity of Whitby shipbuilding and shipowning in the late eighteenth century and during the Napoleonic Wars. Maberly Phillips, an historian of banking, initially intended to confine his studies to Northumberland and Durham but widened the scope of his work to include North Yorkshire, in order to take in the expansion of banking at Whitby.<sup>2</sup> Of a total of ninety-six banks in these three counties, eight were based in Whitby, mostly founded and managed by local shipowners. The financing of shipowning by local banks was aided by connections with national banking houses. This created a secure base for the development of the Whitby shipping industry, and contributed to the tradition of the importance of local investment in the ownership of Whitby registered tonnage, which extended into the period of steamship owning. Young, in 1817, remarked on the stability of Whitby banking:

It is the happy privilege of Whitby that all its banks enjoy the full confidence of the public, and that on the best grounds, being all conducted by gentlemen of great property, and of well known integrity and prudence. Amidst the numerous failures of other provincial banks, the Whitby banks have remained unshaken. Indeed, it may be noticed as a proof of the prosperity and riches of Whitby, as well as of the prudence of its public characters, that during the great fluctuations in business that have occurred in the last ten or twelve years, our town has experienced no shock; no bankruptcy worth noticing has occurred.<sup>3</sup>

A study of these eight Whitby banks reveals the truth of this assertion: between 1785 and 1892, they survived for an average of forty-seven years.

Tracing the actual date of commencement of these old banking houses poses difficulties, as often the bankers were previously tradesmen or merchants who were involved on a small scale in lending and borrowing before gradually expanding into recognised bankers.<sup>4</sup> It was in this manner that Messrs. Simpson, Chapman & Company began business in Grape Lane.<sup>5</sup> They became a regular bank in 1785, but it has been suggested that Wakefield Simpson, a draper and grocer, had acted as a private banker up to ten years previously.<sup>6</sup> Simpson, a Quaker, married the daughter of the shipowner John Walker, also of this faith,<sup>7</sup> whose extensive investments in Whitby shipping included the Free Love, a vessel in which the young James Cook served.<sup>8</sup> The Simpsons also appear in the Statutory Registers of Shipping from 1786 onwards,<sup>9</sup> and Wakefield's grandson Henry served as second mate on board the Earl of Eldon, a vessel owned by Robert Barry.<sup>10</sup> As discussed in the fifth section of Chapter Five, many Whitby Quakers abandoned their pacific beliefs when their ships became armed transports during the Napoleonic Wars, including the Chapman partners in the bank. Abel Chapman, a prominent local shipowner, had been one of the founding partners in 1785. There does not appear to have been a specific deed of partnership between the original founders, which occasioned a Chancery suit.<sup>11</sup> One of the pioneering banks of Whitby, Simpson, Chapman & Co. survived banking panics of over a century, and flourished, still issuing its own banknotes, until 1892, when it was purchased by the York Union Bank.<sup>12</sup> In 1844 the note issue of this bank was fixed at £14,258 in the neighbourhood, where Whitby notes were always accepted in preference to even those of the Bank of England. A Chapman-owned vessel was christened Bank Note in recognition.<sup>13</sup> The London agents for this bank were Barclay & Company, who eventually, in 1902, became its owners after their incorporation with the York Union. When it ceased to be a private local bank, John Chapman Walker and Henry and Thomas Wakefield Simpson were the remaining partners,

great-great nephew and great grandsons of the original founder.<sup>14</sup> The prominence of this local bank is seen in the loans provided for the harbour improvements. Its endurance in banking may have been aided by the inter-marriage of the partners with other banking families such as the Gurneys, Barclays and Frys, and a relation of the partners, E.H. Chapman, was to become a director of the Bank of England.<sup>15</sup>

The banking house of Thomas Peirson of Whitby dated from 1778, founded by tanners originally settling in Whitby from Helmsley, who had established a tannery at Spital Bridge. They became drapers and merchants before setting up Whitby's second bank. The notes issued by these early banks were made payable in London, and were 'post bills', not payable on demand but a few days after sight. Bank bills of this form did not continue beyond 1789. The Peirsons were responsible for many grants to local charities and to the poor, and survived until the 1820's. Phillips notes that it speaks well for the stability and prudence of Whitby bankers that during the time of the panic which affected banks in other parts of the North of England, in 1793, 1797, 1803, 1815 and 1816, Peirsons' Bank stood their ground.<sup>16</sup> Banking in Whitby in the eighteenth century suffered by the scarcity of silver, so local 'tokens' were produced. Whitby shillings had a large circulation and were common currency throughout the North Riding.<sup>17</sup> No records of this bank exist after 1820, and it may have closed along with many banks in this decade due to the frequent forging of notes and the resultant discrediting of country banks.<sup>18</sup>

Sanders and Sons also established a banking house in Whitby in the 1770's. Commenced by Jonathan Sanders in 1779, the bank received subscriptions for the abolition of slavery, and for sufferers from disasters in the whale fishery. Sanders had previously acted as Collector of Customs at Whitby, and his family were also members of the Society of Friends. He was also responsible for the establishment of the first sail-cloth manufactory in Whitby, appearing in local

directories as such, an activity pursued by other local bankers, including the Campions and Chapmans. Sanders' bank features in Mrs. Gaskell's Sylvia's Lovers, their premises based in Church Street. A very old Whitby family, they were included in lists of taxpayers of the seventeenth century. This bank became discontinued after 1830, possibly as a result of the panic of 1825.<sup>19</sup>

Clarke, Richardson and Hodgson's bank was founded in 1786. The first of the partners was a prominent Whitby shipowner, the second a wine merchant and the third a mercer and draper. Hodgson was a native of Malton, but his partners were from old-established Whitby families. They were exceptional among Whitby banks in having to temporarily suspend payments during the panic of 1793. They were taken over by the York City and County Bank in 1846, Richardson remaining as local manager. In 1790 they changed their title to 'Pease, Richardson & Co., Bankers', and it was under this style that they announced in the Newcastle Chronicle on 18 May 1793 that they had 'again opened for business with the same punctuality and attention that has always distinguished their conduct until that fatal moment which involved almost every Bank in the Kingdom in disappointment and temporary distress', somewhat exaggerating the universal aspects of the panic.<sup>20</sup>

Numerous branches of the Pease family were associated with banking at Whitby and Malton. A member of this family was churchwarden at Whitby from 1727, and a banking house was founded under this name prior to 1790. Members of this bank also went into partnership with Richardson & Co., as discussed above, and although they are not recorded at Whitby after 1823, they retained their business at Malton after this date. In their shipping activities, the Campions banked with Pease & Co. from 1790 until 1802, when their own bank was established.<sup>21</sup>

Margaret Campion, and her son Robert, founded a bank in Whitby in

1800,<sup>22</sup> to facilitate their other commercial activities, in shipowning, sailcloth weaving, flax-dressing and spinning, together with acting as general and wine merchants. Robert's son John Campion also became a partner. They were regarded as one of the most prosperous local families, but suffered decline followed by failure and suspension of payment in 1841. Apart from Richardson's Bank in 1793, Phillips records that no Whitby bank was forced to suspend payment until the failure of Campion's Bank in 1841. In 1807 they had established a spinning manufactory next to their sailcloth works in Bagdale, which by 1814 comprised twelve spinning frames. Robert Campion claimed to have invented a process for the preparation of yarn for making sailcloth without the use of starch, taking out a patent in 1813. When his banking business failed, Robert Campion entered the Church; the family had long been associated with the arts and philanthropy.<sup>23</sup> An important Whitby shipowner, he was responsible for the erection of a monument to Captain Cook on the Cleveland hills in 1827. As a land and property owner, Robert Campion became Lord of the Manor of Earby, near Stokesley, yet his prosperity was short-lived. Debts proved against the Campions in 1842 included £21,550 as bankers, £17,881 as shipowners, £23,348 in Robert Campion's estate and £12,000 in John and William Campion's estate. The banking historian Oldfield who has recorded these figures does not explain the reasons for the Campions' bankruptcy, but two other Whitby banks went out of business in this decade.<sup>24</sup> Their activities in banking and shipowning were obviously on an extensive scale to incur such large debts.

The Whitby bank of Miles, Wells & Co. was the most short-lived of all the Whitby banks, founded prior to 1802 and extinct by 1816. Miles came from Sneaton, near Whitby, but his partner hailed from London. They shared premises with Jonathan Lacey, a ropemaker, in Bridge Street, and were known as the Whitby New Bank. The initial partnership was



speedily discontinued, as in the Yorkshire Gazette of 9 July 1803, it was recorded that 'the partnership between Jonathan Miles and Dymoke Wells, of Whitby, trading under the firm of Miles, Wells & Co., Bankers and Merchants, is dissolved by mutual consent. The business will be carried on by Dymoke Wells alone upon his own account'.<sup>25</sup>

The last of the banking houses set up in Whitby as a private concern was founded by the brothers John and James Frankland in 1820, taking over the business abandoned by the Peirsons. The partners also included members of the Clayton family from Sunderland, and the Wilkinsons of Whitby who, like the Franklands, were also local drapers. The note issue of this bank was only £2,076, and in 1845 the business was sold to the York City and County Bank. An old Whitby family, dating from the seventeenth century, they continued their interest in banking: in the mid 1920's, descendants of the Franklands and Wilkinsons were working in the Whitby branch of the Midland Bank.<sup>26</sup>

Branches of County-based banks were also established in Whitby in the early nineteenth century. The Yorkshire Agricultural and Commercial Banking Co. was founded in 1836 on the joint-stock principle, with its head office in York and with a capital of £½ million. It was housed in splendid premises in Bridge Street, and paid a yearly dividend of six per cent average, but collapsed in 1842. The York City and County Banking Company was more successful, surviving from 1830 to 1909, when it was absorbed by the London Joint-Stock Bank, which was in turn taken over by the Midland Bank in 1918. By 1909, it was one of the largest purely provincial banks remaining in England, with nearly 200 branches in the North East. The Whitby branch was one of the oldest, with over eighty years of banking experience, and took over the business of Clarke, Richardson & Hodgson and their successors Richardson, Holt and Company, together with that of John and James Frankland and the later Frankland & Wilkinson.<sup>27</sup>

Chapter Three has shown the effects of the collapse of Whitby banks on investment in shipping in the locality, culminating in the Overend Gurney banking crisis in 1866, which marked the turning point in the ownership of wooden sailing ships at Whitby. Only Simpson, Chapman & Co.'s Bank survived into the period of steamship owning and building at Whitby. With the York City and County Banking Co. Ltd., to be taken over by the Midland Bank in 1918, they helped considerably in the financing of steamship purchases: the taking out of mortgages on Whitby steamers was very common.<sup>28</sup> The flourishing of local banking at Whitby in the late eighteenth and early nineteenth centuries, and the number of banks supported by such a small commercial population reflects the prosperity of the maritime community of the port.

## REFERENCES: APPENDIX ONE

1. With the establishment of Simpson, Chapman & Co.
2. Maberly Phillips, A History of Banks, Bankers and Banking in Northumberland, Durham and North Yorkshire, illustrating the Commercial Development of the North of England, from 1755 to 1894, (London, 1894), p. ix
3. Rev. George Young, A History of Whitby, etc..., (Whitby, 1817), p.582
4. W.A. Oldfield, 'Bygone Whitby Banks and Bankers', The Midland Venture (the magazine of the Midland Bank Staff Association), VIII (1925), p.11. Oldfield was also the author of a chapter on Whitby banks in H.B. Brown, Chapters of Whitby History, 1823-1946, (London, 1946)
5. The Bank occupied a house which was previously an old inn, 'The Grapes', which had an entrance from the harbour and duplicate cellars underneath, 'a most convenient thing in the days of smuggling, for which Whitby had an unenviable reputation'. Maberly Phillips, History of Banks, p.219
6. Young, Whitby, p.581
7. P.W. Matthews and Anthony Tuke, History of Barclays Bank Ltd., (London, 1926), Chapter XXVIII, 'Simpson, Chapman & Co.: the Whitby Bank', p.242
8. Muster Rolls, 1747-1795, Wh. Lit. & Phil.
9. Reg. Ship.
10. Ledger of John and Robert Barry, shipowners, 1832-1839, Wh. Lit. & Phil.
11. Matthews & Tuke, Barclays, pp.241-243
12. Oldfield, 'Whitby Banks', p.11
13. Maberly Phillips, p.373
14. Matthews & Tuke, pp.241-243
15. Oldfield, p.17
16. Maberly Phillips, p.360
17. Young, pp.582-3, and Oldfield, p.11
18. Maberly Phillips, p.365
19. Oldfield, p.16 and Maberly Phillips, p.365
20. Maberly Phillips, p.227, and Oldfield, p.13. A bank named Richardson, Holt & Co. had carried on business until 1846, when they were absorbed into the York City and County Bank
21. Oldfield, p.15, Maberly Phillips, p.345
22. Young, p.581
23. Maberly Phillips, p.219
24. Oldfield, p.13
25. Maberly Phillips, p.306, Oldfield, p.15
26. Oldfield, p.14, Maberly Phillips, p.273
27. Oldfield, pp.17-8

28. Between 1880 and 1914, 149 steamships were registered at Whitby, sixty-three of which were mortgaged, usually with the York City and County Bank. Reg. Ship.

