# Nova Scotia's Spencer's Island Company, 1880-1895: A Case Study in Post- 

 Confederation Entrepreneurial Success
## by

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To the memory of Stanley T. Spicer a great contributor to Nova Scotia's maritime historical record

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#### Abstract

The Spencer's Island Company (SIC) was established in 1880, following the collapse of the hamlet's sole shipbuilding and storekeeping partnership. Its members were highly community oriented, and their greatest manufacturing capability was the transformation of trees into ships.

The company's development coincided with Atlantic Canada's rapid retreat from the maritime sector, a trend which intensified following the National Policy's introduction in 1879. Other Minas Basin entrepreneurs also expanded their fleets during the 1880 s, to such an extent that the Basin accounted for more than a quarter of all oceangoing vessels registered in the Maritimes by the early 1890s.

New York merchants, led by J. F. Whitney and Company, were an important source of capital for ships built by SIC, and others in the region. Their investments, facilitated by mortgages registered against shares officially owned by members of the British Empire, contributed to this sub-region's divergence from the Atlantic Canadian norm.


## List of Abbreviations and Symbols Used

ACSP
NSARM Nova Scotia Archives and Records Management SPC
£: s: d

Spicer Private Collection
Pounds, Shillings and Pence ${ }^{1}$

[^0]
## Glossary ${ }^{2}$

Barque - A vessel with three or more masts and carrying square sails on all but the after mast which carried fore and aft sails.

Barquentine - A vessel with three or more masts and carrying square sails only on the foremast. Fore and aft sails were carried on all other masts.

Deals - Sawn planks of at least nine inches width and at least three inches thick. ${ }^{3}$
Hull - The body of a vessel.
Master Builder - The builder-in-charge of constructing a vessel.
Master Mariner - The captain of a vessel.
Passage - A voyage from one port or place to another.
Port of Registry - The port in which a vessel is registered.
Schooner - A fore and aft rigged vessel with two or more masts.
Ship - A generic term for an ocean-going vessel, more specifically applied herein to a vessel with three or more masts with square sails set on each mast.

Ship Chandler - A merchant who specializes in marine goods, equipment and supplies.
Shipwright - A carpenter skilled in the techniques of building vessels. Can more broadly refer to overseers and managers of vessel construction.

Square-rig - A vessel with sails set cross-wise on yards.
Tonnage - The weight of water displaced by a vessel. "Registered Tonnage" is a regulated method for determining vessel size; periodically subject to legislative adjustment.

Vessel - A water-going construction which navigates oceans or coastal waters but excluding small boats. The term does not signify any particular sail or mast configuration.

[^1]
## Acknowledgements

The support I received during the writing of this thesis has been staggering. I started with publicly available records at Nova Scotia Archives and Records Management, where the highly competent staff went out of their way to assist me. Dalhousie University Library's Document Delivery Service was also outstanding. I suspect its contribution to the multitude of impatient thesis writers on campus goes under-recognized.

People along Minas Basin's shores uncovered sometimes deeply personal family documents and photographs, retrieved from attics, basements and storage boxes, to add unexpected depth to my thesis sources. They accepted me unreservedly, and aided my understanding of those whose business I was writing about. The following deserve special mention: Paula Fenwick, Mary E. (Betty) Gamblin, John F. Grant, Roleen Ogilvie, Oralee Collins - Manager and Curator of the Age of Sail Heritage Centre at Port Greville - and local historians Conrad Byers and Kerr Canning. Conrad also provided much needed context and valuable pointers during the drafting process. My single visit to Amherst typifies my research experiences. The Land Records and Deeds office was extremely helpful and lent me a staff-member for photocopying, while another patron, William B. Fairbanks, Q.C., took time out from his own busy schedule to assist me in my search for obscure records.

My supervisor and respected friend, Dr. Jerry Bannister, restrained me from the pitfalls of too much research and over-analysis of tabulated results. His guidance through the proposal preparation and subsequent writing process enabled me to evolve my arguments whilst staying on track with a specific goal in mind. I also appreciate his family's forbearance when my elongated schedule for completion intruded on their personal time. In addition, my examining readers, Dr. Shirley Tillotson and Dr. David Sutherland, provided much valued input, editorial advice and suggestions for the future.

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Above all, I am indebted to Spencer's Island resident Gwendolyn Spicer. Gwen welcomed me into her home, provided resources collected by the late Stanley T. Spicer, and introduced me to others in the community. She has been my special guide and leading advocate for the last ten months; this thesis would have been much the lesser without her. Dear friend, our association has enriched my life.

## Chapter One:

## Setting the Sails

The golden age of sail in the Canadian Maritimes was doomed not by the inevitable advance of technology or by impersonal market forces but by Maritimers themselves. ${ }^{1}$

This claim, by Eric Sager with Gerald Panting in the most comprehensive publication on Atlantic Canada's nineteenth-century merchant marine, conveys an unequivocal sense of self-inflicted regional defeat. A similar assertion was levelled against modern-day inhabitants by Stephen Harper in May 2002, when he charged that a "culture of defeat ... [exists] in Atlantic Canada, because of what happened in the decades following Confederation. ${ }^{, 2}$ Such sweeping statements also reinforce romantic versions of the region prior to Confederation. Modern-day tourists to the Maritimes are frequently introduced to the long gone "golden age of sail" while popular memory, and some historians, partly attribute the region's subsequent economic under-development to the demise of its shipbuilding and seafaring operations. ${ }^{3}$

The case of the Spencer's Island Company (SIC) of Nova Scotia provides a remarkable opportunity to assess the changing fortunes of a maritime company during a critical period in Atlantic Canada's history. ${ }^{4}$ Formed in 1880, SIC grew its managed fleet

[^2]while the Maritimes' major ports outside the Minas Basin were in decline. Who were these men who acted against today's conventional wisdom about regional entrepreneurship during the nineteenth-century's final two decades? Why did, or could, the company perform so differently and what does it tell us about entrepreneurs' goals and expectations, vessel profitability, and the capital sources for building and retaining ships?

Historians record that Windsor-registered tonnage continued to increase for more than a decade after owners of vessels at Maritime Canada's other major registries began dismantling their fleets, but until now there has been little investigation into why this was so. ${ }^{5}$ American capital was one significant factor contributing to SIC's - and the Windsor registry's - exceptional performance. Minas Basin's merchant marine industry became the Maritimes' second-largest shipbuilders and operators around 1890, and foreign capital contributed to its continued growth when others were rapidly declining.

This thesis bridges the gap in maritime historiography between data-based industry studies and the few biographically-oriented shipping business investigations. ${ }^{6}$ It

[^3]combines top-down and ground-up analyses to assess one business's economic performance, and its participants' perceived agency during rapidly changing competitive conditions. This approach overcomes a shortcoming of data-based analyses by providing a cohesive picture of lived experiences over time. The thesis reveals the central roles dividends from existing vessels and United States capital played in sustaining SIC's shipbuilding and vessel management activities. Americans principally invested through registered mortgages which both masked actual ownership of shares and conferred added benefits. Citizens of countries outside the British Empire could not register ownership in British vessels without risking their flagged status, while unregistered shareholdings or mortgages afforded little or no security in the event of financial problems; but they could register mortgages which did. ${ }^{7}$ Registered mortgagees were able to protect their investments from prejudicial actions by ship owners and masters as well as claims from lower-ranking creditors in the event a registered shareholder went bankrupt. ${ }^{8}$ These legal instruments were a prevalent financing tool for vessels registered at Minas Basin's ports.

## Atlantic Canada Shipping Project's (ACSP's) David Alexander, argued that

 Maritimes ship owners suffered a "reversal of investment opportunities" after Canada introduced its National Policy in 1879 to stimulate domestic manufacturing growth. ${ }^{9}$ Another historian associated with this project, Rosemary Ommer, suggests that[^4]withdrawal from the sea in favour of land-based investments may have been the only prudent approach as returns from shipping declined and federal policies enhanced the business landscape ashore. ${ }^{10}$ ACSP team-members place most emphasis on relative, rather than absolute, expected investment returns after 1879 as the decisive factor in shipowners' switch away from the sea. Taking a different tack, T.W. Acheson persuasively argues that the Maritimes' late nineteenth-century entrepreneurs were capital-constrained. ${ }^{11}$ Having limited financial resources for new endeavours, many business-owners sold out of investments they considered to be riskier or in poorly performing sectors, such as wooden ships, to raise capital for new ventures. SIC's experience appears more consistent with the picture Acheson paints. In contrast to the apparent norm, SIC continued shipbuilding and added to its managed fleet because it could. The company's owners were not mavericks, but they had access to American capital. SIC's members were also highly community-oriented, with entrepreneurial skills developed through shipbuilding and seafaring, and their greatest manufacturing capability was the transformation of trees into ships. There were probably other companies similarly positioned around Nova Scotia's Minas Basin.

This thesis investigates SIC shareholders' reasoning and business choices, and analyzes the economic outcomes of their actions. SIC vessels provided better returns than did many of its peer group, and during the 1880 s maritime investments were local capitalists' most important sources of funds for new ships in a virtuous economic circle.

[^5]For those involved with the SIC, shipping appeared a better path to financial improvement than most alternatives ashore until the early 1890s. There is no evidence that the SIC ever contemplated managing steamships. The specific circumstances that enabled its formation and operation probably did not lend themselves to such a transition; although some of the investors in SIC-built vessels went on to work with the new technology vessels. ${ }^{12}$ When the SIC was disbanded in 1895 , its major shareholders and largest financial sponsor had directly benefitted from the company's activities, accumulating considerable wealth which sustained them in their future endeavours. SIC represents an excellent case study in Canadian maritime enterprise.

## The Historiography

There is ample research on Atlantic Canada's shipping and shipbuilding industries prior to the Great War of 1914-18, but this has generally emphasized the alleged failure of these sectors. With few exceptions, the dominant paradigm has been macro-economic and quantitative. ${ }^{13}$ Even maritime historians from adjoining regions who do include

[^6]personal or biographical elements, such as William Hutchison Rowe in The Maritime
History of Maine, usually limit themselves to fragmented records of numerous participants in the merchant marine rather than extended investigations into lived experiences. ${ }^{14}$ At the other end of the spectrum, Atlantic Canadian maritime biographers and cultural historians rarely integrate economic analyses into their narratives about businesses on this side of the Atlantic. ${ }^{15}$ Yet, a micro-economic approach offers an excellent means through which to examine vessel owners, operators, and seafarers. ${ }^{16}$

Nearly a century ago, Frederick William Wallace wrote of an "era of maritime effort and industry which is one of the most inspiring ... in Canadian history, ${ }^{17}$ and his

[^7]groundbreaking work became a touchstone for generations thereafter. ${ }^{18}$ More recent scholars such as Robert Foulke, Daniel Vickers, Lewis Jackson and Ian MacKay regard the efforts of most early maritime historians as celebrations of an imagined golden era rather than critical academic analyses. ${ }^{19}$ This thesis recognizes the validity of such arguments whilst also utilizing important historical gems within Wallace's published works.

Maritime historiography in the latter half of the twentieth-century generally falls into one of three categories: macro-economic analyses of changing ocean-going trade conditions; major shipping industry studies; or biographical and social studies into the lives of seafarers and, infrequently, sailing-ship owners. Historians such as Douglass C. North and C. Knick Harley utilize indices of freight rates during the nineteenth-century and other data to determine the impact of changing sea transportation technologies on North Atlantic trade efficiency and its economic impacts on ship supply. ${ }^{20}$ Harley's work is more relevant for this thesis than North's; it focuses more specifically on the latter half

[^8]of the nineteenth-century and provides solid evidence that changing technologies impacted on the shipping industry in partial-equilibrium steps. His conclusions also dovetail well with Gerald S. Graham's view that the shift to iron hulls and steam power occurred over time while Eric Sager reports that Atlantic Canada's transition occurred more slowly than in most other regions. ${ }^{21}$ Deep-water sailing ships remained competitive on many global routes until after the widespread utilization of high-pressure marine engines; although they were displaced from the bulk of their traditional North Atlantic beats much earlier. ${ }^{22}$

## The Newfoundland-based ACSP, led by Keith Matthews, David Alexander and

 Gerald Panting, conducted the most significant revisionist maritime research in Atlantic Canada during the late 1970s. The team was convinced that it could determine the reasons for the rapid rise and cataclysmic fall of Atlantic Canada's deep-sea merchant marine from its position as one of the world's largest fleets through quantitative research. ${ }^{23}$ The ACSP compiled a massive database on ocean-going ships and seafarers from major Atlantic Canadian ports between 1840 and 1914 and produced a number of working papers for conferences. Yet, the breathtaking magnitude and nature of the undertaking, together with the untimely deaths of Matthews and Alexander, meant the ACSP never fully achieved its original objectives. In 1990, Eric Sager, who joined the[^9]project in 1976, with Panting, published Maritime Capital which comes closest to being the ACSP's final monograph. ${ }^{24}$ They make the following observations about the Maritimes' disengagement from the sector during the latter decades of the nineteenthcentury:

In the 1870 s - when new investment in sailing ships began its steep decline in the Maritimes - the world's sailing fleets were still growing, and at the end of the decade over 70 percent of world tonnage lay under the decks of sailing vessels. In the 1880 s, when Maritimers were dismantling their industry, Norwegians expanded their sailing fleets, in part by purchasing used Canadian tonnage. ${ }^{25}$

This did not hold true for all those involved in the region's merchant marine. The SIC, for example, expanded its activities during the 1880s as its owners were optimistic about the prospects for the enterprise. ${ }^{26}$ Spencer's Island had become an important shipbuilding centre over the preceding twenty years making wooden vessel construction and seafaring major components of its economy. Many of the locals went to sea on the quarterdeck or before the mast; others provided goods and services to the industry and its participants, while vessel ownership was also an important investment avenue within the community. The SIC built some of Nova Scotia's largest sailing ships between 1880 and 1891, culminating in the 1,721 ton Glooscap. Most of the vessels built at Spencer's Island during this period were registered at Parrsboro but operated out of New York on trans-Atlantic and increasingly global routes as the century progressed. Sager with Panting show that this became the norm for the majority of Atlantic Canada's merchant

[^10]marine in the second half of the nineteenth-century. ${ }^{27}$ The Maritimes' age of sail must therefore be placed in the broader context of international competition. The ACSP's annual conferences in Newfoundland between 1977 and 1982 investigated this aspect more extensively than others, but almost entirely from a macro-economic, or quantitative, perspective. ${ }^{28}$

During the last quarter of the twentieth-century, maritime historiography underwent substantial revision as a new wave of historians investigated important issues such as class, gender and race in efforts to dispel the earlier myopic vision of the role and nature of seafaring workers. ${ }^{29}$ These studies generally focus on sailors before the mast not those on the quarterdeck, ${ }^{30}$ and the notion of separate realms for land and sea remains prevalent, ${ }^{31}$ belying the lived reality of this thesis's subjects. Vickers with Vince Walsh opine in their investigation of Salem's seafarers in the seventeenth to nineteenthcenturies, that there was nothing special, or golden, about this occupation during the age of sail: "[I]t was simply what young men did when they lived beside the sea., ${ }^{32}$ Similarly,

[^11]the businesses of port towns and coastal communities were more oriented to maritimerelated activities than were centres inland due simply to their waterside locations.

Most of the latter twentieth-century investigations emphasized new aspects of social history at the expense of some others. Canada's merchant marine was viewed disparately by those before the mast or on the quarterdeck, those owning and operating vessels, and their families; yet all were part of the maritime world's social and economic fabric. People who lived near the bounding main engaged in the building, ownership and operation of sailing-vessels and the provision of services to the shipping sector as naturally as they did land-based endeavours. The relative balance between such activities merely altered in line with changes in commercial supply and demand. Industrialization and urbanization also brought new business opportunities and threats to the Maritimes' major centres and scattered communities in different measure. ${ }^{33}$ This was a significant factor in the continued expansion of shipbuilding and vessel management at Spencer's

[^12]Island for more than a decade after total registered tonnage at Maritime Canadian ports began its rapid decline. ${ }^{34}$

It is also important to consider the differing natures of pre- and postConfederation Atlantic Canadian economic historiography. For the pre-Confederation period, most emphasis is on the region's economic development and international orientation, whereas post-Confederation, the focus usually shifts westward with the Maritimes increasingly shrouded in a cloak of economic shortcomings and dependency. ${ }^{35}$ This thesis seeks to redress the balance somewhat through its investigation of Spencer's Island's maritime entrepreneurs during the three decades following Confederation. T. W. Acheson's investigation into industrialization between 1880 and 1910 reveals that the Maritimes suffered significant capital constraints during this period and pockets of industry developed around entrepreneurial hubs rather than as satellites of major financial centres. ${ }^{36}$ Many shipowners may have been prompted to sell vessels as much by limited capital resources as by diminishing fleet returns in order to take advantage of new landbased opportunities, but publications utilizing ACSP research under-emphasize this situation as a causal factor in what occurred. Furthermore, as Fischer noted in 1995, "[t]he business history of shipping has been almost totally ignored by Canadian

[^13]scholars," particularly as it pertains to the age of sail. ${ }^{37}$ Recent studies emphasize steamship entrepreneurs over those who never made the transition from sail, perhaps reflecting a bias in favour of pre-determined notions of success. ${ }^{38}$ This thesis fills a lacuna in the existing literature by combining strands in the fabric of economic circumstance so far left unbound.

## Explanation of Arguments

This thesis investigates the experiences of one group of entrepreneurs based on the shores of the Bay of Fundy's Minas Basin who came together to establish a major shipbuilding operation and a deep-sea sailing fleet. While the SIC had a short life in its original or combined form (from 1880 to 1895), it represented an important step forward for its participating families, contributing significantly to their material well-being. The thesis investigates the concepts of 'success' and 'failure' from the perspective of those associated with the shipbuilding and seafaring sectors through the lens of the SIC's shareholders rather than a quantitative top-down or industry-based one. The American Heritage Dictionary defines success as " $[t]$ he achievement of something desired, planned, or attempted," and "the gaining of fame or prosperity," whereas failure is defined as "the

[^14]condition or fact of not achieving the desired end or ends. ${ }^{39}$ A further strand is provided by Roberta J. Park's recognition of the latter Victorian-era's increased emphasis on the economically-oriented notion of "the self-made man," who made "his mark upon the world." ${ }^{40}$ This thesis considers the yardstick for measuring SIC's success or failure should be the extent to which it enabled its members to achieve desired economic and personal goals. This approach enables a meshing of cultural history with economic review in a manner rarely, if ever, undertaken by this region's maritime business or cultural historians.

Why did these men expand their business interests in sailing vessels when the Atlantic Canadian industry as a whole was retrenching? This thesis investigates the commercial enterprise they created and the business world they experienced. The sources for the investigation include correspondence to the company and the Spicer brothers as well as financial papers relating to some of the vessels with which they were involved. ${ }^{41}$ It begins with a biographical outline of key figures about a decade before SIC's formation and continues a few years beyond its 1895 dissolution. The broader time period captures two issues of considerable significance. Firstly, it reveals SIC shareholders' changing financial circumstances and the company's role as an enabler for future life and business

[^15]choices. Secondly, it spans a period when Atlantic Canadian registered tonnage rose strongly to peak just prior to 1880 , before halving even more rapidly. ${ }^{42}$ In contrast, Spencer's Island-controlled tonnage increased during the 1880s and only began to decline after $1892 .{ }^{43}$

This thesis investigates the maritime-related activities of SIC members, and associated New York-based investors in its vessels, before and after their involvement with the company. This approach situates the key participants within the context of their economic circumstances ashore and at sea. The investigation uncovers the important role American capital and commission agents played in the Bay of Fundy's merchant marine, through an analysis of shipping reports published in New York Times, ACSP data on vessel ownership, and the port of Windsor's registry records. The data links ACSP's topdown industry and major port town studies with the specific position of SIC and investors in the ships it constructed. The thesis also utilizes financial records for several Spencer's Island-built vessels to ascertain actual returns on capital invested as well as its sources, thereby providing both sides of the investment equation.

The thesis utilizes an approach similar to that employed by David Hancock in Citizens of the World. ${ }^{44}$ Despite a paucity of surviving personal correspondence,

[^16]Hancock pieced together a comprehensive picture of twenty-three mostly London-based merchants who operated in four partnership circles between 1735 and $1785 .{ }^{45}$ In SIC's case, considerable correspondence to the company, and from its members to key employee Dewis Spicer, survives in private and public hands making the picture-building task much easier. Hancock meshes "personal biographical narrative and aggregate statistical analysis" with an investigation into the material assets the merchants left their families and communities as a measure of their sense of the world in which they lived and their place in it. ${ }^{46}$ This thesis adopts Hancock's "business cluster" approach. For SIC there were two clusters: the Minas Basin merchants and mariners, especially those residing at Spencer's Island, with George at the centre; ${ }^{47}$ and the New York-based merchants, particularly J. F. Whitney and Company. Hancock characterises the associates he investigated as marginal restless men who aspired to the pinnacles of commercial, political and social recognition, ${ }^{48}$ whereas SIC's shareholders were already leading figures in their communities early in adulthood. George, in particular, was also widely respected further afield, but he never sought to move elsewhere. ${ }^{49}$ Two other SIC shareholders, Johnson Spicer and Nathan Eaton, did branch out into new business fields

[^17]in nearby metropolitan centres and Nathan later sought political office. Both Hancock's associates and the SIC's shareholders built their international business operations through "opportunism and expedient action. ${ }^{50}$ All had life goals, were actively involved in community development, and certainly left personal and financial legacies. ${ }^{51}$ These are important parts of the puzzle relating to the declining involvement of Maritime entrepreneurs in the ocean-going merchant marine towards the end of the nineteenthcentury.

Those in the second business cluster coalesced around J. F. Whitney and Company. They were also more entrenched in establishment circles than were Hancock's subjects, but appear to have been highly driven to achieve financial success and reputational recognition. Several took leading positions in New York maritime and commercial bodies during their careers. The Spencer's Islanders' and New Yorkers' advancement ambitions came together during the nineteenth-century's final two decades to create and expand a business which capitalized on ocean-going opportunities at a time when many Maritimers were forced to choose between land and sea.

## Thesis Sources

The best publicly available primary sources for this thesis are the Spicer family fonds, the SIC fonds and the George D. Spicer fonds held by Nova Scotia Archives and Records Management (NSARM). The first two principally comprise correspondence,

[^18]diaries and various financial records retained by George's brother Dewis. The SIC fonds contain relatively few documents directly related to the company itself but do provide substantial insights into Dewis Spicer's time as captain of the J. F. Whitney, E. J. Spicer and Charles $S$. Whitney. ${ }^{52}$ Of these, only the Charles $S$. Whitney was registered as an SIC-built ship, but all three operated under the command of the Spicer brothers. ${ }^{53}$ There are also private collections of primary documents comprising letters, photographs and accounting records held by Spicer descendants, local historians and the former owner of the store from which SIC operated. These private records proved the most important for assessing SIC's shipbuilding business and its early years of operation. They complement the SIC fonds which provide a comprehensive picture of vessel profitability in the nineteenth-century's last two decades, and the correspondence therein refers to challenges faced and addressed over time. Additional sources include the ACSP vessel registries database, Parrsboro and Windsor shipping registers, New York Times newspapers and George Spicer's grandson Stanley T. Spicer's published works, private records and manuscripts. ${ }^{54}$

[^19]The George D. Spicer fonds principally comprise microfilm facsimiles of thirtyfive diaries he kept between 1871 and 1910. The diaries include some useful information for this thesis, particularly with respect to interactions and communications with others associated with SIC, as well as general seafaring activities. The diaries also help provide context for the few publicly available letters George wrote to Dewis. In addition, Stanley Spicer published a number of books on the Bay of Fundy's nineteenth-century shipbuilders, seafarers and sail vessels, including one on his grandfather. ${ }^{55}$ While none reveal much about the SIC, or its members other than George, they represent important secondary sources to supplement the surviving primary documents. Stanley Spicer records that George had investments in non-Spicer captained vessels and ashore. ${ }^{56} \mathrm{He}$ further reflects that George accumulated sufficient capital during his career to support "his family of seven, [send] three of his children on to a post-high school education and [live] for twenty-seven years in comfortable retirement - long before the era of old age pensions. ${ }^{, 57}$ Probate records for several SIC members are on file with the Cumberland County Registrar of Deeds. These reveal that George and Johnson left considerable estates, although only George's can be directly attributed to capital accumulation through ship ownership and operation.

[^20]
## Thesis Organization

The chapters cover four broad areas and generally utilize a chronological framework within each. This reflects the lived experiences of SIC's members, revealing their perceptions of competitive threats and opportunities, and their sense of agency over time. Chapter One provides an overview of the subject matter in the context of an industrializing world. It establishes key aspects of Atlantic maritime and Maritimes' historiography within which to frame the Spencer's Islanders' particular circumstances. The differing pace of industrialization in urban and rural societies probably played a role in the divergent paths of sailing-ship owners and operators based in major port towns and those of smaller coastal settlements. Nearly a fifth of the Maritimes' ocean-going capacity in 1880 was registered at smaller ports, so it appears likely that many other shipbuilders and owners in the region acted similarly to the SIC, in some cases aided by foreign capital. ${ }^{58}$

Chapter Two begins with a collective biography of the eight men residing either at Spencer's Island or Canning who joined together to establish a shipbuilding company at the Island in 1880. This octet comprised: master mariners George and Johnson Spicer and their brother-in-law Samuel Williams; farming cousin Robert Spicer; shipbuilder Amasa Loomer; along with merchants William, John and Gideon Bigelow. These men were ably supported by accounts clerk, and later shareholder, Nathan Eaton. Part Two introduces New York-based commission agents J. F. Whitney and Company, and their associates, who developed strong bonds with Nova Scotian sea-captains. The

[^21]relationships between SIC's master mariners and J. F. Whitney and Company's senior partners, especially the one between George Spicer and James Whitney, formed the basis for more than a decade of shipbuilding and management at Spencer's Island. The chapter also investigates J. F. Whitney and Company's extensive role as a shipping agent for ocean-going vessels from the Maritimes generally. The agents chartered more than nine percent of Nova Scotia's total registered tonnage in 1880, a finding which fits with Frederick William Wallace's observation that the company acted for many Nova Scotian ocean-going vessels during the 1880 s . ${ }^{59}$

Chapter Three is also divided into two main parts. Part One sheds light on the events leading to SIC's formation, its business structure, the ambitions of its shareholders and the inter-relatedness of commercial and family life. Part Two focuses on the company's early years in shipbuilding, paying particular attention to the first ship built after 1880, the Stephen D. Horton, through an analysis of detailed construction journals, personal financial records and correspondence. Chapter Four investigates SIC's shipping business by utilizing records for some Spencer's Island-built and managed vessels between 1880 and 1895. These show that there were two periods of partial equilibrium in freight rates before a general slide took hold in the first half of the 1890s. The chapter outlines the actions SIC's ship managers and their commission agents took redirecting vessels to new trade routes, and master mariners' cost-cutting measures aboard ship as they endeavoured to maintain profitability. A few years after financial returns from shipping fell below the levels needed to justify new vessel construction, SIC's owners

[^22]effectively dissolved the company. However, many of the ships it built continued to operate into the twentieth-century.

The owners of wooden sailing vessels experienced increasing challenges towards the end of the nineteenth-century and these contributed to the decline in SIC's activities. This does not represent failure from the shareholders' perspectives. They considered risks and opportunities in both existing and new commercial fields in light of changing circumstances and elected to wind-up shipbuilding operations and sell the store. SIC did not build any more ships after 1893 and two key participants left the region soon thereafter. Nathan Eaton returned to Canning where he rose to commercial and public prominence, while Amasa Loomer retired to Massachusetts. ${ }^{60}$ Johnson Spicer built smaller vessels well into the twentieth-century, but these were primarily on his own account rather than under SIC's auspices. Johnson retired from seafaring in 1896 and later relocated to Parrsboro, forty kilometres east of Spencer's Island, about the time he acquired the Newville Lumber Company. Antoinette Sayre also moved to town when she entered her third marriage, this time to Cory Jenks, the manager of the region's telephone company. ${ }^{61}$ Only George Spicer remained at Spencer's Island continuing as the

[^23]Glooscap's captain until his retirement in $1910 .{ }^{62}$ All five enjoyed long lives in relative financial comfort and SIC's two master mariners left substantial estates. When Johnson died in May 1923, his estate was valued at $\$ 69,782{ }^{63}$ George survived all his brothers, living to the ripe old age of ninety-one and leaving an estate of $\$ 29,148 .{ }^{64}$ Johnson's estate was boosted by his sawmilling investment, but both brothers probably derived most of their capital in the nineteenth-century from their seafaring-related activities and SIC played a large part in this.

SIC's owners formed the company to capitalize on commercial opportunities they saw in the early 1880s. It operated as a sailing-ship builder, vessel manager and storekeeper for only so long as it met members' joint needs. It performed profitably over its fifteen-year existence, but by 1895 , the company had served its purposes. It contributed materially to shareholders' financial well-being, providing them a platform for their future individual pursuits. By this measure, SIC undoubtedly represents an entrepreneurial success story.

[^24]
## Chapter Two:

## Family and Financiers: A Cast of Characters

The Spencer's Island Company (SIC) was formed in 1880 and expanded its operations over the next decade. Based on Minas Basin's northern shore, SIC was one of a multitude of moderately sized shipbuilding and vessel management enterprises in the region during the latter part of the nineteenth-century. Eric W. Sager with Gerald Panting, and other scholars associated with the Atlantic Canada Shipping Project (ACSP), identify this period as the one during which most Atlantic Canadian shipowners were dismantling their deep-water fleets. ${ }^{1}$ This thesis offers two key reasons for SIC's divergence from the East Canadian norm. ${ }^{2}$ Firstly, shipbuilding and vessel operation were sufficiently rewarding within a narrow range of business options to justify continued investment. Secondly, while many Atlantic Canadian entrepreneurs diverted funds into new landbased and westward-looking investments, Americans contributed part of the capital Minas Basin's maritime industries needed to sustain them into the 1890s. The Americans provided these funds through registered mortgages which, in SIC's case, masked foreign investors' direct investments in the vessels built at Spencer's Island. The chapter's investigation into American capital's role in Nova Scotia-side Bay of Fundy's late nineteenth -century merchant marine is a first in Atlantic Canadian maritime historiography.

[^25]This chapter introduces SIC's shareholders and the relationships its members formed with New York-based shipping commission agents J. F. Whitney and Company. The chapter is divided into two main parts. Part One contains a collective biography of SIC's shareholders and reviews the community at Spencer's Island which was oriented to basic agriculture, timber extraction and maritime enterprise. Part Two introduces the New York connection, which coalesced around J. F. Whitney and Company. The commission agents were important facilitators of business for British North America's deep-water fleet, and arranged charters for 9.1 percent of Nova Scotia's total registered tonnage in 1880. United States-based merchants also provided nine percent of the capital for Windsor's newly registered ships between 1873 and 1883 , primarily through registered mortgages. These instruments have received scant attention in the historical record.

The thesis represents one of only a handful of merchant marine business case studies undertaken in the region and appears to be the first to combine both sociological and financial considerations. ${ }^{3}$ It fills a gap in the historiography between other case studies and ACSP's top-down data-driven publications. SIC's vessels were registered at Parrsboro, which was not included in ACSP's database, but Nova Scotia-side Bay of Fundy's largest port, Windsor, was. This thesis uncovers important similarities between vessels registered there and those SIC built, which suggests the specific company case may be extended more broadly.

[^26]Figure 2.1: Glooscap Under Construction at Spencer's Island, 1891


Note: The Spencer's Island store is in the right background below the 1,721 ton Glooscap's bowsprit. Source: Kerr Canning, Conrad Byers private collection.