## APPENDIX TWO: MARINE INSURANCE AND THE WHITBY SHIPPING INDUSTRY

The importance of marine insurance to Whitby shipowners became more apparent with the ownership of larger and more expensive ships in the late nineteenth and early twentieth centuries. The insuring of eighteenth and early nineteenth century wooden sailing ships against loss or damage to the ship and cargo was by no means standard practice; in the voyage accounts of Whitby colliers, such as the Hannah and the Morton House, there is no mention of expenditure on insurance premiums.<sup>1</sup>

An early exception may be seen among the surviving insurance policies of the Royal Exchange Assurance Company, in this case of the whaler Resolution in 1807.<sup>2</sup> Whalers were generally more expensive in outfit and equipment than other merchant vessels, and only the largest ships were employed in this trade. The third section of Chapter Five shows that the Resolution, built in 1803, originally cost £7,791 or £26 15s per ton, a higher price than the average vessel of this period. Thus Fishburn and Brodrick, the partners who built and then managed this vessel, considered that their property required safeguarding:

On the Greenland Ship Resolution, burthen about 300 tons, and Commander, now lying in the Harbour at Whitby aforesaid, or in any other Port or Harbour in Great Britain with liberty to Dock £2000  
 On Blubber, Oil and Bone, including Stores on Board the said Ship and on the same when removed to Warehouses and Boiling Houses in Whitby aforesaid £2000  
 £2000 insured at 2s 6d, £2000 at 6s, with duty of £2 10s, cost of premium per annum £11, vessel insured from 27 July 1807 to 27 January 1808. Newcastle insurance district.<sup>3</sup>

Other early nineteenth century sailing vessels for which shipowners considered that insurance was necessary were ships in long haul trades with valuable cargoes. Rather than requesting cover for a set period, such as a year or half year, in the case of the Resolution, specific voyage insurance was popular. John Barry, the Whitby shipbuilder and

shipowner, insured particular voyages of his vessels with Lloyd's, through his brother Thomas Barry, the local Lloyd's Agent.<sup>4</sup> A sample of ten insurance policies taken out on Barry-owned ships from June 1818 includes the Hyperion, from London to Calcutta with leave to call at Madras to load or unload goods, which was insured for £1,000 at a cost of £34 2s 6d. A similar voyage of the Hyperion in the same year was insured at the same rate. The John Barry, Stephenson Ellerby master, in a voyage from London to St. Petersburg and back, was insured at a rate of three guineas per cent for £4,000, with a premium of £136 10s. The Briton was covered by three separate policies in a voyage from Calcutta to the U.K. in 1818: for £500, costing £16 6s 3d, for £5,000, costing £163 2s 6d and for £1500, with a premium of £48 18s 9d. Thus, for the Briton alone in just one year, John Barry paid a total of £228 7s 6d. If the cost of insurance cover for the Hyperion and John Barry is included, together with the premium of the William Harris in a voyage to Jamaica, two voyages of the Cleopatra to Darien and one voyage of the Hibberts to Jamaica, the sum expended in the insurance of ships by John Barry in 1818 exceeded £600. The freights he received, or rate of charter, must have been high to support such expenditure on insurance.

High costs of insurance could be borne on selected ships on particular voyages but such expenditure on all the vessels owned by a single shipowner for all their voyages became prohibitive. With the advent of steamship owning at Whitby, it was recognised that insurance with Lloyd's and other national bodies was the most expensive means of safeguarding the property of Whitby shipowners. The early Whitby steamship owners, reluctant to pay the high premiums and abide by the strict rules laid down by Lloyd's, purchased insurance cover with the North of England Iron Steam-Ship Insurance Association.<sup>5</sup> In 1873, twelve Whitby steamers, of a total registered at Whitby that year of eighteen, were insured for

between £2,000 and £6,000 each, depending on tonnage. Thus they were insured for approximately half of their original value, possibly an economy measure on the part of shipowners faced with a large increase in capital expenditure when transferring their interests from wooden sailing ships to iron steamers. When the large sums paid out in premiums to insurance bodies outside the Whitby shipping community were unclaimed, which inevitably happened in most cases, Whitby shipowners organised their own mutual insurance clubs. This form of insurance was also popular in the case of wooden sailing ships of the mid nineteenth century: in the 1850's and 1860's records exist of the Marine and Neptune Insurance Association, the Ocean Insurance Association - both chaired by George Barrick, a local shipbuilder and shipowner - the Whitby Mutual Insurance Association, organised by Sampson Storm, a shipowner from Robin Hood's Bay, the Esk Insurance Association, run by Henry Robinson, and the Standard Insurance Association of Whitby, managed by Thomas Turnbull.<sup>6</sup> Many of these personalities of the Whitby shipping industry were to venture into steam shipping. Thomas Marwood, who had been secretary of the Marine and Neptune, set up the Whitby Iron Steamship Insurance Co. in 1870, which was followed by the Whitby Mutual Marine Iron Steam Ship Insurance Co. in 1871.<sup>7</sup> They also insured the steamers of other ports, as the Whitby Gazette records that the W.I.S.I.A. insured over 180 steamers, representing over £3 million with nearly £ $\frac{1}{4}$  million insured in the Association.<sup>8</sup> Some of the old mutual clubs transferred their interests to steamships but many, including the Whitby Hilda, the Robin Hood's Bay Indemnity, the Whitby Esk and the Whitby Neptune Insurance Associations were abandoned. In 1880, for example, the Esk Shipping Insurance Association decided to wind up, as the tonnage of wooden ships at the port was declining, and in any case relatively few of them found the need to insure at all. So many had been lost and broken up without being

replaced, that the promoters deemed it best to dissolve the Association. By 1883, the Whitby Marine Insurance Association, W.H. Marwood, chairman, was believed to be the only mutual marine insurance company on the North East coast which still insured sailing ships, outside Newcastle and Sunderland.<sup>9</sup>

A leading Whitby steamship owner, Robert Harrowing, complained in 1883 that not only was insuring with Lloyd's too expensive, but the mutual clubs also charged prohibitive premiums.<sup>10</sup> He suggested that self insurance was a possible alternative, and formed Messrs. Robert Harrowing and Company's Steamship Insurance Association. Later that year, a well-attended meeting of Harrowing shareholders agreed that £240,000 be put down for the new insurance company. Harrowing had previously paid out £24,000 per year in insurance premiums and in the last year had only claimed back £4,000, due he claimed to the thoroughness of inspection of his ships. Insurance was thus costing between ten and eleven per cent of the company's outgoings, and could be reduced to five per cent. Under the new system Harrowing could afford to lose a ship each year of his fleet of fourteen steamers.<sup>11</sup> Despite the loss of two vessels in 1884, Harrowing's self-insurance system was still less expensive than the mutual clubs, and this prompted Walter Grimshaw, a prominent local shipowner, to call a meeting of all investors in Whitby-registered steamers, proposing the formation of one club for the insurance of all Whitby tonnage. He argued that 'if a fleet of only fourteen vessels can afford to lose two in one year and still be status quo, how much better it would have been if all seventy steamers [the total Whitby fleet in the mid 1880's] had been insured together'. Steamers owned by the Smales family also successfully employed self insurance.<sup>12</sup>

Although this manner of reducing expenditure on insurance was attractive to many shipowners, opposition came from Thomas Turnbull, the



iron shipbuilder of Whitby and the owner of a large proportion of the steam shipping of the port. He pointed to the high initial costs of steamers, their maintenance and repairs, considering that it was better to spread these costs over a wider area, by insuring them at Lloyd's, for example. A better way of reducing insurance costs, he argued, was to reduce the value of vessels for insurance purposes, rather than to adopt self-insurance.<sup>13</sup> Harrowing's new insurance method did not survive the depression in the shipping industry of the early to mid 1880's, and in 1887 he re-entered the Mutual Clubs for insurance against total losses, realising that drawing on the resources of the rest of his fleet would not necessarily cover him in the event of the complete loss of one of his steamers.<sup>14</sup> In December 1887, at a meeting of eighty-five steamship shareholders, Grimshaw continued his campaign for self-insurance, arguing that £1 million would cover Whitby's seventy steamers: only one vessel, insured for £11,000, had been lost in that year.<sup>15</sup> By February 1888, the Harrowing steam fleet had totally abandoned self-insurance, prompted by the improved earnings of steamers that year. At a meeting of the International Line shareholders, their steamships were insured for a larger amount in consequence of their enhanced values. In April 1892, Thomas Dotchon, the Secretary of the Whitby Steamship Shareholders' Protection Association, offered a further alternative method of insurance when he advised shareholders to insure their individual shares privately at Lloyd's.<sup>16</sup>

National insurance protection was preferred for large Whitby sailing ships, especially those of expensive outfit, such as whalers and foreign-going vessels. When the insurance of Whitby shipping became the norm rather than the exception, cover was sought from the North of England Steamship Insurance Association, and then Whitby's own Mutual Clubs. A further reduction of insurance costs was obtained by systems of self-

insurance, but they did not receive the full support of all Whitby steamship owners, and were gradually abandoned. The costs of investing in steam shipping by the end of the period under review were such that shipowners returned to national insurance cover. The Bernard, built at Whitby and launched in 1900, the voyages of which are discussed in Chapter Four, was insured for a total of £43,250: £4,000 with the Whitehall Marine, £2,500 with other Mutual Clubs, and £36,750 with Lloyd's. The port of Whitby had retained links with this organisation and its associated bodies throughout the nineteenth century, especially in the period 1835 to 1881, when Thomas Chapman, one of the Whitby Chapmans, became chairman of Lloyd's Register.<sup>17</sup>

## REFERENCES: APPENDIX TWO

1. See Chapter Five, Section Two
2. Royal Exchange Assurance Co. Fire Policy Registers, Guildhall Library, MS 7253 / 57, policy no. 231864, fo. 215, 31 July 1807
3. Another policy in these registers was taken out by Benjamin Gowland of Whitby on his brigantine Lady Minela, 'while lying in Whitby harbour or in any other port or harbour in Great Britain with liberty to dock', and was insured for £400. MS 7253 / 66, policy no. 264430, fo. 115. 16 December 1811
4. John and Robert Barry Letter Books, Wh. Lit. & Phil.
5. Royal Commission on Unseaworthy Ships, P.P., 1873, XXXVI, (315.), Appendix XIV. North of England Iron Steamship Insurance Association, list of steamers insured in 1873. Whitby owned steamers were extracted from this list. Details of the premiums paid were not given
6. Whitby Gazette, 20 February 1858, 12 February 1859
7. By-Laws and Form of Policy of the Whitby Iron Steamship Insurance Co. and the Whitby Mutual Marine Iron Steamship Insurance Co., Wh. Lit. & Phil. They were both incorporated in February 1876 for 'the mutual insurance of steamships by members of the company with the company'. The last policy taken out with them was in 1942. They were wound up voluntarily in 1964, when the owners were Turnbull Scott and Co. of London, Hall Brothers Steamship Co. Ltd., R. Chapman & Son, and the Dalglish Steamship Co. Ltd. of Newcastle, and the Rowland and Marwood Steamship Co. Ltd. of Whitby
8. Wh.Gaz., 6 June 1873
9. Wh.Gaz., 28 February 1880, 17 February 1883
10. Mutual insurance clubs in Whitby in 1882 were the Whitby Iron Steamship Insurance Co. Ltd., Whitby Marine Insurance Co. Ltd., Whitby Freight and Outfit Insurance Co. Ltd., for which Thomas Marwood and Sons were agents. Barnard & Foxton were the agents for the Whitby Mutual Marine Iron Steamship Insurance Co. Ltd. Turnbull's Shipping Register & British & Foreign Maritime Advertiser, (North Shields, 1882)
11. Wh.Gaz., 27 October 1883
12. Wh.Gaz., 24 January 1885, 31 January 1885
13. Wh.Gaz., 17 January 1885, 24 January 1885
14. Wh.Gaz., 1 January 1887
15. Wh.Gaz., 2 December 1887
16. Wh.Gaz., 4 February 1888, 8 February 1889, 15 February 1889, 14 April 1892
17. Charles Wright and C.E. Fyale, A History of Lloyd's, (London, 1928), p.333

**BIBLIOGRAPHY****SECTION ONE: MANUSCRIPT SOURCES**

- a. Whitby Literary and Philosophical Society, Whitby Museum, and Custom House, Whitby
- b. Public Record Office: at Kew, Chancery Lane and Portugal Street
- c. National Maritime Museum
- d. British Library Manuscripts
- e. Guildhall Library
- f. North Yorkshire County Record Office
- g. Archives of Lloyd's Register
- h. Memorial University of Newfoundland
- i. Somerset House
- j. Other Manuscript Sources

**SECTION TWO: PARLIAMENTARY PAPERS**

- a. Select Committees and Royal Commissions
- b. Accounts and Papers
- c. House of Commons' Journals
- d. House of Commons' Sessional Papers

**SECTION THREE: NEWSPAPERS, ETC.****SECTION FOUR: TRADE DIRECTORIES****SECTION FIVE: CONTEMPORARY PRINTED SOURCES**

- a. Pamphlets, etc.
- b. Annual Publications

**SECTION SIX: SECONDARY SOURCES**

- a. Books
- b. Articles
- c. Collections of Essays, etc.

**SECTION SEVEN: THESES, ETC.****SECTION EIGHT: MAPS AND CHARTS**

## BIBLIOGRAPHY

## SECTION ONE: MANUSCRIPT SOURCES

- a. Whitby Literary and Philosophical Society, Whitby Museum, and Custom House, Whitby

Barry Papers

Letter Book of John Barry, 1801-1807, and 1805-1808

Letter Book of Robert Barry, 1815-1843

Cash Book of Robert Barry, 1818-1835

Freight Book of Robert Barry, 1822-1831

Ledger of Robert Barry, 1832-1839

Log Book of the Hyperion of Whitby, transport, July 1812 - April 1815

List of insurance policies taken out by John Barry, from 1818

Smales Papers

Masting Book, 1750-1871

Accounts of the Princess Elfleda, 1866-1873

Chapman Papers

Accounts of the Hannah, 1715-1718

Joseph B. Chapman, diaries and private ledgers, 1826-1871

The Diadem, list of crew, provisions and inventory, 1841-1845

Scoresby Archive

1A 4 Vessels employed in the whale fishery from selected ports, 1814-1822

1A 12B List of men lost in the Esk and Lively, 1826

1A 12C, D, E Seamen's articles from Resolution, 1812 and Fame, 1818

1A 14 Contract for work on the ship Fame for Wm. Scoresby, 1822

1A 16 Accounts of William Scoresby Sen. in Henrietta, 1791-1797

1A 19 Vessels in the whale fishery, 1753-1812

1A 21 Expenses of the Fame and the Resolution, 1803-1811

1A 22 Whalersmen's wages at Hull, 1821

1B 2 Stores on board the Baffin, 1822

1B 3 Stores on board the Baffin, 1821

1B 4 The building of the Baffin, 1819-1820

1B 7A Manifest of the Baffin, 1820

1B 7B Pay List of the Baffin, 1820

Miscellaneous Papers

Ramsdale, Capt. D.S., 'Particulars of ships sailing from Whitby to Canada with emigrants', Unpublished MS

English, Dr., 'Whitby Prints, and Diary of Events', Unpublished MS

Smales, H.W., 'A Register of Whitby Steamships, 1865-1950', Unpublished MS

Papers deposited by Robert Tate Gaskin

Muster Rolls of Whitby Ships, 1747-1795

Journal of a voyage in the Aid, transport, with provisions for H.M. fleet off Lisbon commanded by Sir Charles Cotton

Advertisement of the emigrant ship Columbus, April 1832

Articles of association of Whitby Steamship Insurance Companies

Voyage accounts of the International Line steamships, 1895-1898, 1912-1914

Collection of Acts of Parliament relating to Whitby harbour

Collection of Maps and Plans of Whitby

Custom House, Whitby

Volumes of Certificates of Registry:

1. 1786-1823
2. 1/1824-43/1825
3. 44/1825-58/1826
4. 59/1826-8/1833
5. 29 March 1833-26 April 1836
6. 27 July 1836-23 April 1840
7. 24 April 1840-14 April 1846
8. 14 April 1846-23 May 1849
9. 29 May 1849-14 September 1853
10. 22 September 1853-28 April 1855
11. 1855-1858

12. 1858-1862
13. 1862-1868
14. 1868-1878
15. 1878-1900
16. 1900-1936

Transcriptions of these registers, by P. Barton and C.M. Linford, were compiled under the Port Registry Transcript Scheme, organised by the National Maritime Museum, and are housed at Greenwich.

b. Public Record Office: at Kew

Admiralty Papers

- ADM 1 / 3729 Letters from the Transport Dept., 1704-1706
- ADM 1 / 3730 Ditto, 1794-1795
- ADM 1 / 3731 Ditto, 1796
- ADM 1 / 3732 Ditto, 1796
- ADM 1 / 3733 Ditto, 1797
- ADM 1 / 3734 Ditto, 1797
- ADM 1 / 3863 Number and tonnage of vessels owned at the outports, 1701
- ADM 2 / 1392 Letters relating to transports, 1847-1849
- ADM 7 / 61-66 Lists of Convoys
- ADM 7 / 71 Licences to sail without convoy
- ADM 7 / 75-132 Register of Passes, 1729-1843
- ADM 7 / 154-155 Mediterranean Passes, 1815-1819
- ADM 7 / 363-369 Admiralty Protections, 1702-1747
- ADM 7 / 371-387 Lists of ships and persons protected, 1750-1815
- ADM 7 / 565 Register of Transports, 1776-1782
- ADM 7 / 649 Register of Letters of Marque
- ADM 49 / 2 Transports during the American War
- ADM 49 / 3-6 Musters of Transports
- ADM 49 / 96 Papers relating to hired ships, 1793-1815
- ADM 49 / 97-99 Registers of hired ships, 1803-1818
- ADM 49 / 100 Lists of ships, 1793-99

- ADM 49 / 102 Ships built at Merchants' Yards, 1801-1817
- ADM 49 / 125 Papers relating to Transports, 1740-1800
- ADM 49 / 126 Register of Transports, 1754-1773
- ADM 49 / 132-162 Registers of Orders to Dockyards
- ADM 49 / 163 Papers relating to Victualling, 1705-1708
- ADM 49 / 164 Ditto, 1708-1713
- ADM 68 / 194-218 Ledgers of the Receiver of Sixpences, 1725-1830
- ADM 106 / 274 Letters relating to American Transports, 1741-1759
- ADM 106 / 1138 Correspondence of the Navy Board
- ADM 106 / 1532-3 Navy Board In Letters
- ADM 106 / 2119 Letters from the Admiralty concerning transports, 1790-1794
- ADM 106 / 2607 List of transports
- ADM 106 / 3318 Deptford Dockyard Letter Book, 1775-1778
- ADM 106 / 3319-3329 Ditto, 1778-1804
- ADM 106 / 3334 Ditto, 1807-8
- ADM 106 / 3338 Ditto, 1813-1814
- ADM 106 / 3366, 3385-9, 3402-5, Ditto, various
- ADM 106 / 3525-6 Charge of transports
- ADM 106 / 3529-30 Survey of transports
- ADM 108 / 158 Freight Ledger of Transport Dept., 1795-1799
- ADM 108 / 159 Ditto, 1799-1801
- ADM 108 / 160 Ditto, 1801-1806
- ADM 108 / 161 Ditto, 1805-1818

British Transport Historical Records

- RAIL 742 / 1 Orders and Proceedings of the Directors of the Whitby and Pickering Railway Company, 1833-1845
- RAIL 742 / 2 Committee Meetings of the above, 1833-1834
- RAIL 742 / 3 Ditto, 1834-1836
- RAIL 743 / 14 North Eastern Railway: Whitby, Redcar and Middlesbrough Union Railway, income from passengers and goods, 1883-1887



RAIL 773 / 1 York and North Midland Railway: Joint Committee Meetings,  
1853-1865

RAIL 773 / 2 Ditto, Coal Committee (York), 1853-1862

Colonial Office Papers

CO 27 / 12 Colonial Office Navy Lists, Bahamas

CO 33 / 13 Ditto, Barbados

CO 41 / 6 Ditto, Bermuda

CO 47 / 80 Ditto, Quebec

CO 142 / 29 Ditto, Jamaica

CO 221 / 29 Colonial Office Navy Lists, Nova Scotia, 1753-1757

CO 221 / 30 Ditto, 1758-1761

CO 221 / 31 Ditto, 1762-5

CO 221 / 32 Ditto, 1811-15

CO 221 / 33 Ditto, 1816-20

CO 388 / 9 Shipping owned at English ports in 1701

CO 388 / 18 Vessels cleared from English ports in the Foreign Trade, 1710

CO 390 / 8 Ditto, 1715-1717

CO 390 / 9 Bounties paid to Ships in the Northern Whale Fishery, 1733-69

Board of Customs and Excise Papers

CUST 17 / 1-9 Vessels owned at British ports, 1772-1786

CUST 17 / 10-30 Vessels built and registered at British ports, 1787-1808

CUST 23 / 1 Imports into Whitby, 1873

CUST 23 / 22 Ditto, 1887

CUST 23 / 44 Ditto, 1889

CUST 23 / 70 Ditto, 1891

CUST 23 / 87 Ditto, 1893

CUST 25 / 10 Imports into Whitby, 1888

CUST 25 / 21 Ditto, 1899

CUST 36 / 1 Imports and Exports, England, 1699-1757

CUST 36 / 2 Ditto, 1699-1766

- CUST 36 / 3 Ditto, 1758-1784
- CUST 36 / 4 Number and tons of vessels belonging to British ports, 1799
- CUST 36 / 5 Account Book of imports and exports, 1814-1828
- CUST 73 / 35 Swansea: Collector to Board Letter Book, 1836
- CUST 90 / 1 Whitby: Collector to Board Letter Book, 1721-1724
- CUST 90 / 2 Ditto, 1726-1731
- CUST 90 / 3 Ditto, 1743-1754
- CUST 90 / 4 Ditto, 1754-1767
- CUST 90 / 5 Ditto, 1767-1778
- CUST 90 / 6 Ditto, 1778-1786
- CUST 90 / 7 Ditto, 1787-1792
- CUST 90 / 8 Ditto, 1792-1798
- CUST 90 / 9 Ditto, 1798-1802
- CUST 90 / 10 Ditto, 1802-1804
- CUST 90 / 11-14 Ditto, 1804-1826
- CUST 90 / 15-21 Ditto, 1826-1888
- CUST 90 / 22-69 Whitby: Board to Collector Letter Books
- CUST 90 / 70 Order and Report Book, Whitby, 1715-1833
- CUST 90 / 71 Ditto, 1816-1824
- CUST 90 / 74 Committee of Whitby Shipowners, 1787-1800
- CUST 90 / 75 Licences for Boats, 1808-1838
- CUST 90 / 76 Licences for Ships, 1808-1838
- CUST 90 / 77 Record of Ages and Capacities, 1824-1855
- Foreign Office Papers
- FO 280 / 1 Cuba, Returns, (Shipping, etc.), 1875-1883
- FO 280 / 2 Ditto, 1884-1907
- FO 284 / 1-2 New York, Shipping Returns
- FO 639 / 12-18 Barcelona, Shipping Returns
- Board of Trade Papers
- BT 6 / 93-4 Vessels engaged in the Northern Whale Fishery
- BT 6 / 185 Trade and Navigation Accounts of England, 1697-1801