## Introducing the Cast

SIC's shareholders were joined in common interest by bloodlines, marriages and their involvement in maritime industry. Hundreds of business groupings along North America's East Coast had similar ties where pre-industrial commercial structures based on family and locally accessible resources remained dominant. ${ }^{4}$ This pluralism meant businesses were partisan but not insular in nature. Participants' occupations and operations linked them to major trading and financial centres around the Atlantic. The

[^27]Figure 2.2: The North Atlantic Region


Source: MSN Encarta, retrieved from
http://encarta.msn.com/map_701510917/bay_of fundy.html, 28 February, 2008.
most commercially efficient transport and communication links were generally across the sea rather than over land during this era, so in many respects ports such as New York and Boston were at least as accessible for Spencer's Island's residents as Montreal, Toronto and Halifax. ${ }^{5}$ Many Bay of Fundy mariners developed close associations with New

[^28]Figure 2.3: The Bay of Fundy


Source: MSN Encarta, retrieved from http://encarta.msn.com/map 701510917/bay of fundy.html, 28 February, 2008.
Note: Spencer's Island community shown by the circle.
York merchants who were involved in shipping goods throughout the North Atlantic and across the globe. For those from Spencer's Island, such links were to prove a cornerstone in the development of a significant new ship building, owning and operating enterprise.

The hamlet of Spencer's Island is located in mainland Nova Scotia's Cumberland County, on the Minas Basin's northern shore, and takes its name from a small island a few miles offshore. ${ }^{6}$ The Minas Basin is an offshoot of the Bay of Fundy which separates Maine and most of New Brunswick from Nova Scotia, as shown in Figure 2.3. Minas

[^29]Basin's waters were a hive of human activity throughout the nineteenth-century. Locals built vessels of all sizes along the coast to engage in trade. The smaller ones generally plied coastal business while increasingly larger vessels were employed on major ocean routes. Merchants in Kings and Hants Counties, on the southern shores of the basin, imported processed goods and luxuries from Boston, New York and Europe, some of which were then re-shipped to small centres around Minas Basin's shores, along with produce derived from the highly productive Annapolis Valley. ${ }^{7}$

Trans-basin interactions extended well beyond the exchange of goods; a cursory survey of census records indicates many inter-marriages. These combinations intensified multigenerational associations between families, some of which had been forged prior to the relocation of planters from Massachusetts and elsewhere to take over the lands of Acadians evicted between 1755 and $1763 .{ }^{8}$ Many planters settled in the Annapolis Valley, whereas the first settlers along the basin's north-western shoreline largely comprised loyalists who had fought for, or continued to support, Britain through the American War of Independence. The Bigelow and Loomer families were amongst the former grouping, whilst the Spicers who settled at Spencer's Island were in the latter. All three families were linked through marriage within two generations of their settlement in Nova Scotia. ${ }^{9}$

[^30]Figure 2.4: Initial Land Grants at the Western End of Cumberland County


Note: Port Greville is shown as "Port Grecille" due to a typographical error. Source: Kerr Canning, 2008, a composite of archival materials at Crown Land Information Management Centre, Halifax.

The first planter families in 'the Valley' took over existing productive operations in a favourable micro-climate. The more entrepreneurial amongst them developed wide ranging activities including shipbuilding and ownership to further enhance their agricultural and trading bases. Loyalists who received Crown land grants on the basin's northern shores typically achieved lower yields across a narrower range of agricultural products than settlers in the Valley. More importantly for their future direction, the lots

[^31]also held considerable timber resources further inland which were quite suitable for shipbuilding in the many tidal bays and river mouths along the coast. ${ }^{10}$

By 1881, the hamlet at Spencer's Island comprised 135 men, women and children in twenty-three households. ${ }^{11}$ This was a significant increase on the estimate ten years earlier of "about 80 ," and was due more to the high fertility levels amongst the locals than to new arrivals in the region. ${ }^{12}$ Economic engagements ashore were skewed to preindustrial activities while the sea played an important role both in terms of employment opportunities and as a transport route for local commodities, especially timber. ${ }^{13}$ Amongst Spencer's Island's forty-three residents for whom occupations are recorded in the 1881 Canada-wide census, fifteen were farmers or farm labourers, eleven were landbased carpenters and nine were taking a break from their maritime careers. ${ }^{14}$ The situation was similar for the surrounding area. A review of the first 120 household families in the census of District 22, sub-district K of Advocate Harbour totalling 686

[^32]people, produces 190 entries in the occupation column. ${ }^{15}$ There were fifty-one farmers, a further twenty-three labouring on farms, fifty-two land-based carpenters, forty-three seafarers and fifteen other tradesmen many of who derived a significant part of their earnings from the most capital-intensive activity in the region, shipbuilding. ${ }^{16}$ For example, the 1,317 ton ship E. J. Spicer, launched at Spencer's Island in November 1880, cost $\$ 47,042$ to complete. ${ }^{17}$ Of this, approximately seventeen percent related to timber inputs, and around thirty-eight percent represented wages paid to workers during the vessel's construction. ${ }^{18}$ In current day (2008) dollars this equates to $\$ 202,000$ for timber and $\$ 445,000$ for labour. ${ }^{19}$ In the eighteen years after 1873, nine vessels of over 1,200 tons capacity were constructed at Spencer's Island, and many more in the wider region, in an almost continuous production stream. These vessels engaged little in trade originating from Canada. Instead they operated out of New York and infrequently returned to the Bay of Fundy, but their construction was integral to the local economy, as were dividends to local owners and the portion of earnings local seafarers remitted home. ${ }^{20}$

[^33]Figure 2.5: View of Spencer's Island from the Store, circa 1884


Source: Spicer private collection and Conrad Byers private collection.

The Spencer's Island community faced some local geographic challenges. Most households were on one or other side of a salt marsh, with those to the east principally located on higher ground. The western side sloped gently down to the beach where the shipyard and local store, later to become SIC's operational headquarters, were located.

Figure 2.5 is a photograph taken from beside the store looking inland across the western side of the community prior to 1884 . George Spicer's house is on the right, William Henry Bigelow's to the left of George's with Robert Wesley Spicer's behind that. The shipyard was to the immediate right of the photograph's foreground.

[^34]
## The Birth of Spencer's Island Company

In 1880, eight men joined together to form a shipbuilding company at Spencer's Island. ${ }^{21}$ It was merged with the local store the following year and quickly became the hamlet's largest business enterprise and cash-flow generator. The octet comprised three local master mariners, a farming timber-owner, a master shipbuilder and three merchantshipbuilders: Captains George D. Spicer, Johnson Spicer, and Jacob Samuel Williams, along with Robert Wesley Spicer, Amasa Loomer, William Henry Bigelow, John Emerson Bigelow and Gideon Bigelow. They were ably assisted in the new company by clerk, and later shareholder, Nathan Eaton.

All nine participants were related by blood or marriage, and their business interests converged to mutual benefit. SIC was an unincorporated company, yet significant changes in shareholdings during the first six years of operation did not destabilize the business entity. For example, after Samuel Williams' death at sea in 1883, widow Antoinette took over his one-eighth share in the company. The following year John and Gideon Bigelow offloaded their interests to Nathan Eaton as they endeavoured to wind back their capital commitments. In 1886 Robert Spicer sold his share to Johnson Spicer about the time he relocated to Diligent River and Henry Bigelow later sold out to Nathan. The final five-shareholder combination was probably more financially resilient than the original set. Six SIC shareholders were photographed together in about 1885, a reproduction of which is shown in Figure 2.6, overleaf.

SIC's business formula was more akin to those of corporate entities that became common in the twentieth-century although its legal structure was not. SIC was a

[^35]Figure 2.6: Some Shareholders in the Spencer's Island Company, circa 1885


Standing, left to right: Johnson Spicer, George Spicer, Nathan Eaton. Seated, left to right: William Bigelow, Antoinette Williams, Amasa Loomer.

Source: Spicer private collection.
partnership rather than an incorporated company but, after 1884, most business decisions did not require consultation among all the partners. ${ }^{22}$ SIC effectively had three operating divisions - vessel management, storekeeping and shipbuilding - each of which was managed differently. George and Johnson Spicer controlled the vessels and decided on charters in conjunction with the commission agents. Henry Bigelow and Nathan Eaton ran the store while George and Johnson decided on vessel construction in consultation with prospective investors. Amasa Loomer oversaw the actual shipbuilding, aided by whichever of the two senior Spicer captain-brothers was in North America at the time.

[^36]Other members of the firm, including Nathan Eaton, were also involved in materials procurement and worker engagement. George Spicer was effectively the director of company finances, with Nathan acting as the accountant, although the latter's role increased in later years. Overlaying this effective operational structure, the partners acted in similar fashion to a modern-day Board of Directors. Still, the business's legal construction meant its bankers and other financiers required signed declarations from all the partners and financial distress would affect their personal assets. In addition, access to capital was subject to more constraints than most modern-day enterprises. ${ }^{23}$

## The Master Mariners

George Spicer, the first of Jacob and Mary Spicer's eleven children, was born on 8 September 1846 and raised at Spencer's Island. ${ }^{24}$ Nine of Jacob and Mary's offspring reached adulthood; the four sons undertook maritime careers and rose to become captains of the vessels on which they sailed while two daughters lost their first husbands, also master mariners, to the sea. ${ }^{25}$ Young George began his career afloat in 1858 at age twelve, ${ }^{26}$ and according to grandson Stanley T. Spicer, he recognized the importance further education played in career advancement. ${ }^{27}$ George "interrupted his seafaring activities to come back to [nearby village] Advocate where a local teacher was instilling

[^37]the theory and practice of navigation into the minds of hopeful, future sea captains."28 During these study periods ashore George met and began courting Emily Jane Morris, by whom he was reportedly smitten. ${ }^{29}$ George passed his master mariner examination in Liverpool, England, in June 1868, a circumstance which ensured both sound career prospects and suitability for marriage. ${ }^{30}$ George and Emily Jane wed on 6 August that year and soon after his marriage George was offered the helm of the Globe, a 289 ton brig. ${ }^{31}$ This was the first of five vessels George commanded during his fifty-two year seafaring career and the only one in which he did not own shares. ${ }^{32}$

Emily Jane accompanied George on most voyages only returning to their home at Spencer's Island when her husband was taking a spell from the sea or otherwise in the style of maternity leave, to bear their children, before rejoining him on the quarterdeck with their growing brood of infants in tow. ${ }^{33}$ Eric W. Sager reports that such an arrangement was relatively common on Canadian vessels, but less-so for those registered in Britain. ${ }^{34}$ In 1874, George bought a quarter-acre lot which his uncle Isaac divided from an estate on the south-western hillside. ${ }^{35}$ There, he built the house in which he lived for the rest of his life. By the end of the 1870 s, George was father to three children and a

[^38]part-owner and commander of the J. F. Whitney, a 701 ton barque which had been built by Thomas E. Bigelow at Spencer's Island in $1872 .{ }^{36}$

The second son in Jacob and Mary's family, Johnson, was born on 5 December 1850 , and followed his brother into a seafaring career when aged thirteen. ${ }^{37}$ Johnson gained his master's papers in 1872, the same year he shipped across to Antwerp to take over the Globe from George, who returned to Spencer's Island to assist in the completion of the J. F. Whitney. ${ }^{38}$ Johnson probably undertook his certification examination in England, as had George before him, and custom suggests he may also have entered into his first marriage at about the same time. ${ }^{39}$ Johnson's first wife died, but he remarried in the summer of $1878 .{ }^{40}$ This time, his bride was the eldest daughter of Bay of Fundy master shipbuilder Amasa Loomer. ${ }^{41}$

Johnson took more shares in sailing vessels during the 1870s than did his eldest brother. On the other hand, he had no offspring to care for and even after his marriage to Adelia, the couple may not even have had the costs, and benefits, associated with their own residence. ${ }^{42}$ These circumstances meant Johnson had greater risk capital for

[^39]investment. In 1877, Johnson acquired two shares in the Calcutta, a 1,283 ton barque completed at Spencer's Island under Amasa Loomer's watchful eye for merchants William Henry Payzant and Henry Bigelow the year before. ${ }^{43}$ When these merchants registered their next vessel, the 1,309 ton ship Servia, in the summer of 1878 , Johnson was its captain and took four shares. ${ }^{44}$ Johnson was to hold stakes in all the vessels he subsequently commanded. He may also have considered taking an interest in Payzant and Bigelow's largest undertaking, the 1,406 ton Athlon, an issue which is discussed later in the thesis. ${ }^{45}$

The fourth child, and second daughter, in Mary and Jacob's household, Antoinette, was born on 15 November 1848. ${ }^{46}$ "Nettie," as she was known to friends and family, began what was to become something of a tradition amongst the Spicer women by marrying a master mariner. ${ }^{47}$ Her beau was J. Samuel Williams. Samuel was born about 1841 and raised by his farming parents near Crow Harbour, Guysborough, which he continued to call home for several years after going to sea. ${ }^{48}$ It is unclear when or where Samuel gained his master's papers, but a "Williams, J. S." is recorded as the

[^40]captain of the 244 ton British-registered barque Robinson in November 1863. ${ }^{49}$ In 1871
Samuel recorded two life milestones. Firstly, he took command of, and shares in, the Windsor-registered 339 ton brigantine J. Williams, which was built by Advocate's William Moore. ${ }^{50}$ Second, and more importantly, Samuel married Antoinette on 16 December, the same year he moved to Spencer's Island. ${ }^{51}$ The newlyweds apparently developed a strong relationship with Johnson Spicer and Adelia Loomer and they acted as witnesses at the latter couple's wedding in July $1878 .{ }^{52}$ In addition, although Samuel owned a residence at Spencer's Island prior to 1880 , it was usually rented out when he and Antoinette went to sea. If it was still occupied on their return, the couple might stay at Jacob and Mary's house, sometimes with Johnson under the same roof. ${ }^{53}$

As the 1870s drew to a close, Samuel was a shareholder in the Calcutta, as well as the newest vessel under his command, the 991 ton Hannah Blanchard, and he appears to have signed up for a stake in the Athlon. ${ }^{54}$ An expatriate Nova Scotian who would play an important part in the SIC story also appeared on the Calcutta and Hannah Blanchard

[^41]registers: the New York-based Mark Shaw. ${ }^{55}$ As events transpired, Samuel drowned during a voyage in 1883, but Antoinette agreed to take over his SIC share and remained a member of the company for the balance of its duration.

## The Farmer and Woodlot Owner

Robert Wesley Spicer, the fourth child and oldest son of Jacob's brother Isaac and wife Lydia, was born on 6 April $1850 .{ }^{56}$ The family farm on the western side of Spencer's Island became home to ten children. Three boys were among the seven siblings who survived to adulthood: Robert, Daniel born in 1855, and John Nutting Spicer born in $1862 .{ }^{57}$ Like his male cousins and second brother, Daniel, Robert engaged in a career afloat, at least until his marriage. ${ }^{58} \mathrm{He}$ probably began as a general carpenter, before undertaking a more specialized role aboard ship in his twenties. ${ }^{59}$ Robert's life was intertwined with the sea and this probably contributed to his taking up shares in a number of vessels, including the Calcutta. ${ }^{60}$ In 1875, Robert married Emma Smith of Diligent River, the same year his father Isaac sold him thirty acres on which he built a homestead

[^42]across the road from cousin George. ${ }^{61}$ Soon after his marriage, Robert retired from the sea in favour of farming, an avenue opened up either by his father's land settlement or death in 1880 , although subsequent events appear to support the former. ${ }^{62}$

## The Master Builder

Amasa Loomer, born to parents David and Mary at Advocate Harbour in
Cumberland County on 2 July 1835, represented the fourth generation of the loyalist
Loomer family which moved north from Massachusetts prior to 1775 to settle in
Cornwallis, Nova Scotia. ${ }^{63}$ Amasa probably entered into carpentry in his early teens. He may have been prompted to shift across the Minas Basin to Annapolis Valley's shores to take advantage of the close ties his family had developed through inter-marriages with prominent merchant shipbuilders in Canning and Hantsport. ${ }^{64}$ When he was twenty-three, Amasa completed his first vessel, the barque Pleiades for W. \& D. Knowlton. ${ }^{65}$ Two years later, he married Valley girl Mary Ann Allen, who was two years his junior, and

[^43]they established a home in Canning. ${ }^{66}$ There, they were blessed with their first child, Ada Adelia, in May 1860, but most of the couple's nine offspring were born further along the shoreline at Scott's Bay, where Amasa developed a solid reputation as the builder of high quality small shipping vessels into the early 1870 s. ${ }^{67}$ In 1874 , Amasa, and likely his family, relocated to Spencer's Island, where he oversaw the building of the Gideon Bigelow-designed Calcutta for William Payzant and Henry Bigelow. ${ }^{68}$ This vessel brought together the commercial shipping interests of four of those who were to become SIC shareholders. Robert Spicer was an original investor in the Calcutta, while its captain, Johnson Spicer, and master mariner Samuel Williams both became shareholders during $1877 .{ }^{69}$

## The Merchants

SIC's initial shareholder list included three merchants: Henry Bigelow, John Emerson Bigelow and Gideon Bigelow. Henry Bigelow was born in Advocate on 25 July 1832, the second son of Justus and Olivia Bigelow. ${ }^{70}$ Henry, or "Harry" as he was known to his associates, became a merchant and moved to Spencer's Island about 1859 to enter into a storekeeping partnership with William Payzant and Daniel Cox. ${ }^{71}$ Two years later, the three merchants took a joint interest in twelve of the sixty-four shares recent West

[^44]Advocate arrival Joshua Dewis offered relatives and local businessmen in a 198 ton brigantine he intended to construct at Spencer's Island. ${ }^{72}$ Stanley T. Spicer records that Joshua Dewis considered the beach to be ideal for shipbuilding, an endeavour not previously undertaken there. ${ }^{73}$ The new vessel, Amazon, seems today to be incredibly small for its intended purpose of taking lumber across the Atlantic to England and plying the Mediterranean and West Indies trades. ${ }^{74}$ Almost from the outset the brigantine was plagued with trouble. Her first captain, Robert McLellan, died of illness in the early stages of its maiden voyage out of the Bay of Fundy. ${ }^{75}$ Seven years later, the Amazon foundered, was condemned and sold. ${ }^{76}$ In 1868, Americans acquired the vessel and soon after renamed it Mary Celeste, a name that lives on today as the mystery ship abandoned at sea with no sign of captain, family or crew ever being found. ${ }^{77}$

By 1861, both Cox and Payzant were residing in the Annapolis Valley on the other side of the Minas Basin, leaving Henry Bigelow as the sole storekeeping partner actually located at 'the Island. ${ }^{, 78}$ The three merchants organized the building of two more vessels at Spencer's Island during the 1860s, the 280 ton brigantine W. H. Bigelow, completed in 1863, and the 554 ton barque Cumberland, completed in 1865. Henry's

[^45]brother Thomas was probably the builder for at least one of these. ${ }^{79}$ It appears that William Payzant and Henry Bigelow bought Cox out of the partnership in the early 1870s as he did not take any interest in the 701 ton barque $J$. F. Whitney which was completed in 1872 under Thomas's oversight. ${ }^{80}$ When Payzant and Bigelow determined to take their shipbuilding activities to a new level, they brought in Amasa Loomer to manage construction. Their next barque, the Calcutta, represented a major step-up in size, its 1,283 ton displacement being eighty-three percent greater than any previous undertaking. ${ }^{81}$ The merchants increased the pace of their shipbuilding operations at Spencer's Island over the balance of the decade. The partners launched the 1,309 ton ship Servia in 1878, and the 1,406 ton Athlon was underway by the following year. ${ }^{82}$

Payzant and Bigelow's shipbuilding and ownership experiences proved to be mixed. Of the six vessels they were involved with prior to the Athlon, three were lost by 1871. The Amazon was stranded and sold in 1867, the same year that the Cumberland was abandoned in the mid-Atlantic, while the $W . H$. Bigelow was wrecked in the Bahamas four years later. ${ }^{83}$ As the 1870 s drew to a close, the Calcutta was still sailing under the command of Henry's former brother-in-law, Captain Robert Dewis, but the partners lost their financial interest in it in 1879, four years before it sank in the Malacca

[^46]Strait. ${ }^{84}$ Along with the Calcutta, Payzant and Bigelow's best experiences came from vessels commanded by Spicer brothers George and Johnson, the J. F. Whitney and Servia respectively. ${ }^{85}$

In a fateful development, the merchant partnership overstretched its financial capabilities undertaking construction of the Athlon so soon after Servia's launch. It appears that investors were to slow to commit capital to the new venture, necessitating additional debt finance to pay construction bills. Payzant and Bigelow were unable to meet their obligations and Commercial Bank of Windsor successfully petitioned for the appointment of an official assignee in $1879 .{ }^{86}$ The two merchants were not the only ones to suffer financial indignity towards the end of the 1870 s. Business failures became more frequent in Canada during the last three years of the decade as the country struggled with difficult economic conditions. ${ }^{87}$ Overly ambitious shipowners tended to be more at risk than most given the size of their capital investments, the general scarcity of cash, and volatility in freight markets.

[^47]Henry's cousin, John Emerson Bigelow, was born into a leading merchant and shipbuilding family based in Canning, Kings County, on 21 February $1842 .{ }^{88}$ John became active in both aspects of the family business - E. Bigelow Sons and Co. He is recorded as master builder of at least five vessels by 1879 , the earliest being the familycontrolled 196 ton brigantine Branch in 1864 along with his father Ebernezer Junior; he probably took over general store operations by 1875. ${ }^{89}$ John married Hannah Ann Blenkhorn, in June 1862, two months before the birth of their first of their ten children, Minnie Beatrice, and the couple remained in Canning throughout their sixty-three year marriage. ${ }^{90}$

Gideon Bigelow was the eighth of SIC's initial shareholders. Born twenty-two months after his oldest sibling, Gideon also became a ship builder, albeit not until at least ten years after John, and continued to share this responsibility with his brother in the family business. ${ }^{91}$ When Gideon married Ann Eliza Sarsfield on 16 August, 1871, the thirty-eight year old entered his occupation as "Mechanic." ${ }^{\text {" }}$ Gideon is listed as the

[^48]designer of two vessels and the master builder of a further two between 1874 and 1879;
he also took shares in several vessels. ${ }^{93}$
Nathan Eaton played a pivotal role from soon after SIC's formation, first as its accounts clerk and later as a shareholder in the company. Born 17 April 1860, this final child of Canning merchant Levi and his second wife Sarah was at least a decade younger than most of SIC's founding members. ${ }^{94}$ Nathan appears to have developed the attributes of care and accuracy required of an accountant early. By age twenty he was engaged as a clerk either in his father's conveyancing business or, more likely, at E. Bigelow Sons and $\mathrm{Co} .{ }^{95}$ Nathan also became betrothed to John Bigelow's eldest daughter and the two were married on 21 July 1881, four weeks before Minnie's nineteenth birthday. ${ }^{96}$ Shortly thereafter, Nathan accepted a position as SIC's clerk and the couple relocated to Spencer's Island. This decision contributed greatly to Nathan's future wealth.

[^49]
## The New York Connection

Some Maritimers removed themselves to New York in the second-half of the nineteenth-century to engage in merchant shipping-related activities. There they encountered a group of United States citizens who were already heavily involved in business with Nova Scotia-side Bay of Fundy vessel owners and operators. Mark Shaw was one notable Canadian who resided in New York while J. F. Whitney and Company represented the conduit for a substantial proportion of American interest in the Bay of Fundy's shipping industry.

Mark Shaw was born near Windsor, Nova Scotia, in about 1837 and was a mariner in his early adulthood before leaving the sea to engage in sail-making and ship chandlery. ${ }^{97}$ In about 1864, Shaw relocated to New York and entered into business with American William Simpson. ${ }^{98}$ Simpson \& Shaw operated as a ship chandler, occasional ship broker, commission agent and managing owner, and later established the New York Sailmaking Company. ${ }^{99}$ Shaw fostered his relationships with Nova Scotian mariners

[^50]directly while the partnership developed strong links with one of New York's larger
shipping commission agents, J. F. Whitney and Company, and possibly its predecessor
firm, J. S. Whitney and Company.
Jonathan Stone Whitney and James Frothingham Whitney, the third and fourth sons in the seven child family of Sally Stone and Nathaniel Ruggles Whitney Junior, were born in Watertown, Massachusetts, on 20 April 1811 and 2 March 1813, respectively. ${ }^{100}$ The Whitney and Stone families were amongst those pioneers who arrived in the New World in 1635, and both had established solid financial positions in Massachusetts by the nineteenth-century. ${ }^{101}$ Nathaniel and Sally Whitney provided their children with comfortable, but perhaps not indulgent, upbringings. ${ }^{102}$ Nathaniel had significant land holdings around Watertown, but Elizabeth Rogers Payne suggests that after "Sarah inherited a share of her father's estate ... [the] family moved back to the hills of her rural childhood home" in East Cambridge where Nathaniel became a clerk of the

[^51]Middlesex Courts. ${ }^{103}$ Payne, the biographer of the boys' sister, Anne, describes Nathaniel and Sarah as "upright, [and] interested in all topics of government and reform." 104

Jonathan and James may have grown up with similarly progressive attitudes to those of their parents and siblings Alexander and Anne. Alexander became a high profile civil rights activist during his time as a student at Harvard University; Anne's surviving papers indicate that she was no less enthusiastic about such causes, although her gender meant it was prudent to take a somewhat lower public profile. ${ }^{105}$ Indirect evidence suggests Jonathon and James may have had similar leanings. For example, Anne was sufficiently close to the older brother to move into his home in Brooklyn, New York, for a period following his marriage to Margaret Manning in 1845; this was three years after Alexander's untimely death at the age of thirty-two due to consumption. ${ }^{106}$ In addition, James named his first son Charles Sumner Whitney, which may have been in recognition of Charles Sumner, a leader in the American civil rights movement and a statue of whom Anne completed in one of the final acts of her illustrious career. ${ }^{107}$

[^52]Jonathan and James went into the shipping business after leaving school rather than following Alexander into higher education. ${ }^{108}$ By the time Jonathan married, both brothers were based in New York and Jonathan may have been operating his own shipping house under the name J. S. Whitney Company, ${ }^{109}$ with James rising from the position of clerk to principal around $1850 .{ }^{110}$ In any case, by 1851 , "J. S. Whitney \& Co." was a very active commission agent for ocean-going vessels and the New York Times's "Marine Intelligence" section reports its engagements on forty-nine days in the paper's first full calendar year of publication. ${ }^{111}$ This section of the newspaper recorded the arrivals, clearances, departures and other news about shipping vessels involved in business to and from New York's ports. J. S. Whitney and Company appeared as commission agent for vessels entering or clearing the port at the rate of about forty days per annum into 1861 , with multiple vessels reported some days. ${ }^{112}$ The majority of vessels reportedly acting under the firm's orders were registered at New Brunswick and

[^53]Nova Scotian ports, suggesting that the Whitneys established strong relationships with managing owners and master mariners from the region during the 1850 s. ${ }^{113}$

Jonathan Whitney prospered. In the July 1860 United States Federal Census, the reported value of his real estate reached $\$ 30,000$ and his personal estate $\$ 7,000$, by no means inconsiderable sums, while his family was sufficiently well-off to have four servants in its Essex, New Jersey household. ${ }^{\text {I } 14}$ Jonathan died the following March, a month shy of his thirty-ninth birthday and less than two weeks before the outbreak of the American Civil War. ${ }^{115}$ It appears that brother James quickly took over the reins of control at the commission house which was renamed "J. F. Whitney \& Co." ${ }^{116}$ One or other, or both, of these disruptive events prompted a decline in the firm's activities over the next two years, but operations returned towards the previous decade's levels by 1864. ${ }^{117}$ Confederate privateers harried vessels registered in the northern states during the conflict so J. F. Whitney and Company probably benefited from its high orientation to vessels sailing under the British flag. Numerous American shipowners reflagged their vessels during the war, but this led to complications later when the United States

[^54]Government passed retaliatory legislation against those it saw as acting unpatriotically. J.
F. Whitney and Company's high orientation to British vessels from the outset meant it was better placed than many competitors when new restrictions were imposed on America's merchant marine.

By the 1870s, J. F. Whitney and Company was well established in the transAtlantic petroleum trade utilizing, in large part, vessels from the Bay of Fundy, especially the Upper Bay including Minas Basin. ${ }^{118}$ Nova Scotian deep-sea ships visited New York with increasing frequency in the second half of the century. Frederick William Wallace reports that many engaged in "the North Atlantic trade, carrying deals, grain and refined petroleum to the eastward and returning west with coal, pig or scrap iron, rails or in ballast." ${ }^{119}$ In a precursor to the shipping agent's association with SIC in the 1880 s, two vessels constructed in the Bay were named after senior partners in the business: the barque J. F. Whitney launched from Spencer's Island in 1872 and the Henry Buschman at Advocate Harbour just over twelve months later. ${ }^{120}$

The J. F. Whitney and Company - Spicer family connection began before the construction of J. F. Whitney and was probably established in the former's New York

[^55]offices in 1869 or $1870 .{ }^{121}$ The shipping agent and master mariner George Spicer had certainly forged a commercial relationship by September 1870 . ${ }^{122}$ Over succeeding years this association extended to include Samuel Williams, as well as George's brothers Johnson, Dewis and Edmund Spicer. By the end of the decade the key relationships leading to the formation of the SIC were well entrenched, especially the one between James and George. ${ }^{123}$

Wallace notes that by the 1880 s, J. F. Whitney and Company had very strong ties with the owners and captains of other vessels hailing from the Minas Basin. ${ }^{124}$ While it was not the only New York firm to do so, J. F. Whitney and Company appeared to hold 'pole position':

The oil trade out of New York afforded profitable cargoes to Bluenose ships [from Windsor and the vicinity] in the 'eighties, and it had a good deal to do with the building of ships "up the Bay." New York firms such as J. F. Whitney and Co. were financially interested in the ships built around Windsor, and it was to New York that these ships went to pick up cargoes of barrelled and case oil. The Whitney firm acted as agents for many Bluenose vessels, and their New York office was a sort of rendezvous for Nova Scotiamen. ${ }^{125}$

An indication of the extent of J. F. Whitney and Company's involvement with Nova Scotian vessels can be gained from a survey of the New York Times' "Marine

[^56]Table 2.1: Vessels Under Charter to J. F. Whitney and Company in 1880, as Reported in the New York Times

| Registry Port | No. | Registered <br> Tons | Percent of Total |
| :---: | :---: | :---: | :---: |
| Nova Scotia |  |  |  |
| West Coast |  |  |  |
| Windsor | 32 | 26,165 | 47.0 |
| Maitland | 10 | 9,798 | 17.6 |
| Amherst | 4 | 3,796 | 6.8 |
| Parrsboro | 4 | 1,820 | 3.3 |
| Yarmouth | 2 | 1,451 | 2.6 |
| Truro | 1 | 447 | 0.8 |
|  | 53 | 43,477 | 78.1 |
| Other Nova Scotia |  |  |  |
| Halifax | 9 | 5,898 | 10.6 |
| Pictou | 1 | 574 | 1.0 |
| Lunenburg | 1 | 216 | 0.4 |
|  | 11 | 6,688 | 12.0 |
| TOTAL NOVA SCOTIA | 64 | 50,165 | 90.1 |
| Scotland | 5 | 2,674 | 4.8 |
| Ireland | 1 | 678 | 1.2 |
| England | 1 | 359 | 0.6 |
| Total "British" | 71 | 53,876 | 96.8 |
| Norway | 1 | 693 | 1.2 |
| New York | 1 | 1,080 | 1.9 |
| Total "JF Whitney" vessels | 73 | 55,649 | 100.0 |
| Total Vessels reg. in NS | 2,977 | 550,448 |  |
| Notes: Ports in Atlantic Canada Shipping Project database shown in bold Sources: New York Times 1 January to 31 December 1880; Mystic Seaport Digital Initiative, Ship and Yacht Register List; Keith Matthews, "The Shipping Industry of Atlantic Canada; Themes and Problems," in Ships and Shipbuilding in the North Atlantic Region, eds. Keith Matthews and Gerald Panting, 18. |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Intelligence" section for $1880 .{ }^{126}$ During that year, the paper reports J. F. Whitney and Company as agent for 127 voyages involving seventy-three vessels, of which eighty-eight percent were registered in Nova Scotia and all but two were registered somewhere in the British Empire. ${ }^{127}$ Table 2.1 summarises the vessels chartered by J. F. Whitney and Company in 1880 as reported in the New York Times by port of registry.