BT 6 / 191 Vessels registered at British ports, 1786-1789

BT 31 / 86810 / 11336 Asolvesby Steamship Co. Ltd. file

BT 31 / 60017 / 16103 Eskside Steam Shipping Co. Ltd. file

BT 31 / 78739 / 17112 Glенаen Steamship Co. Ltd. file

BT 31 / 114857 / 19933 Glenbridge Steamship Co. Ltd. file

BT 31 / 105761 / 12969 Glencliffe Steamship Co. Ltd. file

BT 31 / 118341 / 20278 Glendene Steamship Co. Ltd. file

BT 31 / 85858 / 17558 Glensk Steamship Co. Ltd. file

BT 31 / 61971 / 31700 Harrowing Steamship Co. Ltd. file

BT 31 / 89726 / 17834 Helredale Steamship Co. Ltd. file

BT 31 / 118239 / 20267 Horngarth Steamship Co. Ltd. file

BT 31 / 20430 / 14783 International Line Steamship Co. Ltd. file

BT 31 / 86179 / 17579 Parkgate Steamship Co. Ltd. file

BT 31 / 93852 / 12018 Robinson Brothers Steamship Co. Ltd. file

BT 31 / 120039 / 20449 Thomas Turnbull & Son Shipping Co. Ltd. file

BT 31 / 108398 / 19331 Whitby Shipping Investment Co. Ltd. file

BT 31 / 7566 / 1889 Whitby Steamboat Co. file

BT 31 / 4951 / 1547 Whitby Steam Shipping Co. Ltd. file

BT 31 / 73895 / 16832 Whitby Steam Shipping Co. Ltd. file

BT 31 / 9892 / 2143 Whitby and London Steam Shipping Co. file

BT 31 / 3465 / 1326 Whitby & Robin Hood's Bay Steam Packet Co. Ltd. file

BT 98, 99, 100 Crew Agreements, approx. 10% sample

BT 98 / 136-7 Muster Rolls of Whitby Ships, 1822-1850

BT 107 Registers of Shipping, 1786-1854

BT 108 Transcripts and Transactions since 1854

BT 112 Registers of Seamen, 1835-1844

BT 113, 114 Register of Seamen's Tickets

BT 115, 116 Register of Masters' Tickets

BT 119 Alphabetical Index of Seamen

BT 120 Seamen registered, 1835-6

b. Public Record Office: at Chancery LaneHigh Court of Admiralty Papers

HCA / 1 / 19 / 82-5, 88 & 57 / 25, 27, 31, 32, Happy Entrance of Whitby

HCA / 13-88, 15-52 Accounts of the Morton House, 1726-1728

Chancery Papers

C / 103 / 205 Accounts of the Ship Buck of Whitby, 1728-1746

Exchequer Papers

E / 190 Exchequer Queen's Remembrancer, Port Books

E / 190 / 209/9 Whitby, Customer, 1701-1702

E / 190 / 208/1 Whitby, Controller, 1701-1702

E / 190 / 208/2 Whitby, Searcher, 1701-1702

E / 190 / 208/8 Whitby, Customer & Controller, 1701-1702

E / 190 / 209/8 Whitby, Customer, 1702-1703

E / 190 / 209/6 Whitby, Controller, 1702-1703

E / 190 / 209/2 Whitby, Searcher, 1702-1703

E / 190 / 209/14 Whitby, Customer & Controller, 1702-1703

E / 190 / 209/16 Whitby, Customer, 1703-1704

E / 190 / 209/11 Whitby, Searcher, 1703-1704

E / 190 / 209/15 Whitby, Customer & Controller, 1703-1704

E / 190 / 210/10 Whitby, Customer, 1704-1705

E / 190 / 210/4 Whitby, Controller, 1704-1705

E / 190 / 210/2 Whitby, Customer & Controller, 1704-1705

E / 190 / 210/9 Whitby, Searcher, 1704-1705

E / 190 / 211/5 Whitby, Controller, 1705-1706

E / 190 / 211/7 Whitby, Customer & Controller, 1705-1706

E / 190 / 212/8 Whitby, Customer, 1706-1707

E / 190 / 212/4 Whitby, Controller, 1706-1707

E / 190 / 212/3 Whitby, Customer & Controller, 1706-1707

E / 190 / 214/2 Whitby, Customer, 1707-1708

E / 190 / 213/6 Whitby, Controller, 1707-1708

E / 190 / 213/3 Whitby, Searcher, 1707-1708  
 E / 190 / 213/4 Whitby, Customer & Controller, 1707-1708  
 E / 190 / 214/7 Whitby, Customer, 1708-1709  
 E / 190 / 214/3 Whitby, Controller, 1708-1709  
 E / 190 / 214/8 Whitby, Customer & Controller, 1708-1709  
 E / 190 / 215/4 Whitby, Customer, 1709-1710  
 E / 190 / 288/1 Whitby, Customer, 1787-1788  
 E / 190 / 288/5 Whitby, Searcher, 1787-1788  
 E / 190 / 288/2 Whitby, Controller, 1787-1788  
 E / 190 / 289/3 Whitby, Customer, 1789-1790  
 E / 190 / 290/3 Whitby, Customer & Controller, 1789-1790  
 E / 190 / 290/4 Whitby, Customer, 1790-1791  
 E / 190 / 290/5 Whitby, Controller, 1790-1791

b. Public Record Office: at Portugal Street

Home Office Papers

HO / 107 / 1265 Census of Whitby Township, 1841  
 HO / 107 / 2374 Census of Whitby Township, 1851

General Register Office Papers

RG / 9 / 3647-8 Census of Whitby Township, 1861  
 RG / 10 / 4847-8 Census of Whitby Township, 1871

c. National Maritime Museum

Admiralty Papers

ADL / G / 1 List of Transports, 1804  
 ADM / B / 191, 194 Navy Board to Admiralty concerning Transports  
 ADM / ET Care of Sick and Wounded Seamen  
 ADM / G Victualling Board, 1694-1819  
 ADM / MI Relating to Prisoners of War  
 ADM / N Navy Board In Letters from Admiralty concerning Transports  
 ADM / N 234 1741-1742

ADM / N / 235 1747-1748

ADM / N / 236 1749-1750

ADM / N / 237 1757

ADM / N / 238 1758

ADM / N / 239 1759

ADM / N / 240 1758-1760

ADM / N / 241 1763

ADM / N / 242 1763-1766

ADM / N / 243 1767-1775

ADM / N / 244 1775

ADM / N / 245 1776

ADM / N / 246 1776

ADM / N / 247 1776

ADM / N / 248 1779

ADM / N / 249 1780

ADM / N / 250 1781

ADM / RP / 1-5 Navy Board In Letters from Admiralty, 1793-1797

ADM / OT / 1 Treasury Orders concerning Transports, 1783-1789

Miscellaneous Papers

AMS / 35 Account Book of the Henrietta of Whitby, 1777-1820

MS 39 / 81 Account Book of John Coats of Whitby, 1807-1820, including accounts of voyages of the Benjamin & Mary, Free Briton and Esk

Crew Agreements, approx. 10% sample

Lloyd's Survey Reports, vessels surveyed at Whitby, 1834-1856

d. British Library Manuscripts

Add. MSS 384 29/30 Liverpool Papers

Add. MSS 11255-6 Musgrave MSS

Add. MS 38 347 Price of whale oil and whalers

Add. MSS 38429, 38376 Vessels registered, 1787-1808

Add. MSS 8133A, B, C Revenue of Customs, England & Wales, 1700-1787

Add. MS 38 3432 Value of British shipping, 1790-1799

Moreau, Cesar, 'Chronological Records of the British Royal and Commercial Navy', MS 1827

e. Guildhall Library

MS 7253 / 57 Royal Exchange Assurance Co. Fire Policy Registers, 1807

MS 7253 / 66 Royal Exchange Assurance Co. Fire Policy Registers, 1811

MS 18567 / 1-15 Lloyd's Captains Register, 1868-1873

f. North Yorkshire County Record Office

DC / WHU No. 1 Minute Book of the Harbour Trustees, 1781-1796 and 1796-1814

DC / WHU No. 3 Register of Harbour Dues, 1862-1871

DC / WHU No. 5 Coal Dues Account Books, 1876-1882

QDT Register of annual statement of Turnpike Accounts, 1822-1874

ZCG No. 6 An Account of the net produce of the duty on coals from 1 June 1750 to 1 June 1765

ZCG No. 7 An Account of the number of ships that have entered the harbour of Whitby, 1753-1765

ZCG No. 8 An Account of the cash expended for repairing and improving the piers and harbour of Whitby, 1750-1765

ZCG No. 10 An estimate of the expense of repairing the piers and erecting and executing the other works to the harbour of Whitby, 1766

ZW No. 5 The case in support of the proposed Whitby and Pickering Railway

Uncatalogued Collection of Crew Agreements of vessels registered at Whitby, Scarborough and Middlesbrough

g. Archives of Lloyd's Register

Reports of Visiting Surveyors, 1844-1852

Reports and Committees of Visitation, 1851-1879

h. Memorial University of Newfoundland

Crew Agreements of British Empire Ships, 1863-1913

i. Somerset House

Probate Court Index

Will of Sir John Henry Harrowing, died 20 February 1937

Will of Thomas Turnbull of Airy Hill, died 3 January 1924

Will of John Henry Barry, died 23 May 1891

Will of Wellburn Granger Robinson, died 26 March 1911

Will of John Rowland, died 3 September 1899

j. Other Manuscript Sources

Accounts of London whale-oil factors, compiled by Dr. Chesley Sanger of Memorial University of Newfoundland

Johansen, Hans Chr., 'Unpublished tables of an analysis of shipping through the Sound, from the Sound Toll Accounts Registers, 1784-1793', Institute for Historie og Samfundsvidenskab, Odense Universitet, Odense, Danmark

Voyage accounts of the Everilda, Gwendoline, Eric and Bernard, 1882-1906, from the private collection of Peter Frank, Dept. of Government, University of Essex

Registers of Shipping consulted, in addition to those of Whitby, 1786-1914: London, 1821-1867, Boston, 1836-1848, Liverpool 'Other Ports' Register, 1786-1803, and registers of Whitby-built ships owned at Guernsey, Jersey and Lancaster

SECTION TWO: PARLIAMENTARY PAPERS

a. Select Committees and Royal Commissions

Select Committee on Seeds and Wool, etc., P.P., 1816, VI, (272.)

Report from the Select Committee on Emigration from the U.K., P.P., 1826, IV, (404.)

First Report from the Select Committee on Emigration from the U.K., P.P., 1826-7, V, (88.)

Second Report from the Select Committee on Emigration from the U.K., P.P., 1826-7, V, (237.)

Third Report from the Select Committee on Emigration from the U.K., P.P., 1826-7, V, (550.)

Report of the Select Committee on the State of the Coal Trade, P.P., 1830, VIII, (663.)

Select Committee on Commerce, Manufactures and Shipping, P.P., 1833, VI, (690.)

Report from the Select Committee on British Channel Fisheries, P.P., 1833, XIV, (676.)

Select Committee on Timber Duties, P.P., 1835, XIX, (519.)

Report from the Select Committee on the State of the Coal Trade, P.P., 1836, XI, (522.)

Report from the Select Committee on the Causes of Shipwrecks, P.P., 1836, XVII, (567.)