In 1880, J. F. Whitney and Company arranged cargoes for vessels with a combined 55,649 registered tons, ninety percent of which hailed from Nova Scotia and together representing 9.1 percent of the province's total registered capacity that year. ${ }^{128}$ The company's influence on upper Bay of Fundy-registered vessels was even greater. For example, over twenty-six percent of vessels registered at the port of Windsor made at least one voyage under orders from J. F. Whitney and Company in 1880. This shipping agent's role in the context of the entire Canadian fleet is also significant. Keith Matthews records that in 1883 at least 554 Canadian vessels with a total 493,139 registered tons engaged in the deep-water trade to the United States, the majority destined for New York. ${ }^{129}$ This amounts to thirty-nine percent of the country's total shipping capacity and J. F. Whitney and Company represented more than a tenth of them.

New York shipping agents' financial interests in these vessels could extend beyond their commissions on the cargoes carried, despite British and American restrictions on ownership, although no historians other than Wallace mention it. This

[^57]thesis reveals that in the ten years to November 1883, United States-based merchants held direct interests in, or mortgages over, some of the shares in twenty-eight percent of the vessels registered at Windsor and all of SIC's square-rigged deep-sea ships - which were registered at Parrsboro. Windsor was the Maritimes' fourth largest port during the 1870s and its registry continued to grow for more than a decade after tonnage at most other ACSP-surveyed ports turned down. In 1888, it became Atlantic Canada's second-largest port after Saint John, New Brunswick. The combination of American capital and a more limited range of alternative investment opportunities for locals may have been two decisive factors in Windsor's, and perhaps all of Minas Basin's, divergent performance during this period. This thesis represents the first investigation into these issues. ${ }^{130}$

Under Britain's merchant shipping legislation, only those persons who were born within the British Empire and who had never taken "an oath of allegiance to a foreign sovereign or state," or who had been "naturalised by or in pursuance of an Act of Parliament of the United Kingdom" could own shares in British vessels. ${ }^{131}$ United States legislation had similar restrictions for American-registered vessels and these were further tightened after the American Civil War in a body of laws which contributed to a relative loss of competitiveness against the ocean going fleets of European nations, by far the

[^58]largest of which was Britain's. ${ }^{132}$ The United States Act required that American vessels "must have been either (1) built within the United States, or (2) captured in war by citizens of the United States, or (3) adjudged to be forfeited for a breach of the law of the United States. ${ }^{1133}$ This was similar to restrictions in British legislation, but the United States further provided that "all the officers ... who have charge of a watch must be citizens,, ${ }^{134}$ and the general terms of employment were less flexible than those for vessels flying the British flag. These requirements together meant that American vessels, already typically more expensive to purchase than Canadian vessels, ${ }^{135}$ were also more costly to operate. This created a legislation-protected commercial opportunity for those who could facilitate American ownership of Canadian vessels.

New Yorkers made loans to registered Canadian owners secured by registered mortgages. Legally, these did not provide the mortgagees control of vessels, but neither did it expose them to any liabilities the vessels incurred. ${ }^{136}$ Furthermore, Benjamin Constant points out that a mortgagee was "always entitled to intervene and give bail in any proceedings which affect his security." ${ }^{137}$ In the event that a mortgagee considered his investment at risk, the law provided that he could take possession and in that event "if he has the authority to act as owner he has, of necessity, authority to enter into all those contracts touching the disposition of the ship, which may be necessary for enabling him

[^59]to get the full value and full benefit out of his property." ${ }^{138}$ Thus, a mortgagee was able to protect his investment from prejudicial actions by ship owners and masters as well as claims from lower ranking creditors in the event a registered shareholder went bankrupt. ${ }^{139}$ Sometimes registered mortgages in favour of foreigners masked their actual interest in the underlying shares. Citizens of countries outside the British Empire could not register ownership in British vessels without risking their flagged status, whilst unregistered shareholdings or mortgages afforded little or no security in the event of financial problems. Consequently, it was prudent for foreigners to register their interests in the form of mortgages whether or not they were bona fide loans or masked direct investments. Both forms appear prevalent for Windsor-registered vessels and SIC's Parrsboro-registered ships. In the latter case, United States citizens took shares but registered their interests through mortgages against stakes officially held by George or Johnson Spicer, or Mark Shaw.

This under-recognized arrangement may have become important for some shipbuilders and owners in the Maritimes as early as the 1850s. It only becomes evident through an even deeper analysis of ship ownership records than the ACSP undertook during its monumental statistical investigation between 1976 and 1982. The ACSP developed a database which included initial ownership details for vessels registered at nine "Atlantic Canadian" ports between 1786 and 1936. ${ }^{140}$ Table 2.2 summarises the

[^60]Table 2.2: Summary of Owners Entries for the Ten Years to 3 November 1883

| Registry | NS | NB | PE | $\begin{aligned} & \text { Oth } \\ & \text { Can } \end{aligned}$ | Can <br> Total | US | Brit | Ire | Oth | Total | $\begin{array}{r} \text { Ppn } \\ \text { US } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Halifax | 896 | 8 | 2 | 24 | 930 | 3 | 8 | 3 | 5 | 949 | 0.3\% |
| Saint |  |  |  |  |  |  |  |  |  |  |  |
| John, NB | 80 | 2,042 |  | 3 | 2,125 | 34 | 40 | 4 | 5 | 2,208 | 1.5\% |
| Pictou | 338 | 2 | 2 | 8 | 350 | 3 | 3 |  |  | 356 | 0.8\% |
| Windsor | 699 | 11 |  |  | 710 | 26 | 3 | 1 |  | 740 | 3.5\% |
| Yarmouth | 1,037 | 3 |  | 4 | 1,044 | 3 | 6 | 3 |  | 1,056 | 0.3\% |
|  | 3,050 | 2,066 | 4 | 39 | 5,159 | 69 | 60 | 11 | 10 | 5,309 | 1.3\% |

Notes: Regions shown: Nova Scotia (NS); New Brunswick (NB); Prince Edward Island (PE); Other Canada (Oth Can); United States of America (US); England, Wales and Scotland (Brit); Ireland (Ire); Other owners including those of unknown residence (Oth); Owners residing in USA as a percentage of total initial owners (Ppn US).
Sources: Data retrieved from Maritime History Archive, "Ships and Seafarers of Atlantic Canada," (St. John's: Memorial University of Newfoundland, 1998), CD.
position for those first registered between 1873 and 1883. By its very nature, initial ownership registration can not reveal significant direct investment in, or other capital support for, Atlantic Canadian shipbuilding by investors who were not citizens of the British Empire. ${ }^{141}$ This requires an investigation of mortgages registered after vessels were entered into the official record books, together with subsequently reported purchases and sales of shares.

Windsor was chosen as a proxy for the Nova Scotia-side Bay of Fundy ports as it is the only one included in the ACSP's database. The decade to 1883 encompasses the peak in new Atlantic Canadian shipping investment and is a time-frame for which

[^61]Windsor's registry record remains virtually complete and relatively accessible. ${ }^{142}$ This period is significant as registered tonnage at Windsor, and perhaps other Nova Scotiaside Bay of Fundy ports, continued to increase through the 1880 s , whereas in the Maritimes overall new investment in, and retention of, vessels fell precipitously. ${ }^{143}$

A review of ACSP's database between 3 November 1873 and 1883 shows initial owners resident in the United States made up 1.5 percent of the ownership entries for Saint John's newly registered vessels and 3.5 percent of the entries for those at Windsor. ${ }^{144}$ The Saint John registry contains more entries for United States-resident owners than does Windsor, but their proportionate significance was far greater for vessels registered at the latter port. United States residents held shares, or mortgages over shares, in forty-eight, or 28.1 percent, of Windsor's 171 newly registered vessels constructed in the ten years to 3 November 1883. Amongst initial ownership lists, two New York residents appear most frequently: Nova Scotian shipbroker Charles W. Bertaux with eight entries and Mark Shaw with six. ${ }^{145}$ Bertaux is not recorded acquiring initial interests in

[^62]any new Atlantic Canadian-registered vessels after 1875, whereas Shaw continued to do so until $1891 .^{146}$

Bertaux was a commission merchant, and like the J. F. Whitney and Company, regularly acted as an agent for British North American and other vessels operating out of New York, although his business was probably only a fraction that of the Whitney Company. ${ }^{147}$ Shaw also bought second-hand shares in Canadian vessels and frequently mortgaged his interests to United States citizens. ${ }^{148}$ In some cases the formal arrangement may merely have been a technique for getting around United States and British ownership restrictions. It appears reasonable to assume that non-interest-bearing and 'nointerest specified' mortgages represented de facto shareholdings by American citizens in the vessels concerned, given the nature of mortgages against SIC vessels analyzed elsewhere in the thesis. ${ }^{149}$ Most mortgages against Windsor-registered vessels bore a reported interest rate, so they were probably bona fide lending arrangements. However, the capital introduced into the region was no less important in supporting shipbuilding and ownership. United States citizens also registered mortgages against shares held by other Canadian owners, most frequently master mariners and shipbuilders. The extent of British and United States resident interests in newly-built vessels first registered at Windsor is summarized in Table 2.3 overleaf.

[^63]Table 2.3: Non-Canadian Residents' Interests in Vessels Registered at Windsor, Ten Years to 3 November 1883


Overall, United States residents were twice as important to the Windsor shipbuilding and owning sector as those of Great Britain, either as a source of capital for shipbuilding or as a market for recently finished vessels. This situation may have been similar in other ports around the Bay of Fundy which were not surveyed by the ACSP and is consistent with Sager with Panting, and Rice's findings that Bay of Fundy and East

Coast Nova Scotians were less reliant on the British market than shipbuilders in Prince Edward Island and around the Northumberland Strait. ${ }^{150}$ In aggregate, United States residents had an effective interest in nine percent of Windsor's newly registered tonnage constructed in the decade to 3 November 1883. More significantly, the high concentration

[^64]of financial interests in certain vessels, suggests these were more than passive portfolio arrangements. United States residents held, or had mortgages over, a quarter or more of the shares in 12.3 percent of Windsor-registered vessels. This ratio may be a more important indicator of American involvement in deep-sea cargo vessels than their proportionate interest in total effective registered tonnage, which includes small coastal and fishing vessels in which they had little involvement. United States-based capital providers' ongoing financial interests were tightly bound to those of Canadian vessel owners and commanders but this situation remains largely unrecognized.

Between 1880 and 1881, three master mariners, one master shipbuilder, a farmertimberlot owner, three merchant shipwrights and a clerk, all from Nova Scotia, came together to form SIC. The new operation built and managed British-registered deep-water ships which participated in the growth in Atlantic commodities trades from a New York home base. Commission agents J. F. Whitney and Company, already strongly positioned with the captains and owners of Nova Scotian vessels, became silent shareholders in SICbuilt ships, but not the company itself. The intertwined financial interests of these men from two nations including their sources of investment for vessel construction formed the basis for a vibrant business enterprise and are dealt with in more detail in Chapters Three and Four.

## Chapter Three:

## Divergent Courses: The Development of SIC's Shipbuilding Operation, 1880-85

The Spencer's Island Company (SIC) was created after British North American ownership in sailing vessels had peaked. ${ }^{1}$ Registered tonnage at Yarmouth and Halifax in Nova Scotia, and Saint John, New Brunswick, declined rapidly from the late 1870s as ship owners liquidated their investments in ocean-going fleets. ${ }^{2}$ Sager with Panting considers that merchants "[appear] to have known in the third quarter of the nineteenth century ... that the shipping industry was doomed to decline or extinction," whilst new investment opportunities ashore abounded. ${ }^{3}$ There is no reason to believe that merchants in these urban ports had access to better maritime intelligence than the Minas Basin's ship owners and master mariners. Yet, during the eleven years from 1880, SIC's partners and their associates increased their maritime investments. The company registered its vessels at Parrsboro, but it is noteworthy that the Minas Basin's major registering port, Windsor, also recorded rising tonnages until 1891, the same year SIC launched its largest

[^65]ship, the Glooscap. ${ }^{4}$ By then, the Minas Basin probably accounted for more than a quarter of Maritime Canada's ocean-going sailing capacity.

This thesis argues that two key factors contributed to the Minas Basin's divergent performance from the Maritimes' norm. Firstly, deep-water shipping's profitability during the 1880 s was sufficient for it to be a viable investment option within a narrow range of 'hands-on' opportunities available to those outside major westward-looking entrepreneurial growth pockets. Secondly, profit distributions from vessels already in operation and American capital together provided the necessary financial resources to build new ships and maintain fleets. The important role these two sources of capital played in Nova Scotia's Minas Basin shipbuilding industry has never been investigated.

The chapter is divided into two main parts. Part One discusses events leading to SIC's formation in 1880. The review reveals the challenging economic times, the pitfalls which heavy investment in shipping could inflict and the measures SIC's members took to mitigate their risks. Part Two introduces the nature of the shipbuilding industry and the reported ownership structure of vessels registered at Windsor between 1873 and 1883. Chapter Two revealed that United States merchants provided nine percent of the total funds invested in shares of Windsor-registered vessels in the decade to $1883 .{ }^{5}$ This chapter intertwines analysis of this cross-border involvement with the occupational structure of registered vessel owners. It then explores the sources of capital for one of

[^66]SIC's first vessels, Stephen D. Horton, from which are drawn some tentative conclusions for the wider realm. New York-based investors represented SIC's single largest capital source for shipbuilding, followed by local mariners and merchants who derived most of their funds for investment from dividends paid on shares in existing vessels. In the Stephen D. Horton's case, local investors relied upon dividends for nearly ninety-five percent of the calls on their collective purses.

## Maritime Fleets and Investment Opportunities

Total tonnages registered at those ports most highly oriented to selling new vessels on the British market and those located in the major urban centres of Halifax and Saint John, New Brunswick, were all in decline by $1877 .{ }^{6}$ Meanwhile, shipbuilding and vessel retention continued apace along the Nova Scotia-side of the Bay of Fundy into the late 1880s. The Atlantic Canada Shipping Project (ACSP) reports that tonnage at this region's largest registering port, Windsor, peaked in 1891. ${ }^{7}$ All SIC's vessels were registered at Parrsboro, one of several ports in the region ACSP did not include in its monumental investigation into Atlantic Canada's nineteenth-century merchant marine. However, the SIC-managed fleet size performed more in tandem with fellow Minas Basin port Windsor than those elsewhere in the Maritimes. Given this region's socioeconomic inter-connectedness, it appears reasonable to assume that several other registries, such as Maitland, also recorded trends more in tune with Windsor than Halifax,

[^67]Yarmouth or Saint John. Minas Basin's combined registered tonnage was second only to Saint John by the end of the 1880 s, having continued to increase for more than a decade beyond the peak for any registry in ACSP's database other than Windsor. ${ }^{8}$ This finding does not detract from Sager with Panting's extensive investigations into what transpired at the other ports. ${ }^{9}$ Entrepreneurs there appear to have had access to a great range of alternative investments which they pursued with limited capital resources and increasing vigour after the Macdonald Government introduced its National Policy in 1879.

The Maritimes' entrepreneurs may have had an increasing preference for the apparently greater certainty of profits to be gained through new land-based industrial ventures protected by domestic tariffs under the National Policy, especially when contrasted with the highly competitive and volatile international freight markets. Sager with Panting points out that the urban merchant-shipowners were not tied to maritime ventures and they diversified their investment portfolios through a "gradual movement of capital from maritime to landward enterprise. ${ }^{10}$ In contrast, shipbuilding was the only large-scale option in some coastal regions such as Minas Basin's north-western shore. It offered hard-cash-paying employment to many, while vessel ownership continued to

[^68]offer considerable prospective returns. ${ }^{11}$ Freight rates deteriorated in the latter decades of the nineteenth-century, but this occurred in a number of step-changes rather than as a steady trend. Furthermore, a number of scholars provide evidence that during the 1870s and 1880 s, many ship owners achieved good profits and some continued to derive economic rents from their fleets for at least part of this period. ${ }^{12}$ The Norwegians and Finns also appeared to consider shipping a viable long term business and continued to expand their deep-water fleets throughout the second half of the nineteenth-century, adding both new vessels and second-hand ones, some of which were bought from Canadian shareholders. ${ }^{13}$ Chapter Four investigates profitability in more detail.

Nova Scotians laboured under generally difficult economic circumstances during most of the nineteenth-century's final four decades. Cash was a relatively scarce commodity in rural areas. Outside the major urban regions, local economies operated on the largely pre-industrial system of barter and credit and were usually oriented around local store-owners. Furthermore, many Atlantic nations were in the grip of price deflation and challenging business conditions now referred to as "the Long Depression." ${ }^{14}$ From 1871 to 1896 , the general price level declined 0.4 per cent per annum in Canada and per

[^69]capita real incomes fell more years than they rose in the two decades to $1895 .{ }^{15}$ In this context, the fall in some freight rates during the first half of the 1880s appear less severe. Declines in the cost of supplies for vessel construction and provisions for general consumption partially offset their impact on the relative financial position of new investors and their shipbuilding workforces.

## Events Leading to the Company's Formation

The SIC was formed to fill a commercial vacuum created after Spencer's Island's sole storekeeping and shipbuilding partnership failed in 1879 . That enterprise had been a mainstay of the local economy from the 1840s when Canning's Daniel Cox opened the first store at Spencer's Island; it was reportedly the only store "between Parrsboro and Joggins Mines." ${ }^{16}$ Within a few years, Cox's brother-in-law, William Henry Payzant, joined him as a partner, with William Henry Bigelow adding his resources around $1860 .{ }^{17}$

Cox later sold out, leaving the partnership operating under the name "Payzant \&
Bigelow." ${ }^{18}$ William Payzant and Henry Bigelow ramped up their business activities at

[^70]'the Island,' especially in terms of shipbuilding and ownership. Three vessels were built during the 1860 s with a total combined tonnage of 1,032 tons before the 701 ton J. F. Whitney slid down the skids to begin its long and highly profitable life in $1872 .{ }^{19}$ Over the next seven years, Payzant and Bigelow arranged for the construction of another three vessels, each more than 1,200 tons, the largest being the 1,406 ton Athlon which was completed in $1879 .{ }^{20}$ The partners' ambitions exceeded their financial capacity and Payzant and Bigelow ran into severe cash flow problems by August 1878.

The merchants retained twenty-four of the sixty-four shares in the 1,283 ton Calcutta, which was completed in August 1876, and a sixteen share interest in the 1,309 ton Servia launched on 17 July 1878. ${ }^{21}$ By then, the construction of, and cash demands for, the Athlon were probably in full swing. Just a month after launching the Servia, Payzant and Bigelow sold their entire interest in the vessel to Halifax merchant William Epsom. ${ }^{22}$ In January 1879, the storekeepers raised a $\$ 14,000$ mortgage from merchants George J. Troop and William Dimock, of Halifax and Windsor respectively, to meet continued calls on their combined purses. ${ }^{23}$ This did not sufficiently alleviate the

[^71]partners' parlous financial state and a month later they were adjudged bankrupt. ${ }^{24}$ The
Official Assignee, Barry W. Baker, took control of the firm and partners' personal assets, as well as the partially completed Athlon. ${ }^{25}$

The creditors' list included the Commercial Bank of Windsor, which held a \$15,000 commercial note, British-based ship outfitters and metal wholesalers Black Brothers and Company, owed $\$ 4,000$, New York shipping commission agents J. F. Whitney and Company, owed $\$ 2,729$, Athlon's master builder Amasa Loomer, Captain Samuel Williams, several members of the Spicer family and a number of local sailors and tradesmen. ${ }^{26}$ Some of the creditors were probably investors in, or suppliers to, the unfinished vessel but they had no greater recourse than any of the partnership's other unsecured creditors. This was also true for foreign providers of capital for the unfinished ship who sometimes masked their direct investments by registered mortgages. This legislated form of security could not be applied until after vessels were launched and recorded at the shipping registrar's office, following which the foreigners' interests could also be entered. As discussed in Chapter Two, registered mortgages protected foreign

[^72]financiers' investments, without risking the flagged status of the vessels in which they held interests.

In total, Payzant and Bigelow owed over $\$ 55,000$, or about $\$ 1.05$ million in current-day (2008) dollars, although there would have been a multitude of debtor accounts comprising outstanding shop balances against various Spencer's Island households for goods sold on credit to partially offset this sum. ${ }^{27}$ Given their close personal and business relations, some of the creditors may have discussed options for future shipbuilding at Spencer's Island. Locals would also have been concerned to minimize negative financial impacts on the community arising from the failure of its biggest enterprise. Large ships generally took fifteen to twenty months to complete, leaving capital providers without any form of security during construction, so perceptions of creditworthiness were critical to ongoing operation.

Official assignee Baker looked for an avenue to maximize realizations for the creditors in a difficult economic environment, whilst also dealing with the outfit costs for the unfinished Athlon. ${ }^{28}$ The ship was eventually completed in mid-December 1879, giving it the unusual attribute of being launched in winter, and on Christmas Eve the Windsor Shipping Registrar recorded its sale to prominent Canning shipowner David M.

[^73]Dickie. ${ }^{29}$ Eight months later, Baker also sold the bankrupts' assets to Dickie for one dollar provided that he pay creditors sixty-two cents in the dollar in four equal bi-annual instalments beginning in November that year. ${ }^{30}$ Dickie liquidated peripheral assets to meet his commitments. He sold Henry Bigelow's house back to him, but the store may have become separately titled about this time. ${ }^{31}$ Either way, Canning-based merchants and shipbuilders, E. Bigelow Sons \& Co., took control of the store business and employed Henry to manage its day-to-day operations. ${ }^{32}$ A separate "Spencers Island Comp[an]y" existed by March 1880, probably formed to undertake shipbuilding activities at the Island, and the following year it acquired the storekeeping business. ${ }^{33}$

An article on Spencer's Island in The Parrsboro Leader in April 1901, reports that the SIC was "[e]stablished in 1880 and doing a large shipbuilding and general merchandize business it soon rose to be the builder of the largest vessels in the Province. ${ }^{34}$ The article's author relied heavily on an interview with Johnson Spicer during which he suggested the first vessel the SIC built was the 1,317 ton ship $E . J$.

[^74]Spicer, launched on 17 October $1880 .{ }^{35}$ However, the Parrsboro Shipping Registrar recorded Amasa Loomer as the ship's master-builder in contrast to later efforts for which the SIC is entered as the builder. ${ }^{36}$ Johnson's recollection also conflicts with Bigelow family records which report the Canning-based merchants as the Spicer's managerbuilder. ${ }^{37}$ E. J. Spicer's ownership structure and operation have several similar characteristics to those of later ships officially recorded as SIC vessels, including the substantial involvement of American interests. ${ }^{38}$ However, the surviving SIC shipbuilding accounts uncovered during research for this thesis do not begin until April 1881, and prior to 1883 Canning-based E. Bigelow Sons \& Co. managed Spencer's Island vessels captained by SIC shareholders. ${ }^{39}$ In contrast, those vessels which can be confirmed as being built by the SIC appear in the company's surviving financial records. These were officially managed by George or Johnson Spicer with effective operation achieved through sharing arrangements between the Spencer's Island-based SIC shareholders and New York's J. F. Whitney and Company. ${ }^{40}$ Stanley T. Spicer probably

[^75]provides the best portrayal, suggesting that E. J. Spicer was "a cooperative venture" during a transitional, ${ }^{41}$ or pre-merger, phase.

In the early 1880 s, nearly a quarter of Spencer's Island residents with a listed occupation went to sea and more than that fraction were carpenters or other tradesmen whose primary source of income was shipbuilding. ${ }^{42}$ In addition, timber represented a significant source of revenue for the hamlet's land owners. The shipyard required specific performance criteria from the wood it used in vessel construction, so only some was sourced locally although this still represented a substantial business opportunity. Farmers logged their stands selectively to meet the master builder's requirements and timber accepted at the yard probably afforded the greatest profit margins. They also sought to supply completed vessels with timber for carriage to Britain on their maiden voyages. ${ }^{43}$ Timber exports, seafaring wages and other revenues brought in by seafaring and shipbuilding-related activities were mainstays of the local economy. Skilled workers plied their trades around the Bay of Fundy, but it is reasonable to believe that they preferred work close to their homes and families. Furthermore, nearly a fifth of adult

[^76]males in Spencer's Island's forty-three households owned shares in seagoing vessels. ${ }^{44}$ Thus, Spencer's Island's ongoing economic well-being was inexorably tied to shipbuilding and subsequent operation in the latter part of the nineteenth-century.

The negotiations leading to SIC's creation remain unknown, but a careful appraisal of the surrounding circumstances and the attributes of those involved results in a hypothesis that fits the known facts. Payazant and Bigelow's collapse in 1879 represented a major calamity. Risk management was the paramount problem, not the returns from shipping, although these were highly variable. The industry still appeared to produce satisfactory economic returns over time, but investors' confidence in Spencer's Island's shipbuilding management was seriously undermined by Payzant \& Bigelow's failure. The general store, central to economic activity in the community, continued operating without major disruption under the oversight of E. Bigelow Sons \& Co. However, Payzant and Bigelow's collapse may have prompted many to question the store's suitability as consolidator of, and depository for, local financial capital on an unsecured basis. These factors could potentially have resulted in a credit squeeze, the implications of which are all too familiar in many western countries in 2008. Stronger financial controls, more diversified or reliable sources of capital and the close involvement of trusted local businessmen were essential in order to re-establish confidence in storekeeping and shipbuilding management, and to restore the flow of capital for further shipbuilding activities. Spencer's Island's master mariners, supported by New York-based ship brokers and commission agents J. F. Whitney and Company,

[^77]stepped into the breach when shipbuilding at the hamlet might otherwise have ground to a halt. ${ }^{45}$

Spencer's Island's four sea captains operated British North American-registered vessels from a New York base and they principally carried bulk commodities between the United States and Europe. ${ }^{46}$ By 1880, its three most experienced master mariners George and Johnson Spicer and Samuel Williams - had a cumulative thirty-seven years at the helms of ocean-going transporters. ${ }^{47}$ In their shipmaster roles, they managed the vessels under their command for the owners, including dealings with shipping agents in each of the international ports they travelled to. ${ }^{48}$ One such group was New York-based J. F. Whitney and Company. ${ }^{49}$ Its predecessor firm had established agency interests with numerous ocean-going vessels built around the Bay of Fundy during the 1850s, and a decade later the company was also providing capital for shipbuilding in the region. ${ }^{50}$

[^78]J. F. Whitney and Company become interested in taking direct stakes in some of
the vessels whose cargoes it was arranging about the time Frederick William Wallace records that " $[t]$ he discovery of oil in Pennsylvania gave a great impetus to the ocean carrying trade. ${ }^{, 51}$ American merchants seeking to capitalize on this business sought a source of well-built, competitively priced, cargo vessels and the Bay of Fundy shipbuilders were an obvious target. Enterprising Canadians based in New York also played an important role in the development of American financial backing for the Bay of Fundy shipbuilding industry from the 1870 s. One such entrepreneur was Mark Shaw, a Nova Scotia-born, New York-based ship chandler. ${ }^{52}$ Shaw frequently appears on the Windsor register of vessel owners, and his shares were often mortgaged to American merchants. ${ }^{53}$ Whether Shaw acted on his own account utilizing bona-fide third party loans, or as the 'front-man' for American investors, is unclear as many mortgages specify a fixed interest rate. ${ }^{54}$ Whatever the case, the American financiers facilitated a greater involvement in the trans-Atlantic cargo business utilizing Canadian-built vessels. The men who appeared on the registry files as mortgage holders became integrally involved

[^79]with the fortunes of many Bay of Fundy shipbuilders and seafarers over the next twenty years. J. F. Whitney and Company's partners and employees were probably amongst the most important of these connections: Frederick William Wallace notes that, "New York firms such as J. F. Whitney and Co. were financially interested in the ships built around Windsor."55
J. F. Whitney and Company's senior partners James Frothingham Whitney and Henry Buschman may have taken direct stakes, or other financial interests, in two vessels named after them. If so, they hid these through informal arrangements rather than taking the form of registered mortgages over shares in the vessels as they did later. ${ }^{56}$ The firm's two senior members also had numerous dealings with the two oldest Spicer brothers, George and Johnson, along with their brother-in-law, Samuel Williams, during the 1870s. By 1880, the Whitney Company's principals and Spencer's Island-based master mariners had developed a good rapport, laying a sound foundation for a more integrated business association. ${ }^{57}$

[^80]The catalyst for SIC's formation as "Shipbuilders \& Dealers in Timber, Ship Chandlery and General Merchandise," ${ }^{58}$ and ongoing managers of the vessels the company built for their owners was the gap opened up by Payzant and Bigelow's failure. The first steps were probably the creation of a Spencer's Island shipbuilding company in 1880 while E. Bigelow Sons \& Co. managed the local store autonomously. During the following year, the key parties decided to merge these two entities and, with the benefit of hindsight, we can assess the nature of SIC's business model. Its operations would be horizontally integrated but vertically oriented, utilizing locally available wood materials and skilled labour as well as international supplier-markets and multi-national capital sources. Business success depended on intensive cash-flow management, sustained investor confidence, and optimization of the value-for-money equation, to avoid the pitfalls so vividly laid bare by recent events. The SIC did not, itself, own raw materials or make any substantial capital commitments in the ships it built, and vessel ownership was spread widely amongst reputable investors. ${ }^{59}$ The store's relatively consistent incomestream helped support the shipbuilding operations. It was the most significant stable, year-round, cash-earning operation for more than twenty miles in either direction along the Parrsborough coast and enabled many of the workers to be paid by crediting their accounts rather than in cash.

Church: 1892-1992 (Hantsport: Lancelot Press, 1992), 19-20. Members of J. F. Whitney and Company contributed $\$ 85.00$ of the total of $\$ 909.57$ for the church's construction and other New Yorkers $\$ 72.00$. In addition, Captains Spicer and Williams together contributed a total of $\$ 350.00$ and other seafarers, including "Sailors on Board [Johnson's Ship] 'Servia"" $\$ 87.00$, all of which provide an indication of the economic importance of seafaring related activities to community development.
${ }^{58}$ Grant private collection, Letterhead of the Spencer's Island Company.
${ }^{59}$ It is noted that, Grant private collection, SIC Shipbuilding Journal, "Capital", 400, contains entries relating to George T. Hay and Glooscap suggesting the company's shareholders acted as underwriters taking up shares when there was a shortfall. Further investigation of the company accounts is required to determine whether or not this was the case.

SIC's shareholders provided a mix of overlapping and complementary attributes as well as financial resources. ${ }^{60}$ Master mariners George and Johnson Spicer, and Samuel Williams, gained access to international capital through their New York contacts, especially within J. F. Whitney and Company, and offered ongoing operating management of ships post-launch. Amasa Loomer, already the ship designer and foreman at the Spencer's Island shipyard, became the firm's head of vessel construction. ${ }^{61}$ John and Gideon Bigelow supplemented the shipbuilding capability from across the Basin and were very active in procurement in the early years. The two Canning-based Bigelows, together with Henry Bigelow, brought storekeeping and general merchandising expertise, attention to day-to-day cash management and accounting skills. These capacities were enhanced when John's son-in-law, Nathan Eaton, was engaged as SIC's accounts clerk. John Bigelow appears to have been very focused on financial detail in his general business dealings, and he may have insisted on Nathan for this position in the combined venture. On the supply-side, Robert Spicer ensured access to some of the best local wood supplies. Two of Spencer's Island's largest woodlot owners were George and Johnson's father, Jacob, and Robert's father, Isaac, who died in 1880, leaving his eldest son temporarily in control of a vital timbered tract.