- Report from the Select Committee on Harbours of Refuge, P.P., 1836, XX, (334.)
- Report from the Select Committee on Shipwrecks of Timber Ships, P.P., 1839, IX, (333.)
- First Report from the Select Committee on Emigration from Scotland, P.P., 1841, VI, (182.)
- Second Report from the Select Committee on Emigration from Scotland, P.P., 1841, VI, (333.)
- Select Committee on British Shipping, P.P., 1844, VIII, (545.)
- Report from the Select Committee on the Merchant Seamen's Fund, P.P., 1844, VIII, (431.)
- First Report of the Tidal Harbours Commission, P.P., 1845, XVI, (665.)
- Report of the Commissioners on the Subject of Harbours of Refuge, P.P., 1845, XVI, (611.)
- Second Report of the Tidal Harbours Commission, P.P., 1846, XVIII, pt. I, (692.)
- First Report from the Select Committee on Emigrant Ships, P.P., 1854, XIII, (163.)
- Second Report from the Select Committee on Emigrant Ships, P.P., 1854, XVIII, (349.)
- Report of the Commissioners on Local Charges on Shipping in the U.K., P.P., 1854, XXVII, (1836.)
- Report from the Select Committee on Harbours of Refuge, P.P., 1857, Session 2, XIV, (262.)
- Report from the Select Committee on Harbours of Refuge, P.P., 1857-8, XVII, (344.)
- Report of the Commissioners on Harbours of Refuge, P.P., 1859, X pt. I, (2474.)
- Royal Commission on Harbours of Refuge, P.P., 1859, X pt. II, (2506-II)
- Report from the Select Committee on Breakwaters and Harbours, P.P., 1860 XV, (45.)
- Report from the Select Committee on the Transport Service, P.P., 1860, XVIII, (480.)
- Report from the Select Committee on the Transport Service, P.P., 1861, XII, (380.)
- First Report of the Commission appointed to inquire into the Sea Fisheries of the U.K., P.P., 1866, XVII, (3596.)
- Report of the Commissioners for British Fisheries, 1865, P.P., 1866, XVII, (3718.)

Second Report of the Commission appointed to inquire into the Sea Fisheries of the U.K., P. P., 1866, XVIII, (3596-I)

Report to the Treasury of the Commission on Harbours of Refuge, P.P., 1868-9, LIV, (151.)

Report of the Commission relating to Coal in the United Kingdom, P.P., 1871, XVIII, (c.435)

Report of the Select Committee on Coal, P.P., 1873, X, (313.)

Royal Commission on Unseaworthy Ships, P.P., 1873, XXXVI, (315.)

Select Committee on Wrecks and Casualties, P.P., 1873, LX, (877.)

Final Report of the Royal Commission on Unseaworthy Ships, P.P., 1874, XXXIV, (1027.)

Report to the Board of Trade on the System of Deep Sea Trawl Fishing, P.P., 1883, XVIII, (3711.)

Report from the Select Committee on Harbour Accommodation, P.P., 1883, XIV, (255.)

Second Report from the Select Committee on Harbour Accommodation, P.P., 1884, XII, (290.)

Royal Commission on Trawl Nets and Beam Trawl Fishing, P.P., 1884-5, XVI, (4328.)

Royal Commission on the Depression in Trade and Industry, P.P., 1886, XXIII, (4797.). Final Report, P.P., 1886, XXIII, (4893.)

First Report of the Inspector of Sea Fisheries, P.P., 1887, XXI, (5069.)

Select Committee on Sea Fisheries, P.P., 1893-4, XV, (377.)

Manning of Merchant Ships Committee, P.P., 1896, XL, (8127.)

b. Accounts and Papers

An Account of the quantity of foreign grain of all sorts, potatoes, and salted provisions imported into the several ports of England, September 1799 to September 1800, P.P., 1799-1800, II, pp.860-881

Board of Trade Freight Index, P.P., 1801-1903, (Cd.2337)

Number and tons of Transports taken up for the Hanoverian Army, 1804, P.P., 1803-4, VII, (97.), p.459

An Account, shewing the number of shipwrights, and also of apprentices, employed in the Merchant Yards of Great Britain: according to the returns made to the Admiralty, P.P., 1805, VIII, (193.), p.485

Navy Victualling and Transport Bills, 1794-6, P.P., 1805, IX, (162.), p.259

An Account, presented to the House of Commons, of Ships and Vessels built in Great Britain, from 1790 to 1806, P.P., 1806, XIII, (243.), pp.739-757

- An Account of the number and tonnage of vessels built in Great Britain, from 5 January 1806 to 5 January 1807, P.P., 1806-7, IV, p.107
- An Account of the balances and arrears due from the Collectors of the Customs in England, 5 January 1807, P.P., 1806-7, V, pp.102-3
- Tonnage of Transports in H.M. service, 1806-7, P.P., 1807, IV, (115-6.)
- Directions for discharging Transports, P.P., 1807, IV, (117.)
- Return of Transport tonnage for Home Service, P.P., 1807, IV, (136.)
- Survey Reports of the Transport Board, P.P., 1809, VI, (128.), pp.406-7
- Number and Tons of Private Vessels in the service of the Government, P.P., 1809, X, (186.), p.387
- Number and Tons of hired Transports in the public service, 1810, P.P., 1810, XIII, (250.), p.263
- Rates of Pay to Transports, 1807-1812, P.P., 1812, IX, (129.)
- Seamen's Lives Lost on Transports, P.P., 1816, XIX, (530.), p.233
- An Account of the quantities of coals and culm exported from the several ports in Great Britain to foreign parts, year ending 5 January 1820, P.P., 1821, XVII, (373.), p.86
- Return of Transports employed in 1822, P.P., 1822, XIX, (99.), p.245
- Accounts relating to the Whale Fisheries, P.P., 1823, XIII, (446.), p.597
- An Account of the number of ships with their tonnage and men which have entered the ports of the U.K. during 1822-4, P.P., 1825, XXI, (309.), p.341
- An Account of the number of ships and amount of their tonnage that have been built and registered in the ports of Great Britain, 1814-1826, P.P., 1826-7, XVIII, (327.), p.286
- Returns of the names of ports to which the privilege of warehousing and bonding has been extended, and the number of ships belonging to each, P.P., 1828, XIX, (244.), p.583
- Emigration: a return of the number of persons who have emigrated to the colonies from Great Britain in each year since 1820, P.P., 1830, XXIX, (650.), p.435
- Return of Transports taken up between 1 January 1830 and 25 February 1831, P.P., 1830-1, VI, (315.), p.277
- Expenses of the Romney and Ceylon Troop Ships compared with hired Transports, P.P., 1831-2, XXXIV, (166.), p.269
- Emigration Return, P.P., 1833, XXVI, (696.), pp.280-1
- A Return of all emigrants who have left the U.K. during the years 1833 and 1834, P.P., 1835, XXXIX, (87.), p.741

A Return of all emigrants who have left Great Britain and Ireland during 1835, P.P., 1836, XL, (76.), p.504

A Return of all emigrants who left the U.K. during the year 1837, P.P., 1838, XL, (388.), p.15

Names of ports from whence emigrants came during the year 1837, P.P., 1838, XL, (389.), pp.35-7

Return of emigrant ships, P.P., 1839, XXXIX, (580.), p.569

Annual Statement of the Navigation and Shipping of the United Kingdom, P.P., 1842, XXXIX, pp.618-629; 1843, LII, pp.394-400; 1844, XLV, pp.304-310; 1845, LXVII, pp.309-314; 1846, XLV, pp.308-314; 1847, LX, pp.320-326; 1847-8, LX, pp.512-518; 1849, LI, pp.464-470; 1850, LIII, pp.380-386; 1851, LII, pp.198-204; 1852, XLIX, pp.2-8; 1852-3, XCVIII, pp.278-284; 1854, LX, pp.2-8; 1854-5, XLVI, pp.236-242; 1856, LI, pp.350-356; 1857, XXXIX, pp.38-46; 1857-8, LII, pp.40-48; 1859, XXVII, pp.414-422; 1860, LX, pp.410-418; 1861, LVIII, pp.2-10; 1862, LIV, pp.102-110; 1863, LXIII, pp.6-14; 1864, LV, pp.2-10; 1865, L, pp.218-226; 1866, LXV, pp.2-10; 1867, LXIII, pp.2-10; 1867-8, LXIII, pp.2-10; 1868-9, LV, pp.2-10; 1870, LX, pp.2-10; 1871, LXI, (2.); 1872, LVI, (c.615); 1873, LXIII, (c.759); 1874, LXIV, (c.1030); 1875, LXXIII, (c.1253); 1876, LXXII, (c.1570); 1877, LXXX, (c.1788); 1878, LXXI, (c.1999); 1878-9, LXVIII, (c.2254); 1880, LXXI, (c.2518); 1881, LXXXVII, (c.2860); 1882, LXVIII, (c.3180); 1883, LXX, (c.3540); 1884, LXXVIII, (c.3976); 1884-5, LXXV, (c.4365); 1886, LXIV, (c.4827); 1887, LXXX, (c.5067); 1888, XCVII, (c.5399); 1889, LXXV, (c.5731); 1890, LXXII, (c.6040.); 1890-1, LXXXII, (c.6380); 1892, LXXVII, (c.6663); 1893-4, LXXXVIII, (c.7005); 1894, LXXXIV, (c.7402); 1895, XCV, (c.7696); 1896, LXXXIII, (c.8089); 1897, LXXXVII, (c.8491); 1898, XCI, (c.8884); 1899, XCVI, (c.9315); 1900, LXXXVIII, (Cd.214); 1901, LXXV, (Cd.604); 1902, C, (Cd. 1113); 1903, LXXI, (Cd.1612); 1904, XCI, (Cd.2122); 1905, LXXX, (Cd.2556); 1906, CXVII, (Cd.3093); 1907, LXXXIV, (Cd.3545); 1908, CIV, (Cd.4256); 1909, LXXXIV, (Cd.4789); 1910, LXXXVII, (Cd.5292); 1911, LXXIX, (Cd.5840); 1912-3, LXXVI, (Cd.6398); 1913, CXI, (Cd.7021); 1914, LXXXII, (Cd.7616)

Return of Emigrant Ships, P.P., 1844, XXXV, (503.), p.261

Statement of the number of boats, crews and persons employed in the herring, cod and ling fisheries, P.P., 1845, XLVIII, (621.), pp.100-1

Return of ships hired for the conveyance of convicts, between 1 January 1839 and 30 June 1846, P.P., 1846, XLV, (573.)

Extracts of the Report of the Committee appointed by the Admiralty to inquire into the supply of seamen from the merchant service, P.P., 1847-8, XLI, (233.), p.439

Return of Transports, 1854, P.P., 1854-5, XXX, (1.), p.261

Return of Transports, 1861, P.P., 1862, XXXIV, (151.), p.901

Statistical Tables relating to Emigration and Immigration, P.P., 1863, XXXVIII, (430.)

Steam Transports (England and India), reports and correspondence, P.P., 1865, XL, (159.), p.581

Tables showing the progress of British Merchant Shipping, P.P., 1887, LXXIII, (207.); 1889, LXIX, (176.); 1892, LXXI, (227.); 1899, LXXXVII, (217.); 1901, LXVIII, (306.)

Statistical Tables relating to Emigration and Immigration, P.P., 1896, XCIII, (130.)

c. House of Commons' Journals

Vol. XI 8 December 1696

Vol. XXV 4 December 1749

Vol. XXVII 31 May 1754

Vol. LXXXVI 13 December 1830

d. House of Commons' Sessional Papers

Navy, relating to the supply of timber, 1771, (3114.)

Report from the Committee appointed to enquire into the best mode of providing sufficient accommodation for the increased trade and shipping of the Port of London, 1796, (4646.)

SECTION THREE: NEWSPAPERS, ETC.

Whitby Almanack, 1889-1914

Whitby Anomaliae, 1797-1798

Whitby Gazette, 1857-1914

Whitby Magazine, 1827

Whitby Repository, 1825-1833

Whitby Observer, 1870

Whitby Times and North Yorkshire Advertiser, 1869-1912

Lloyd's List from 1741

Lloyd's Weekly Shipping Index, from 1880

Lloyd's Confidential Index, from 1886

Custom House Bills of Entry, London, 1839, 1842, 1847

Fairplay

Syren and Shipping

Shipping and Mercantile Gazette

## SECTION FOUR: TRADE DIRECTORIES

Bailey's British Directory; or, Merchants' and Traders' Useful Companion,  
(London, 1784)

Baines' History, Directory and Gazetteer, of the County of York, (Leeds, 1823)

Bartholomew's Imperial Gazetteer of England and Wales, 1866-9, (London, 1870)

British Directory of Trade, etc..., (London, 1791)

Cook's Whitby Directory, (Whitby, 1899)

Gillbanks' Directory, (Hull, 1855)

Holden's Directory, (London, 1811)

Holden's Directory, (London, 1815)

Kelly's Directory of the North and East Ridings of Yorkshire, (London, 1889)

Kelly's Directory, etc..., (London, 1905)

Kelly's Directory, etc..., (London, 1913)

Pigot & Co.'s Directory, (London, 1823)

Pigot & Co.'s National Commercial Directory, etc..., (London, 1829)

Pigot & Co.'s National Commercial Directory, etc..., (London, 1834)

Pigot & Co.'s National Commercial Directory, etc..., (London, 1841)

Slater's Classified Directory of the Cleveland District, etc...,  
(Manchester, 1877)

Underhill's Biennial Directory, (London, 1817)

Universal British Directory, (London, 1790)

Universal British Directory, (London, 1798)

White's History, Gazetteer and Directory of the East and North Ridings  
of Yorkshire, etc..., (Sheffield, 1840)

White & Co.'s General Directory and Topography of Kingston Upon Hull and  
the City of York, etc., (Sheffield, 1858)

White's Directory of the City of York, etc..., (Sheffield, 1867)

## SECTION FIVE: CONTEMPORARY PRINTED SOURCES

a. Pamphlets, etc.

Admiralty Hydrographic Office, Report on Lighthouses, (London, 1836),  
B.L. Tracts, 2151

- Anon. (By a working man), A Letter to the Gentlemen and Tradesmen of Whitby: calling attention to an efficacious plan for removing the distress of the town, (Whitby, 1831)
- Anon., A Letter to the Inhabitants of Whitby particularly addressed to the middle class; showing the causes of the present declining state of the town, etc..., (Whitby, 1838)
- Anon., A Second Letter to the inhabitants of Whitby, calling upon them in the name of justice. . . proper to be read by the advocates of the shipping interest in Whitby, (Whitby, 1838)
- Anon., A Third Letter to the inhabitants of Whitby, being the conclusion of the whole matter, etc.., (Whitby, 1838)
- Anon., The Case of the Town and Port of Whitby, in the North Riding of the County of York, (London [?], 1710 [?])
- Nathaniel Atcheson, A Letter addressed to Rowland Burdon, Esquire, on the present state of the carrying part of the coal trade, with tables of several of the duties on coals received by the Corporation of the City of London, (London, 1802), B.L. Tracts, 8244
- Cholmley, Col. G., A Peep at the Borough of Whitby, (York, 1839)
- Dennis, Jeffery, An Address to the Honourable Committee for the Relief of Distressed Seamen, etc..., (London, 1818)
- Elking, Henry, A View of the Greenland Trade and Whale Fishery with the National and Private Advantages thereof, (London, 1722)
- Fisher, Roger, Heart of Oak, the British Bulwark, (London, 1771)
- Gaskin, Robert, 'Chronological List of Events connected with Whitby and its Neighbourhood'; The Whitby Illustrated Almanack and Diary, (Whitby, 1914)
- Guide to Whitby and the Neighbourhood, (Whitby, 1850)
- Hugill, John, A Valuation of the Township of Whitby... under appointment of the Guardians of the Whitby Union, (Whitby, 1837)
- Hugill, John, An Address to the Inhabitants of Whitby and its vicinity, etc... (Whitby, 1830)
- Hugill, John, A Prospectus of a Plan for establishing a Shipbuilding Company at Whitby, (Whitby, 1831)
- Moorsom, Richard, An Address, to the Inhabitants of Whitby and its vicinity, to which is appended a letter relative to some of the causes in which the present depressed state of the shipping interest originates, (Whitby, 1829)
- Moorsom, Richard, Letter to William Richmond, Esquire, relative to the shipping interest of England, the reciprocity treaties, and the evils of impressment; the latter particularly exemplified in the case of the Brig Oak of Whitby, (Whitby, 1832)
- Seamen's Loyal Standard Association, articles of agreement between members, of the ports of Bridlington, Scarborough and Whitby, in Yorkshire, (North Shields, 1825), B.L. Tracts, 8275

Scoresby, William, An Essay on the Improvement of the Town and Harbour of Whitby, (Whitby, 1826)

Scoresby, William, Narrative of the loss of the Esk and the Lively, Greenland Whalers, by which sixty-five persons perished; with a sermon, preached on the melancholy occasion, in the parish church of Whitby, 15 October, 1826, (Whitby, 1826)

Scoresby, William, A Method of Being Heard, etc., (Whitby, 1816)

Scoresby, William, The Whaleman's Adventures, etc., (London, 1850)

Thompson, W., The Whitby and Pickering Railway: its probable traffic and revenue, (Whitby, 1833)

Walker, James, A reply to certain statements in Col. Cholmley's pamphlet, (Whitby, 1839)

Whitby Regatta Programme, Monday 9 September 1889

Whitby and Pickering Railway Company, tickets and advertisements, 1838-40

#### b. Annual Publications

Lloyd's Underwriters' 'Green Books' from 1764

Lloyd's Register of Shipping

Mercantile Navy List and Maritime Directory from 1857-8

Turnbull's Shipping Register and British and Foreign Maritime Advertiser

### SECTION SIX: SECONDARY SOURCES

#### a. Books

Abell, Sir Westcott, The Shipwright's Trade, (London, 1948)

Aflalo, F.G., The Sea-Fishing Industry of England and Wales, (London, 1904)

Albion, R.G., Forests and Sea Power: The Timber Problem of the Royal Navy, 1652-1862, (Harvard, 1926)

Albion, R.G., Naval and Maritime History: An Annotated Bibliography, (Newton Abbot, 1973)

Aldcroft, D.H. and Fearon, P., British Economic Fluctuations, 1790-1939, (London, 1972)

Angier, E.A.V., Fifty Years' Freights, 1869-1919, (London, 1920)

Ashton, T.S. and Sykes, J., The Coal Industry in the Eighteenth Century, (Manchester, 1929)

Ashton, T.S., Economic Fluctuations in England, 1700-1800, (Oxford, 1959)



- Atkinson, G., The Shipping Laws of the British Empire, (London, 1854)
- Atkinson, J.C., Memorials of Old Whitby, (London, 1894)
- Atton, H. and Holland, H.H., The King's Customs, (London, 1910)
- Bagshawe, J.R., The Wooden Ships of Whitby, (Whitby, 1933)
- Baker, J.B., The History of Scarborough, (London, 1882)
- Baldwin, C.E., The History and Development of the Port of Blyth, (Newcastle, 1929)
- Bang, N.E. and Korst, K. Tabeller over Skibsfart og Varetransport Gennem Øresund, 1661-1783, (Copenhagen, 1930)
- Bateson, Charles, The Convict Ships, 1788-1868, (Glasgow, 1969)
- Belcher, Henry, The Whitby and Pickering Railway: the stranger's Guide for a summer day's excursion, (Whitby, 1843)
- Bellamy, J.M., The Trade and Shipping of Nineteenth Century Hull, (York, 1971)
- Brand, J., The History and Antiquities of the Town and County of the Town of Newcastle on Tyne, (Newcastle, 1789)
- British Association, The Industrial Resources of the Tyne, Wear and Tees, (London, 1864)
- Brown, L.M., The Board of Trade and the Free Trade Movement, (London, 1958)
- Browne, Horace Baker, Chapters of Whitby History, 1823-1946, (Whitby, 1946)
- Capper, Charles, The Port and Trade of London, (London, 1862)
- Carlisle, Nicholas, A Topographical Dictionary of England, (London, 1808)
- Carson, E., The Ancient and Rightful Customs, (London, 1972)
- Carswell, John, The South Sea Bubble, (London, 1960)
- Charlton, Lionel, The History of Whitby and of Whitby Abbey, etc..., (York, 1779)
- Clark, E.A.G., The Ports of the Exe Estuary, 1660-1860, (Exeter, 1960)
- Clark, G.N., Guide to English Commercial Statistics, 1696-1782, (London, 1938)
- Cobbe, Hugh, ed. Cook's Voyages and Peoples of the Pacific, (London, 1979)
- Coleman, Terry, Passage to America, (London, 1972)
- Corfe, T., History of Sunderland, (Newcastle, 1973)
- Cowan, H.I., British Emigration to British North America, 1783-1837, (Toronto, 1928)
- Craig, R. and Jarvis, R., Liverpool Registry of Merchant Ships, (Manchester, 1967)

- Craig, Robin, Steam Tramps and Cargo Liners, 1850-1950, (London, 1980)
- Cumpston, J.S., Shipping Arrivals and Departures, Sydney, 1788-1825, (Canberra, 1963)
- Davis, Ralph, The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries, (London, 1962)
- Davis, Ralph, The Trade and Shipping of Hull, 1500-1700, (York, 1964)
- Daysh, G.H.J., A Survey of Whitby and the Surrounding Area, (Windsor, 1958)
- Deane, P. and Cole, W.A., British Economic Growth 1688-1959: Trends and Structure, (London, 1962)
- Defoe, Daniel, Tour Through the Whole Island of Great Britain, (London, 1724), Everyman ed. 1927
- Dittmar, F.J. and Colledge, J., British Warships, 1914-1919, (London, 1972)
- Dougan, D., The History of North East Shipbuilding, (London, 1968)
- Dyos, H.J. and Aldcroft, D.H., British Transport: an economic survey from the seventeenth century to the twentieth, (Leicester, 1969)
- Eames, Aled, Shipmaster: Captain Robert Thomas of Llandwrog and Liverpool, (Gwynedd Archives Service, 1980)
- Eames, Aled, Ships and Seamen of Anglesey, (Anglesey Antiquarian Society, 1973)
- English, T.H., A Memoir of the Yorkshire Esk Fishery Association, (Whitby, 1925)
- Evans, Charles E., Hints to Coal Buyers, (Cardiff, 1921)
- Farr, G., Shipbuilding in North Devon, (N.M.M., 1976)
- Farr, G., Chepstow Ships, (Chepstow, 1954)
- Farr, G., Records of Bristol Ships, 1800-1830, (Bristol, 1950)
- Finch, Roger, Coals from Newcastle, (Lavenham, 1973)
- Floud, Roderick, Essays in Quantitative Economic History, (Oxford, 1974)
- Floud, Roderick, An Introduction to Quantitative Methods for Historians, (London, 1973)
- Fordyce, W., A History of Coal, Coke and Coal Fields, etc..., (London, 1860)
- Frank, Peter, Women's Work in the Yorkshire Inshore Fishing Industry, (Whitby, 1975)
- Gaskell, E., Sylvia's Lovers, (London, 1863)
- Gaskin, Robert Tate, The Old Seaport of Whitby. Being Chapters from the life of its Bygone People, (Whitby, 1909)
- Gayer, A.D., Rostow, W.W., and Schwartz, A.J., The Growth and Fluctuation of the British Economy, 1790-1850, (Oxford, 1953)