[^81]The various parts of the puzzle came together during 1881. As the year drew to a close, Gideon and John Bigelow wrote to Samuel Williams, the only master mariner SIC shareholder at home at the time:

> I don't advise getting too much [stock for the store] till Spring and also about getting some people getting timber. Those that want to work in their shares should be seen and give them all the chances possible. What do you propose naming the company. My choice is Messrs. Spicers and Company, for shortness and in honor of the place ... I propose after a time, at least, to have all the vessels that belong there managed there. Cannot see why a business conducted rightly at the island cannot be carried on to profit. ${ }^{62}$

Nathan and Minnie Eaton relocated to Spencer's Island about the time he undertook the stocktaking which revealed $\$ 1,325$ inventory and $\$ 1,191$ accounts due from store customers. ${ }^{63}$ These were transferred to SIC, with credit accounts established for E. Bigelow Sons and Co. and Henry Bigelow. ${ }^{64}$ The accounting entries are dated 20 December, 1881 which is the probable date for the merging of the shipbuilding and storekeeping operations under the SIC banner. The new business operated while most of the mariner shareholders were at sea, or in foreign port towns, so it was frequently necessary to make decisions in the absence of formal documentation. The company's seafaring members relied upon others at Spencer's Island to act in their best interests while they were away, just as those at home trusted the captains to secure good cargoes

[^82]and operate their vessels most effectively at sea. ${ }^{65}$ An example of the complications faced arose when it took four months to gather all the signatures needed to complete the legal deeds establishing the company. ${ }^{66}$ The flurry of correspondence associated with this indicates both the importance of letter-based communications and the high levels of trust between partners which were essential for effective operation.

## The Nature of the Shipbuilding Industry

Shipbuilding enterprises represented some of the largest commercial concerns in the upper Bay of Fundy during the nineteenth-century although this did not mean that they were big by modern-day industrial standards. ${ }^{67}$ In addition, they were seasonal which meant that different aspects of the construction process were undertaken at various times of the year. For example, farmers extracted timber from their tree lots in the winter months leaving it to season until the spring thaw when milling commenced. Shipyards only became a hive of activity from the late spring. ${ }^{68}$ Men from around the Basin sought

[^83]employment in the shipyards, with the most specialized tradesmen moving from yard to yard as they gained new contracts. During the busiest phases, the worker influx swelled local communities. These workers paid to board nearby and deployed a portion of their wages to purchase provisions from the local storekeeper and farmers.

Some timber for vessel construction came from farms close to the shipyard but the master builder required a variety of characteristics from wooden construction materials and made his timber selections from suppliers throughout the Basin and further afield. ${ }^{69}$ Meanwhile, manufacturers shipped materials from as far away as Britain. Shipbuilders typically paid for their widely sourced supplies by issuing short dated commercial notes, the terms of which depended on their credit reputations. Some notes rolled over at maturity but, in the SIC's case, most were redeemed for cash derived by making capital calls on those who signed up to take shares in vessels under construction. SIC made calls progressively as construction proceeded and the bills flowed in rather than getting all the money up front. ${ }^{70}$ There appear to have been two main reasons for SIC's strategy of "building on the bills," as T. \& E. Kenny termed it. ${ }^{71}$ Firstly, local investors relied heavily on dividends from existing vessels and share sales, as well as wages and salaries, so they preferred to pay over time. Secondly, the New York investors had no security until the vessels were completed and mortgages could be registered over shares, so they probably preferred to defer sending capital until the funds were actually needed. This approach, and the risks associated with phased calls, made it all the more important to select financially robust investors on the basis of their ability to meet such

[^84]demands. Still, defaults and withdrawals could occur, imposing an additional burden on remaining shareholders.

The typical structure of commercial inflows for construction materials, labour, provisions and capital is represented in Figure 3.1 overleaf; this is inspired by those Graeme Wynn produced in his monograph on New Brunswick's timber trade in the early nineteenth-century. ${ }^{72}$ Everything revolved around the shipyard, which was usually controlled by a master builder, who was, in turn, supported by somebody skilled in accounting. Alternatively, a local merchant, farmer-gentleman, or other shareholders' appointee might manage the overall operations and capital flows whilst employing a master builder to oversee actual construction. Shareholders' roles, or at least their reported occupations, could be interchangeable from one project to the next. Particular individuals were variously listed in registry records as "merchant," "shipwright," or "master builder," or some other title, perhaps at the behest of the individuals themselves as their business activities evolved over time. ${ }^{73}$ Investors also recorded varying occupations in local business registries. For example, farmer brothers Jacob and Isaac Spicer were entered as ship-owners in McAlpine's Nova Scotia Directory, 1868-69, and as farmers when two locally built vessels were registered in 1865 and $1872 .^{74}$ Investors,

[^85]0000 (

or scribes, may have listed occupations based on perceptions of their relative involvement in the vessel concerned, shipbuilding's importance to their own activities, their position within the community or, merely, momentary whim. Whatever the case, researchers utilizing data-based analyses of registry records should be careful not to place too strict an interpretation on reported occupational groupings in light of this fluidity.

Local and regional storekeepers played important roles in the shipbuilding process, whether or not they were actually managers or shareholders in a new shipbuilding enterprise. In many respects, the storekeeper was a de facto mini-bank, acting as a depository for wages and dividends, providing credit for provisions and acting as the middleman sourcing construction materials and finished goods for the vessel under construction. The storekeeper, or his clerk, might also provide accounting services to the shipbuilder, receiving and paying invoices and making disbursements to workers. Stanley T. Spicer points out that many workers wanted their wages in cash, ${ }^{75}$ but others were prepared to accept store credit. With banking facilities generally few and far between along the Parrsborough coastline, shipbuilders needed to carry or have access to large quantities of cash. ${ }^{76}$

The SIC combined the roles of shipbuilder and storekeeper, as did E. Bigelow Sons \& Co., of Canning on the Minas Basin's opposite shore. This approach appears to have been relatively common in the region and represents another form of business pluralism which features in the work of scholars such as Steven Maynard, Daniel Samson

County, 12 February 2007. See record for 365 ton brig Albert Dewis, registered in 1865, and 701 ton barque J. F. Whitney, 1872.
${ }^{75}$ Stanley T. Spicer, Masters of Sail, 128.
${ }^{76}$ Ibid.
and Leonore Davidoff and Catherine Hall. ${ }^{77}$ Mercantile pluralism increasingly gave way to specialization as economic regions industrialized and internationalized, but in some rural areas this business approach remained a central feature into the twentieth-century. It continues to be utilized in the modern era by some corporations as an effective form of operational diversification with banking arms providing more ready access to financial capital to support core operational cash flows. ${ }^{78}$ The evidence this thesis uncovers strongly suggests SIC's members were cognizant of both benefits.

If shipbuilders or local merchants had their own sawmilling operation, they would be supplied with unprocessed logs from nearby farmer-woodlot owners. Most timber from more distant sources was partially processed before being transported to the shipyard while specialist items such as masts usually arrived in finished form. Local treelot owners typically received cash or credit for the timber although some took shares in new ships as partial payment. The local storekeeper also made bulk orders for provisions through merchant-wholesalers, and they too might become shareholders in vessels being constructed, with the goods supplied representing partial payment. Halifax-based T. \& E. Kenny and Company (T. \& E. Kenny), for example, took this tack. ${ }^{79}$ Any storekeeper who sought goods in bulk to supply construction workers represented high volume business with a good profit margin and may also have enabled wholesalers to gain better

[^86]terms from their suppliers. ${ }^{80}$ The shipbuilder also sourced manufactured items from producers directly or through materials agents where this was more practical, which was usually the case when these were being supplied from as far away as Britain.

Shipbuilders were most likely to use agents when it came to the vessel outfit. This expense could be considerable, sometimes representing as much as a quarter of the vessel's final cost. ${ }^{81}$

SIC derived the funds to pay for goods and labour employed during construction from its own storekeeping operations and four major outside sources: local merchants; mariners and gentlemen; more distant merchants within Atlantic Canada, Britain or foreign countries; and current account financing for the outfit. An outfitter such as Britain-based John Black Brothers and Company also acted as a commission agent. When it expected to be arranging Britain-side cargoes for the vessels, it might offer to finance the outfit cost at an appropriate interest rate, taking repayments and interest out of the profits of early voyages until the debt was paid down. In the case of SIC vessels, it appears that J. F. Whitney and Company usually sought to take over this financing role after launch date. ${ }^{82}$

Richard Rice reports that British North American shipbuilding entered its most productive phase around 1850 and those regions which were to become the provinces of

[^87]Quebec, New Brunswick, Prince Edward Island and Nova Scotia reached new peaks in the late 1850 s and then again in the early $1860 \mathrm{~s} .{ }^{83}$ The level of shipbuilding activity from year to year was highly volatile and could quadruple or quarter within a few years, but the underlying uptrend was broken in all but Nova Scotia by $1864 .{ }^{84}$ This exceptional province saw a final spike in activity beginning in 1870 which took it to the top of British North American shipbuilding tables for almost the first time and continued to about 1876, although its builders remained more active than those in other provinces through to the end of the nineteenth-century. ${ }^{85}$ The earlier uptrend in shipbuilding coincided with an increase in vessel ownership within British North America, a circumstance which was extensively investigated by Eric W. Sager with Gerald Panting in Maritime Capital. ${ }^{86}$

The aggregate registered tonnage of vessels at major Atlantic Canadian ports in the ACSP database peaked in 1879 although peak years varied widely, with the downturn beginning in Halifax first, in 1874, and Windsor last, in $1892 .{ }^{87}$ The factors driving Windsor-based ship builders and owners during the period from 1874 to 1892 are central to understanding why its operators acted so differently during this period and how this might be applicable to the Minas Basin more generally. ${ }^{88}$ As previously noted, Sager with Panting placed most emphasis on the three ports which were the Maritimes' largest

[^88]during the 1860s and 1870 s - Saint John, Yarmouth and Halifax. ${ }^{89}$ To round out the picture, this chapter provides a preliminary analysis of Windsor. ACSP collected detailed data on Windsor, as it did with other major Atlantic Canadian ports, but the only Windsor-specific article its members published was on the crews of vessels registered there. ${ }^{90}$ Furthermore, if a regional approach is taken, rather than one based simply on major registries, the upper Bay of Fundy stands out as the unexplained exception to the norm despite its significance. This region probably accounted for more than a quarter of the Maritimes' registered tonnage in the early 1890s. Windsor's socio-economic similarities with other ports in Minas Basin are sufficiently strong to contend that trends at this port can be extrapolated more widely.

## The Port of Windsor and Upper Bay of Fundy

The upper Bay of Fundy was probably Nova Scotia's most productive shipbuilding region during the latter half of the nineteenth-century. ${ }^{91}$ A snapshot is provided by Richard Rice who finds that it built nearly a quarter of the province's vessels

[^89]in $1865 .{ }^{92}$ Shipbuilding centres were dotted along the coastline and included Windsor, Parrsboro, Maitland, Truro, Hantsport, Canning, Kingsport, Port Greville, Advocate and Spencer's Island; the first two being more important as ports of registry than actual vessel construction. ${ }^{93}$ Windsor was the only one of these ports to be included in ACSP's database, but the others likely accounted for a substantial proportion of the nearly twenty percent difference between ACSP figures for Atlantic Canadian registered vessels and the Official Board of Trade Annual Lists of Shipping during the 1870s. ${ }^{94}$ This differential increased as Maritime Canada's total registered tonnage declined over the nineteenthcentury's last two decades; ocean-going tonnage registered at other 'Upper Bay' ports probably followed a similar path to Windsor's through the 1880s and into the next decade. If so, the increasing proportion of the Maritimes' total tonnage registered at these ports dilutes the veracity of ACSP-based explanations for the decline in Atlantic Canada's merchant marine. ${ }^{95}$ It is beyond the scope of this thesis to replicate an ACSPtype detailed analysis of these additional ports but it appears reasonable to suppose that other ports in the Upper Bay were subject to dynamics similar to those for Windsor

[^90]which is analysed later in this chapter. The evolution of SIC's Parrsboro-registered fleet is consistent with this portrayal.

Gwendolyn Vaughan Shand provides evidence that small vessels were built in and around Windsor from the second-half of the eighteenth-century, but the registry records prior to 1817 have been lost. ${ }^{96}$ Between 1818 and 1830, small shipyards "in or very near Windsor" built at least twenty-nine schooners, mostly for the coastal trade. ${ }^{97}$ Thereafter, shipbuilding grew to become a dominant factor in the Windsor economy. ${ }^{98}$

Stanley T. Spicer suggests that this new phase was initiated by two men who "were determined to follow Yarmouth and make Windsor another major shipbuilding centre" during the 1830 s , and this claim is taken at face value. ${ }^{99}$ Others followed suit and by 1874, registered tonnage at the port reached 80,000 tons, nearly ten percent of the total for the Maritimes. ${ }^{100}$ Table 3.1 is based on ACSP data and shows the composition of initial ownership of Windsor registered vessels in the decade to 3 November 1883 by listed occupation and residence.

The most important determinants of who invested in Windsor-registered vessels were probably local knowledge and personal associations rather than cross-province

[^91]Table 3.1: Occupation and Location of Initial Owners of Newly-Constructed Vessels First Registered at Windsor, Ten Years to 3 November, 1883

| Location | Hants County | Annap County | Kings County | Colch \& Cum | Halifax County | Other Can | Brit <br> \& Ire | United States | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Occupation |  |  |  |  |  |  |  |  |  |
| Merchant | 17,163 | 10,160 | 2,326 | 2,442 | 8,932 | 709 | 128 | 4,007 | 45,867 |
| Shipowner | 2,076 | 5,963 | 60 | 159 | 238 |  |  | 190 | 8,686 |
| Shipbuilder | 10,710 | 5,376 | 4,372 | 378 | 682 |  | 55 | 221 | 21,794 |
| Mariner | 22,618 | 1,759 | 571 | 628 | 743 | 168 | 272 |  | 26,759 |
| Tradesmen Farmer/ | 2,627 | 218 |  | 340 | 92 |  |  | 70 | 3,347 |
| Planter | 1,171 | 342 | 61 | 578 | 28 | 104 |  | 40 | 2,324 |
| Professional | 1,097 | 267 | 803 |  | 102 | 18 |  |  | 2,287 |
| Other | 1,988 | 145 | 636 | 20 | 175 | 65 |  |  | 3,029 |
|  | 59,450 | 24,230 | 8,829 | 2.4,545 | 10,992 | 1,064 | 455 | 4,528 | 114,093 |

Notes: Some locations are abbreviated as follows: Annapolis County (Annap County); Colchester and Cumberland Counties (Colch \& Cum); Other regions of Canada (Other Can); Great Britain and Ireland (Brit \& Ire).
Sources: Maritime History Archive, Ships and Seafarers of Atlantic Canada
(St. John's, Memorial University of Newfoundland, 1998).
occupational groupings. Merchants, mariners, shipwrights and gentlemen in and around the Annapolis Valley, which adjoined the Bay of Fundy, registered as the largest capital providers. These four occupational groups accounted for about seventy-three percent of newly registered tonnage between 1873 and 1883. Overall, the residents of Hants, Annapolis and Kings Counties appear as initial owners of eighty-one percent of the registered tonnage. ${ }^{101}$ This local orientation overwhelms merchants and shipbuilders as occupational classes generally, wherever they resided. The 'within local reach' higher occupational groups accounted for less than forty-eight percent of the total despite their

[^92]Table 3.2: Initial Owners' Percentage Interest in Windsor Vessels First Registered in the Ten Years to 3 November 1883, by Occupation and Location

| Location | HAK | C\&C | Halifax | NB/ NS | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Occupation |  |  |  |  |  |  |
| Merchant | 26 | 2 | 8 | 1 | 4 | 40 |
| Shipowner (incl Co.) | 7 | 0 | 0 |  | 0 | 8 |
| Shipbuilder | 18 | 0 | 1 |  | 0 | 19 |
| Mariner | 22 | 1 | 1 | 0 | 0 | 24 |
| Trades- Mar \& Non Mar. | 3 | 0 | 0 |  | 0 | 3 |
| Farmer Planter | 1 | 1 | 0 | 0 | 0 | 2 |
| Other | 4 | 0 | 0 | 0 |  | 5 |
| Total | 81 | 4 | 10 | 1 | 4 | 100 |

Notes. Abbreviations used in the table as as follws: Hants, Annapolis and Kings counties
(HAK); Cumberland and Colchester counties (C\&C); New Brunswick and other Nova Scotian counties (NB/NS); Other regions (Other).
Source: Maritime History Archive, Ships and Seafarers of Atlantic Canada, 1998, CD disk.
likely having the greatest personal capital resources. Table 3.2 provides a summary of the proportionate interests of various occupational and geographic groupings.