- Glass, D.V. and Taylor, P., Population and Emigration: Commentaries on British Parliamentary Papers, (Dublin, 1976)
- Godfrey, A. and Cassey, P. J., Shipwrecks of the Yorkshire Coast, (Lancaster, 1974)
- Goss, R.O., Studies in Maritime Economics, (London, 1968)
- Gradish, Stephen F., The Manning of the British Navy during the Seven Years' War, (London, 1980)
- Guillet, E.C., The Great Migration: the Atlantic Crossing by Sailing Ship Since 1770, (Toronto, 1937)
- Le Guillou, M., A History of the River Tees, (Cleveland County Libraries, 1978)
- Guthrie, John, A History of Marine Engineering, (London, 1971)
- Hakluyt Society, The Journals of Captain Cook, (London, 1955, 1961)
- Hansen, M.L., Atlantic Migration, 1607-1860, (Cambridge, Mass. 1941)
- Harper, L.A., The English Navigation Laws, (Columbia, 1939)
- Hobson, George Andrew, The Life of Sir James Falshaw, (London, 1905)
- Holdsworth, E.W.H., Deep Sea Fishing and Fishing Boats, (London, 1874)
- Hoon, E.E., The Organisation of the English Customs System, 1696-1786, (New York, 1938)
- Hughes, Edward, North Country Life in the Eighteenth Century: the North East, 1700-1750, (London, 1952)
- Hughes, H. and Eames, Aled, Porthmadog Ships, (Gwynedd Archives Service, 1975)
- Humble, A.F., The Rowing Life-Boats of Whitby, (Whitby, 1974)
- Hutchinson, William, A Treatise on Naval Architecture, (London, 1794)
- Hyde, Francis E., Liverpool and the Mersey: an economic history of a port, 1700-1970, (Newton Abbot, 1971)
- Jackson, Gordon, The British Whaling Trade, (London, 1978)
- Jackson, Gordon, Hull in the Eighteenth Century: a study in economic and social history, (London, 1972)
- Jackson, Gordon, The Trade and Shipping of Eighteenth Century Hull, (York, 1975)
- James, F. Cyril, Cyclical Fluctuations in the Shipping and Shipbuilding Industries, (Philadelphia, 1927)
- Jarvis, R.C., Customs Letter Books of the Port of Liverpool, 1711-1813, (Manchester, 1954)

- Jefferson, Samuel, Life in the Merchant Marine One Hundred Years Ago, (Blackheath, 1905)
- Jevons, W.S., The British Coal Trade, (London, 1915)
- Johnson, J.S., The Naqars of Runswick Bay, (Bakewell, 1973)
- Kendall, Hugh P., The Story of Whitby Jet, (Whitby, 1977)
- Kendall, Hugh P., The Streets of Whitby and their associations, (Whitby, 1976)
- Kirkaldy, A.W., British Shipping, its history, organisation and importance, (London, 1914)
- Knight, R.J.B., ed. Guide to the Manuscripts in the National Maritime Museum, Vol. 2, (London, 1980)
- Knoppers, Jake V.T., Dutch Trade with Russia from the time of Peter I to Alexander I: a quantitative study of eighteenth century shipping, (Montreal, 1976)
- Langdale, Thomas, A Topographical Dictionary of Yorkshire, (Northallerton, 1809)
- Lindsay, W.S., History of Merchant Shipping and Ancient Commerce, (London, 1874-6)
- Lindsay, W.S., Our Merchant Shipping: its present state Considered, (London, 1860)
- Long, Anne and Russell, A Shipping Venture: Turnbull Scott & Company, 1872-1972, (London, 1974)
- Lubbock, Basil, The Arctic Whalers, (Glasgow, 1937)
- McCulloch, J.R., A Select Collection of Scarce and Valuable Economic Tracts, (London, 1859)
- MacDonagh, O., A Pattern of Government Growth, 1800-1860. The Passenger Acts and their enforcement, (London, 1961)
- Mackesy, Piers, The War for America, 1775-1783, (London, 1964)
- Mackesy, Piers, The War in the Mediterranean, 1803-1810, (London, 1957)
- Maitland, William, The History and Survey of London, etc..., (London, 1756)
- March, Edgar J., Inshore Craft of Britain in the Days of Sail and Oar, (Newton Abbot, 1970)
- Marshall, J., Digest of all the Accounts, etc..., (London, 1833)
- Mathias, P., The First Industrial Nation: An Economic History of Britain, 1700-1914, (London, 1969)
- Matthews, P.W. and Tuke, A., History of Barclays Bank Ltd., (London, 1926)

- Matthews, R.C.O., A Study in Trade Cycle History: Economic Fluctuations in Great Britain, 1833-1842, (Cambridge, 1954)
- Mitchell, B.R. and Deane, P., Abstract of British Historical Statistics, (London, 1971)
- Nef, J.U., The Rise of the English Coal Industry, (London, 1932)
- Oddy, J. Jepson, European Commerce, shewing new and secure channels of trade with the Continent of Europe: detailing produce, manufactures, etc..., (London, 1805)
- O'Loughlin, Carløen, The Economics of Sea Transport, (Oxford, 1967)
- Owen, Douglas, Ocean Trade and Shipping, (Cambridge, 1914)
- Parkinson, C.N., The Rise of the Port of Liverpool, (Liverpool, 1952)
- Phillips, Maberly, A History of Banks, Bankers and Banking in Northumberland, Durham and North Yorkshire, illustrating the Commercial Development of the North of England, 1755-1894, (London, 1894)
- Pollard, S. and Robertson, P., The British Shipbuilding Industry, 1870-1914, (London, 1979)
- Potter, G.W.J., A History of the Whitby and Pickering Railway, (London, 1906)
- Pressnell, L.S., Country Banking in the Industrial Revolution, (Oxford, 1956)
- Rodway, Eric, Whitby in 1851: a description of the town based on census records, (Whitby, undated)
- Runciman, W., Collier Brigs and their Sailors, (London, 1929)
- Scoresby, William, An Account of the Arctic Regions, with a history and description of the Northern Whale Fishery, (Edinburgh, 1820)
- Scoresby, William, Journal of a Voyage to the Northern Whale Fishery including researches and discoveries on the Eastern coast of West Greenland. . . in the ship Baffin of Liverpool, (Edinburgh, 1823)
- Scoresby, William, My Father: being records of the adventurous life of the late William Scoresby, Esq. of Whitby, (London, 1851)
- Scoresby, William, Snr., Seven Log Books concerning the Arctic Voyages of Captain William Scoresby, Senior, of Whitby, (New York, The Explorers Club, 1917)
- Shaw, William Eglon, Frank Meadow Sutcliffe: A Second Selection, (Whitby, 1978)
- Sheppard, T., The Scoresbys, Father and Son, and the Lost Colonies in Greenland, (Hull, 1939)
- The Shipowner's Manual and Seafaring Man's Assistant: or an epitome of the laws and regulations relative to the shipowner and merchant, etc..., (Newcastle, 1804)

- Smith, Raymond, Sea Coal for London, (London, 1961)
- Stamp, T. and C., William Scoresby, Arctic Scientist, (Whitby, 1976)
- Stewart-Brown, R., Liverpool Ships in the Eighteenth Century, including the King's Ships built there with notes on the principal shipwrights, (Liverpool, 1932)
- Sullivan, W.R., Blyth in the Eighteenth Century, (Newcastle, 1971)
- Syrett, David, Shipping and the American War, 1775-1783, (London, 1970)
- Taylor, Henry, Memoirs of the Life and Experience of Henry Taylor, (North Shields, 1821)
- Trump, H.J., Westcountry Harbour: the port of Teignmouth, 1690-1975, (Teignmouth, 1976)
- Tuke, John, A General View of the Agriculture of the North Riding of Yorkshire (York, 1800)
- Victoria County History, Yorkshire: North Riding, (London, 1923)
- Walker, Dora M., Whitby Fishing, (Whitby, 1973)
- Walker, Dora M., Whitby Shipping, (Whitby, 1960)
- Walker, Dora M., Freemen of the Sea, (London, 1947)
- Walker, Dora M., They Labour Mightily, (London, 1951)
- Walmsley, Leo, Three Fevers, (London, 1932)
- Weatherill, Richard, The Ancient Port of Whitby and its Shipping, (Whitby, 1908)
- Whellan, T., History of Whitby (from History and Topography of the City of York, etc...), (Beverley, 1859)
- Willan, T.S., The English Coasting Trade, 1600-1750, (Manchester, 1938)
- Woodwark, T.H., The Rise and Fall of the Whitby Jet Trade, (Whitby, 1922)
- Woodwark, T.H., The Quakers of Whitby, (Whitby, 1926)
- Wren, W.J., Ports of the Eastern Counties, (Lavenham, 1976)
- Wright, C. and Fayle, C.E., A History of Lloyd's, (London, 1928)
- Young, Rev. George, A History of Whitby, and Streoneshalh Abbey; with a statistical survey of the vicinity to the distance of twenty-five miles, (Whitby, 1817)

b. Articles

- D.H. Aldcroft, 'The Depression in British Shipping, 1901-1911', Journal of Transport History, VII (1965)

- David Alexander and Gerald Panting, 'The Mercantile Fleet and its owners: Yarmouth, Nova Scotia, 1840-1889', Acadiensis, VII (1978)
- Edward Ellis Allen, 'On the Comparative Cost of Transit by Steam and Sailing Colliers, and on the Different Modes of Ballasting', Transactions of the Institution of Civil Engineers, (1855)
- J.H. Andrews, 'English Merchant Shipping in 1701', Mariner's Mirror (henceforth M.M.), 41 (1955)
- J.H. Andrews, 'Two Problems in the Interpretation of the Port Books', Economic History Review, IX (1956-7)
- P. Barton, 'The Alum Ships', The Dalesman, (1969)
- E.A. Carson, 'Customs Bills of Entry', Maritime History, I (1971)
- E.A. Carson, 'Customs History and Records of Trade and Shipping', M.M., 58 (1972)
- M.E. Condon, 'The Establishment of the Transport Board', M.M., 58 (1972)
- M.E. Condon, 'Surveying, Measuring and Valuing British Transports during the war against Revolutionary France', M.M., 58 (1972)
- M.E. Condon, 'Freight Rates and the British Transport Service during the war against Revolutionary France, 1793-1802', Maritime History, V (1977)
- Nicholas Cox, 'The Records of the Registrar General of Shipping and Seamen', Maritime History, II (1972)
- R.S. Craig, 'The African Guano Trade', M.M., 50 (1964)
- R.S. Craig, 'The Emergence of a Shipowning Community at Llanelly', Carmarthen Antiquary, III (1959)
- R.S. Craig, 'Shipping Records in the Eighteenth and Nineteenth Century', Archives, VII (1965-6)
- R.S. Craig, 'Shipping and Shipbuilding in the Port of Chester in the eighteenth and early nineteenth centuries', Transactions of the Historic Society of Lancashire and Cheshire, 116 (1964)
- R.S. Craig, 'Some Aspects of the Trade and Shipping of the River Dee in the eighteenth century', Transactions of the Historic Society of Lancashire and Cheshire, 114 (1962)
- J. Creswell, 'British Shipping at the end of the Eighteenth Century', M.M., 25 (1939)
- Ernest Dade, 'The Cobles', M.M., 20 (1934)
- Ernest Dade, 'Old Yorkshire Yawls', M.M., 19 (1933)
- Ernest Dade, 'Trawling Under Sail on the North East Coast', M.M., 18 (1932)
- Ralph Davis, 'Seamen's Sixpences: an index of Commercial Activity', Economica, XXIII (1956)

- Conrad Dixon, 'The Exeter Whale Fishery Company, 1754-1787', M.M., 62 (1976)
- Baron F. Duckham, 'Wrecks and Refuge Harbours, 1856-1861: a Reform That Failed', Transport History, 6 (1973)
- W.G. East, 'The Historical Geography of the Town, Port and Roads of Whitby', The Geographical Journal, LXXX (1932)
- G. Farr, 'Custom House Ship Registers', M.M., 55 (1969)
- Evan Fyers, 'The Transport of Troops by Sea', M.M., 6 (1920)
- Fylingdales Local History Group, 'The Parish of Fylingdales in 1841: an analysis of the census returns', North Yorkshire County Record Office Journal, 3 (1979)
- John Glover, 'On the Statistics of Tonnage during the first decade under the Navigation Law of 1849', Journal of the Royal Statistical Society, (1862)
- John Glover, 'Tonnage Statistics of the Decade 1860 to 1870', Journal of the Royal Statistical Society, (1872)
- John Glover, 'Tonnage Statistics of the Decade 1870 to 1880', Journal of the Royal Statistical Society, (1882)
- John Glover, 'Tonnage Statistics of the Decade 1880 to 1890', Journal of the Royal Statistical Society, (1892)
- J.A. Goldenberg, 'An analysis of shipbuilding sites in Lloyd's Register of 1776', M.M., 59 (1973)
- G.S. Graham, 'The Ascendancy of the Sailing Ship, 1850-1885', Economic History Review, IX (1956)
- G.S. Graham, 'Considerations on the War of American Independence', Bulletin of the Institute of Historical Research, XXII (1949)
- Allison Grant, 'The North Devon Shipping Company, 1851-1864', M.M., 57 (1971)
- B.F. Hills, 'Shipbuilding for the Royal Navy at Sandwich in the Eighteenth Century', Archaeologia Cantiana, XCIV (1978)
- A.F. Humble, 'An Old Whitby Collier', M.M., 61 (1975)
- Hunter and de Rusett, 'Sixty Years of Merchant Shipbuilding on the North East Coast', Transactions of the Institute of Engineers and Shipbuilders of Scotland, (1908-9)
- L. Isserlis, 'Tramp Shipping Cargoes and Freights', Journal of the Royal Statistical Society, (1938)
- Rupert C. Jarvis, 'Ship Registry, 1707-1786', Maritime History, II (1972)
- Rupert C. Jarvis, 'The Archival History of the Customs Records', Journal of the Society of Archivists, I (1959)



- R. Jarvis, 'Sources for the History of Ports', Journal of Transport History, III (1957-8)
- R. Jarvis, 'Sources for the History of Ships and Shipping', Journal of Transport History, III (1957-8)
- R.C. Jarvis, 'Liverpool Statutory Register of British Merchant Ships', Transactions of the Historic Society of Lancashire and Cheshire, 105 (1953)
- R.C. Jarvis, 'Cumberland Shipping in the Eighteenth Century', Transactions of the Cumberland and Westmoreland Antiquarian and Archaeological Society, LIV (1955)
- R.C. Jarvis, 'Eighteenth Century Dorset Shipping', Proceedings of the Dorset Natural History and Archaeological Society, XCII (1971)
- R.C. Jarvis, 'Fractional Shareholding in British Merchant Ships, with special reference to the sixty-fourth', M.M., 45 (1959)
- A.H. John, 'The London Assurance Company and the Marine Insurance Market of the Eighteenth Century', Economica, XXV (1958)
- A.G.E. Jones, 'Shipbuilding in Ipswich, 1700-1750', M.M., 43 (1957)
- A.G.E. Jones, 'Shipbuilding in Ipswich, 1750-1800', M.M., 58 (1972)
- Stephanie Jones, 'Shipwrecking in Boston, Lincolnshire, 1836-1848', M.M., 65 (1979)
- Stephanie Jones, 'Turnbull Brothers of Cardiff: The Voyage Accounts of Four Ships, 1882-1906', Cymru a'r Môr/Maritime Wales, 6 (1981)
- C.R. Lewis, 'Trade Directories - a Data Source in Urban Analysis', National Library of Wales Journal, 19 (1976)
- N. McCord, 'The Impress Service in North East England during the Napoleonic Wars', M.M., 54 (1968)
- D.R. MacGregor, 'Tendering and Contract Procedure in Merchant Ship Yards in the mid nineteenth century', M.M., 48 (1962)
- Joseph J. Malone, 'England and the Baltic Naval Stores Trade in the Seventeenth and Eighteenth Centuries', M.M., 58 (1972)
- K. Matthews, 'Crew Lists, Agreements, and Official Logs of the British Empire, 1863-1913, now in the possession of the Maritime History Group, Memorial University, St. John's, Newfoundland', Business History, XVI (1974)
- James Mitchell, 'Whitby Harbour Extension Works', Concrete and Constructional Engineering: the officially appointed journal of the Concrete Institute, XV (1920)
- D.C. North, 'Ocean Freight Rates and Economic Development, 1750-1913', Journal of Economic History, 18 (1958)

- W.A. Oldfield, 'Bygone Whitby Banks and Bankers', The Midland Venture: the Magazine of the Midland Bank Staff Association, VIII (1925)
- S.R. Palmer, 'Investors in London Shipping, 1820-1850', Maritime History, II (1972)
- S. Pollard, 'The Decline of Shipbuilding on the Thames', Economic History Review, III (1969)
- N.A.M. Rodger, 'Some Practical Problems Arising from the Study of the Receiver of Sixpences Ledgers', M.M., 62 (1976)
- G.W. Rooke and F.L. Terrett, 'The Reconstruction of Whitby Fish Quay', Journal of the Institution of Civil Engineers, (1958)
- A.N. Ryan, 'The Defence of British Trade with the Baltic, 1808-1813', English Historical Review, (1959)
- Eric W. Sager and Lewis R. Fischer, 'Patterns of Investment in the Shipping Industries of Atlantic Canada, 1820-1900', Acadiensis, IX (1979)
- W. Salisbury, 'Early Tonnage Measurement in England', M.M., 52, 53, 54, (1966), (1967), (1968)
- T. Sheppard, 'The Hull Whaling Trade', M.M., 5 (1919)
- David Syrett, 'Living Conditions on the Navy Board's Transports during the American War, 1775-1783', M.M., 55 (1969)
- W. Vamplew, 'The Evolution of International Whaling Controls', Maritime History, III (1973)
- Simon Ville, 'Wages, Prices and Profitability in the Shipping Industry during the Napoleonic Wars', Journal of Transport History, I (1981)
- P. Wilde, 'Sources for Urban History: Commercial Directories and Market Towns', Local Historian, 12 (1976)
- T.S. Willan, 'Yorkshire River Navigation, 1600-1750', Geography, XXII (1937)
- D. Trevor Williams, 'The Maritime Trade of the Swansea Bay Ports with the Channel Islands from the records of the Port Books of 1709-1719', La Societe Guernesiaise, (1953)
- Neville Williams, 'The London Port Books', Transactions of the London and Middlesex Archaeological Society, 18 (1955)
- Donald Woodward, 'The Port Books of England and Wales', Maritime History, III (1973)
- c. Collections of Essays, etc.
- D.H. Aldcroft, 'The Mercantile Marine', in D.H. Aldcroft, ed., The Development of British Industry and Foreign Competition, 1875-1914, (London, 1968)
- Sven-Erik Astrom, 'North European Timber Exports to Great Britain, 1760-1810', in P.L. Cottrell and D.H. Aldcroft, eds., Shipping Trade and Commerce: essays in memory of Ralph Davis, (Leicester, 1981)

- P.L. Cottrell, 'The Steamship on the Mersey, 1815-1880: investment and ownership', in Cottrell and Aldcroft, eds., Shipping, Trade and Commerce
- R.S. Craig, 'Capital Formation in Shipping', in J.P.P. Higgins and S. Pollard, eds., Aspects of Capital Investment in Great Britain, 1750-1850: A Preliminary Survey, (London, 1971)
- R.S. Craig, 'The Ports and Shipping, c.1750-1970', in Arthur John and G. Williams, eds., Glamorgan County History V: Industrial Glamorgan, 1700-1970, (Cardiff, 1980)
- R. Craig, 'William Gray and Company: a West Hartlepool Shipbuilding Enterprise', in Cottrell and Aldcroft, eds., Shipping, Trade and Commerce
- C.E. Fayle, 'Shipowning and Marine Insurance', in C.N. Parkinson, ed., The Trade Winds: a Study of British Overseas Trade during the French Wars, 1793-1815, (London, 1948)
- R.C. Jarvis, 'Eighteenth Century London Shipping' in A.E.J. Hollaender and William Kellaway, eds., Studies in London History presented to Philip Edmund Jones, (London, 1969)
- Stephanie Jones, 'A Comparative View of the Merchant Shipbuilding Industries of the North East and the South West Ports of England, 1870-1914', in W. Minchington and H.E.S. Fisher, eds., Exeter Papers in Economic History, forthcoming, 1982-3
- Frank Neal, 'Liverpool Shipping in the early nineteenth century', in J.R. Harris, ed., Liverpool and Merseyside: essays in the economic and social history of the port and its hinterland, (London, 1969)
- D.J. Oddy, 'The Changing Techniques and Structure of the Fishing Industry', in T.C. Barker and John Yudkin, eds., Fish in Britain: Trends in its Supply, Distribution and Consumption during the past two centuries, (London, 1971)
- G. Panting, 'Personnel and Investment in Canadian Shipping - a paper for the fourth annual conference of the Atlantic Canada Shipping Project', in R. Ommer and G. Panting, eds., Working Men Who Got Wet, (St. John's, 1981)
- Charles Mark Palmer, 'The Construction of Iron Ships, and the Progress of Iron Shipbuilding on the Tyne, Wear and Tees', in W.G. Armstrong, ed., The Industrial Resources of the district of... the Tyne, Wear and Tees, (London, 1864)
- Walter Stern, 'The Fish Supply to Billingsgate from the nineteenth century to World War Two', in Barker and Yudkin, eds., Fish in Britain
- David M. Williams, 'Crew Size in Trans-Atlantic Trades in the Mid Nineteenth Century', in Ommer and Panting, eds., Working Men Who Got Wet
- David M. Williams, 'Customs Evasion, Colonial Preference and the British Tariff, 1829-1842', in Cottrell and Aldcroft, eds., Shipping, Trade and Commerce

David M. Williams, 'Liverpool Merchants and the Cotton Trade, 1820-1850',  
in Harris, ed., Liverpool and Merseyside

SECTION SEVEN: THESES, ETC.

Helen Davenport, 'Transport and the Development of Whitby, 1750-1850',  
Unpublished B.A. dissertation, University of Leeds, 1979

Conrad H. Dixon, 'Seamen and the Law: An Examination of the Impact of  
Legislation on the British Merchant Seaman's Lot, 1588-1918',  
Unpublished Ph.D. thesis, University of London, 1981

Frank Neal, 'Liverpool Shipping, 1815-1835', Unpublished M.A. thesis,  
University of Liverpool, 1962

Sarah Palmer, 'The Character and Organisation of the Shipping Industry of  
the Port of London, 1815-1849', Unpublished Ph.D. thesis, University  
of London, 1979

SECTION EIGHT: MAPS AND CHARTS

Wooler's Plan of 1740, reproduced in G. Young, A History of Whitby, etc...,  
(Whitby, 1817), p.556

Plan of the Town and Harbour of Whitby, made in the Year 1778, by L. Charlton,  
in Lionel Charlton, History of Whitby, etc..., (York, 1779), p.505

A Composite Chart and View of the Yorkshire Coast from Robin Hood's Bay  
to Runswick, including Whitby, by Francis Gibson, 1791, reproduced in  
Hugh Cobbe, ed., Cook's Voyages and Peoples of the Pacific, (London,  
1979), pp.20-21

'A View Near Whitby' by Walmsley, 1804

'View of Whitby' by E. Dayes, 1810

Survey of Whitby by A. Comrie and Thos. Drane, 1845, published in  
Second Report of the Tidal Harbours Commission, P.P., 1846, XVIII  
pt. I, (692.), p.428

Ordnance Survey of Whitby, Scale five inches to one mile, 1852

Admiralty Chart, England: East Coast, 1863

Plan of Whitby in Bartholomew's Imperial Gazetteer of England and Wales,  
(London, 1869), p.1054

Ordnance Plan of Whitby, Scale 1:500, or 10.56 feet to one mile, 1893

Admiralty Chart of Whitby Harbour, 1895

Ordnance Survey of Whitby, Scale 880 feet to one inch, 1895

Plan of Whitby Harbour in Nordsee. England Ostkuste, etc..., (Berlin, 1908)

Ordnance Survey of Whitby, Scale 880 feet to one inch, 1911

Ordnance Survey of Whitby, Scale 880 feet to one inch, 1927

Phillips' Historical Atlas, Medieval and Modern, (London, 1927)