There appear to be five significant factors behind why so many non-urban businessmen and farmers were registered as such large investors in sailing vessels despite the Long Depression's continuation and generally tight liquidity conditions. Firstly, dividends from already-owned vessels represented a major source of incoming cash, although this was highly variable from voyage to voyage, and year to year. Secondly, skilled tradesmen, timber suppliers and master shipbuilders elected to take shares in partpayment for goods and services during construction. Thirdly, master mariners derived their salaries in cash, generally United States dollars or British pounds, and may have preferred to invest their savings into enterprises they knew well and could influence,
particularly if they expected to be at the helm. ${ }^{102}$ Fourthly, through most of this period it appears that relatively few other investments in the locality offered such potentially high, albeit risky, rewards. Some business-people who owned shares in existing vessels sought mortgage finance in order to increase their overall exposure to the industry suggesting they anticipated economic rents through increased ownership; others liquidated a portion of their portfolios to release funds for new investments. Fifthly, the initial register shareholdings do not take account of foreign investors' roles through bona-fide registered mortgages or masked direct investments, which are only revealed by analyzing registry records in the months and years after vessels' initial registration.

Mortgages over shares in vessels represented an important mechanism through which to tap new capital for shipbuilding. British Empire legislation contained specific provisions relating to mortgages and recognized registered instruments held by citizens of the crown and foreigners alike. These provisions included preferential treatment over unregistered mortgages, the ability to act when mortgagees reasonably believed the security of their investments to be at risk and certainty of attachment to a specific asset in the event of bankruptcy of the owners of underlying shares or claims by other creditors. These issues were dealt with in more detail in Chapter Two which also introduced the concept of registered mortgages as a guise behind which foreigners hid actual direct ownership in British-registered ships. This aspect was of critical importance in SIC's development and is also discussed later in the chapter as part of an analysis of the relative magnitude of the various applications of funds and their sources in shipbuilding.

[^93]
## Constructing a Vessel: The Example of Stephen D. Horton

A review of the detailed construction accounts for four of the deep-sea ships SIC
built shows that on average they cost $\$ 63,380 .{ }^{103}$ Of the total construction costs, timber accounted for nineteen percent, iron and related materials for twenty-one per cent, and skilled tradesmen and general labourers' wages for thirty-eight percent, while outfitting costs took the other twenty-two percent. ${ }^{104}$ Analyzing capital sources is more complicated, and this thesis limits itself to the Stephen D. Horton's construction, for which a substantial body of correspondence exists enabling an almost complete picture of effective ownership structure and local investors' probable financial resources. ${ }^{105}$ Acquirers of the sixty-four shares in the vessel were responsible for the seventy-two percent of Stephen D. Horton's $\$ 63,349$ construction cost allocated to the "Hull and Spars" account. ${ }^{106}$ The remaining twenty-eight percent was posted to the "Outfit Account," to be paid off through the profits of early voyages. ${ }^{107}$ Local region investors took up thirty-one of the sixty-four shares in Stephen D. Horton or nearly half of the

[^94]Figure 3.2: A Schematic of the Funds Flow in Shipbuilding

Leurnals recording the building of the Stephen D. Horton; NSARM, Spencer's Island Company. Presentation © David Stanley (2008)
shares, but they provided a lesser proportion of the cash demands for the vessel's construction. Local contractors, farmer-timberlot owners and merchants represented less than a quarter of the cash inflows once contra deals relating to the provision of goods and services were deducted. Sources of capital were far more heavily skewed to dividends than salaries or land-based business activities. Still, mariners' salaries were also very important as they represented a more stable foreign-currency inflow than did dividends. Together these two categories represented locals' primary sources of investment capital, but the bulk of new investment funds came from outside the region. The master mariners were responsible for securing most of this. While Halifax merchant T. \& E. Kenny took four shares, New York residents acquired twenty-nine of Stephen D. Horton's sixty-four shares. United States citizens hid their direct interests behind mortgages registered against interests reportedly held by master mariners George and Johnson Spicer, and New York resident Nova Scotian, Mark Shaw. ${ }^{108}$

The real story was in the sources of cash provided by these occupational groups. After allowing for contra deals relating to the provision of goods and services during the construction process, the reliance local investors placed on dividends from their shares in vessels already plying the high seas, together with the proceeds of share sales and mariners' salaries, falls into stark relief. Together, these made up nearly ninety-five percent of the local sources of cash for investment in the new vessel. There was a virtuous economic circle in the form of positive feedbacks whereby satisfactory distributions and salaries from the voyages of existing vessels begat funds which were ploughed into new investments to achieve further financial returns. For these coastal

[^95]Figure 3.3: A Schematic of Shipbuilding Actual Cash Flows
TOTAL $\$ 59,700$
Storekeeping Other Labour
$\$ 17,000$
Tradesmen
$\$ 3,600$
Timber
$\$ 8,600$ Iron, Materia \$12,500 Vessel Outfit Key:
Dividends from Existing

| Dividends from Existing Vessels |  |
| :---: | :--- |
| Mariners Salaries |  |
| Store Profits/Sawmilling |  |
| Timber Sales |  |
| Goods Purchases |  |
| Labour |  |
|  |  |

LOCAL REGION




Other incl. Vessel sales I. Vessel sales
$\$ 1,800$
DISTANT I. Vessel sales
$\$ 1,800$
DISTANT
Canadian Merchants
$\$ 2,500$
Foreign Investors
$\$ 20,600$
Sources: Maritime Museum of the Atlantic (Halifax, NS)
and Graham McBride for the vessel image; Photocopies of
ournals recording the building of the Stephen D. Horton, Conrad Byers Collection;
Outfit Financier $008^{\prime} \angle I \$$

 \$17,800

Maritimers, larger and more efficient deep-sea vessels represented the principal economic opportunity. Managing owners and master mariners were well versed in this industry. They considered themselves able to exercise a degree of agency not available through investment in more distant manufacturing concerns even when such opportunities were available. ${ }^{109}$ By the early 1890 s, a vicious economic cycle supplanted the virtuous one, prompting SIC shareholders and their associates to adopt different investment strategies.

Dividends, the most important source of new funds for local investors, remained highly volatile throughout the period. Consequently, it required more than steely nerve and sinew to engage in shipbuilding. The business required solid fall-back options in the event of defaults by shareholders during the construction process and a considered view as to managing owners and master mariners' ability to influence operating outcomes post-launch. Dividends from vessels alone provided seventy-two percent of the capital inflows local investors applied to Stephen D. Horton's construction. This was based as much on chance as justifiable expectation and meant the involvement of more distant investors with deeper pockets was especially important.

Foreigners provided over forty-nine percent of the cash required to pay for the hull and spars; they also financed the vessel outfit under the current account arrangement outlined earlier. In the case of SIC vessels, American capital contributors primarily comprised commission agents J. F. Whitney and Company and their associates. They had more diversified financial interests than shareholders from the Minas Basin but their decision to take up shares would have been based on a commercially driven expectation

[^96]that the investment would enhance returns from their core activities as commission
agents. For most of the 1880s, it appears that the Americans continued to expect economic accruals through vessel ownership in the years ahead. Their substantial resources, both in terms of capital provided and ability to access cargoes, were critical to the SIC's ongoing success.

## SIC's Early Years

The members of the new company sought to improve the infrastructure at the shipyard as part of their drive to integrate operations utilizing the latest onshore technologies. SIC acquired the nearby blacksmith shop and its contents, sought the components to build a modern steam mill, and investigated options for getting a wharf built at Spencer's Island. ${ }^{110}$ Almost immediately after the company was formed, its shareholders implemented plans to build another ship. This began a pattern of activity for most of the next decade which involved the harvesting of local lumber during the winter, construction proceeding over the next year and into the following spring, finishing work over the summer with launches in late summer/early fall. ${ }^{111}$ John Bigelow and Nathan

[^97]Table 3.3: Construction Costs for Stephen D. Horton, March 1882 to August 1883

| Segmentation | Total <br> Cost (\$) | Number of bills |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Under } \\ & \$ 100 \\ & \hline \end{aligned}$ | $\begin{aligned} & \$ 100- \\ & \$ 499 \end{aligned}$ | $\begin{aligned} & \$ 500- \\ & \$ 999 \end{aligned}$ |  | $\begin{aligned} & \hline \text { Over } \\ & \$ 1000 \\ & \hline \end{aligned}$ |
| Wood Costs | 10,937.44 | 301 | 26 | 2 |  |  |
| Iron \& Other Materials | 12,577.48 | 80 | 23 | 5 |  | 2 |
| Labour | 24,141.02 | 271 | 53 |  | 3 | 3 |
| Outfit (excl rigging) | 15,417.76 | 50 | 15 | 2 |  | 4 |
| Rigging Labour | 654.07 | 20 |  |  |  |  |
|  | 63,727.77 | 722 | 117 |  | 12 | 9 |

Source: Grant private collection, SIC journals; photocopies held in Conrad Byers private collection.

Eaton dispatched requests, and co-ordinated the collection of bids, for contract work and supplies for the new vessel as well as fielding applications by prospective labouring workers from around the Minas Basin. ${ }^{112}$ John, Henry and Nathan also paid due attention to the development of the store-keeping business which provided the company's day-today cash flow and was a central component in the management of shipyard wages and small bills. As Table 3.3 shows, 722 of the 860 items billed during the Stephen D. Horton's construction were for under $\$ 100$. The vast bulk of these were to local woodlot owners and shipyard labourers who were either permanent local residents or else stayed at Spencer's Island for the duration of the construction project. In many cases these people were credited in the store's books rather than paid in cash, and against which they either drew for goods bought from the store or else accepted it as a safe depository against which to charge future expenses.

[^98]Manufacturing large ocean-going vessels involved the letting of substantial specific contracts and these could be keenly contested. ${ }^{113}$ Some labour-intensive contracts were partly satisfied by exchange of tradable goods or the issue of shares in the vessel. ${ }^{114}$ In the case of the Stephen D. Horton the largest contracts were for delivered manufactured iron products, on-site ironwork, blacksmithing, joinery, rope and canvas, and above all, the role of lead contractor for the vessel outfit. The winning bidders for major roles included Windsor Foundry of Hants County, Nova Scotia; J. A and W. A. Chady, William Robinson and J. A. P. [John] Bordon, all from the Minas Basin; Dartmouth Ropework of Halifax; and John Black and Company, of Glasgow, Scotland. ${ }^{115}$

The building of such large vessels involved huge cash transfers. Consequently, the shipbuilding enterprise required reliable sources of capital which could be called on at
short notice, and a sound financial reputation of its own enabling it to issue commercial

[^99]bills on good terms to its suppliers. SIC considered that bank loans were undesirable
other than as a final backstop or short term financing option because these involved the
most paperwork and provided the least flexibility in changing circumstances. ${ }^{116}$ After all, it was bank debt that took down Payzant and Bigelow. There is no indication that SIC ever resorted to bank loans and it appears likely that this was because J. F. Whitney and Company acted as a broad-ranging financier.

The Payzant and Bigelow collapse vividly illustrated the risk of placing too
heavy a reliance on distributions from profitable voyages as a source of funding for new
vessel construction. Yet, most Minas Basin shareholders in new vessels still relied upon dividends from other vessels to pay for their shares in new vessels. ${ }^{117}$ Sea captains also needed to anticipate capital calls given the extended periods they spent away. ${ }^{118}$ All SIC's
shareholders were active promoters of their new construction proposals, or projects

[^100]already underway, encouraging new investors to take up shares whenever the opportunity arose. SIC's master mariners cultivated New York's deep-pocketed merchant capitalists but the situation in Nova Scotia tended to be more fluid. John Bigelow sought out worthy men around the province, at the same time working an angle to get provincial support for the building of a wharf at Spencer's Island which would greatly facilitate trade across the Bay. ${ }^{119}$ In January 1882, John Bigelow wrote:

> John De Wolfe of Halifax says he will take six or eight shares in the ship if to be had ... would sooner [the politician] Dr [Charles] Tupper take an interest think if he got interested at the Island he would likely do something toward the peir [sic] next season don't fail to write him that is Mr Jacob S + Robert + WHB [Jacob Spicer, Robert Spicer and Henry Bigelow] put the matter strong by the way I saw Mr Geo Churchill in Halifax who said he would run the steamer there if we get the peir ...

George and Johnson Spicer judiciously guarded their association with the members of J. F. Whitney and Company, perhaps recognizing the importance of keeping these businessmen happy with the relationship, the money flowing during construction, and their securing of charter contracts during operation. These associations relied heavily on mutual trust and respect, with the paper trail established more through letter exchange than comprehensive written contracts. ${ }^{121}$ Not only were the arrangements circumventing official regulations, but the final shareholdings were not finalized until relatively late in the construction process. This sometimes necessitated the massaging of egos in New York to ensure the whole process stayed on track. ${ }^{122}$ In addition, the Spicer brothers may

[^101]Yorkers. ${ }^{123}$
Vessel ownership was usually divided into sixty-fourths with the final price of the shares based on the cost of constructing the hull and spars. ${ }^{124}$ In the case of the Stephen D. Horton this amounted to $\$ 45,576$, or $\$ 712$ per share, of its $\$ 63,349$ total cost. ${ }^{125}$ New Yorkers owned twenty-nine of the Horton's sixty-four shares at launch, although only those held through the expatriate Nova Scotian, Mark Shaw, appear in the registry record. ${ }^{126}$ In addition, Mary E. Dixon, the wife of Belgium-based shipbroker C. E. Dixon,

[^102]Table 3.4: Stephen D. Horton's Effective Shareholding Structure - Hull and Spars


[^103] 1883 stating: "We will have our 14 shares in the ship in the name of George D. Spicer. He will give us
held a further two shares. ${ }^{127}$ These foreign-based individuals were the primary source of cash financing for the vessel, providing $\$ 22,076$ of the cash paid on an instalment basis over the period of the vessel's construction. ${ }^{128}$ In addition, J. F. Whitney and Company took over responsibility for financing John Black and Company' outfitting bill which was to be financed out of voyage profits. ${ }^{129}$ Together, these efforts covered $\$ 32,545$, or fiftyone percent of total construction costs. ${ }^{130}$

The next most important source of funds in aggregate was dividends the SIC members, relatives and local investors received from the profits of shipping voyages and the sale of some shares in existing vessels. To place this in some context, it is worthwhile to compare master mariners' foreign currency earnings and dividend inflows. George Spicer's earnings as a sea captain amounted to $\$ 1,000$ in 1878 whilst Stanley T. Spicer estimates that his dividends the following year totalled \$842 from eight shares in two vessels. ${ }^{131}$ At the time Johnson Spicer, Samuel Williams, John and Gideon Bigelow and

[^104]Table 3.5: E. J. Spicer's Dividends, September 1882 to December 1883

| Date Sent |  | Total Divs (\$) | $\begin{gathered} \text { EBS \& } \\ \text { SI } \\ \text { Dividend } \\ (\$) \\ \hline \end{gathered}$ | EBS <br> Shrs | SI <br> Shrs | Voyage End |  | Freight Carried |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1882 | Sep | 203.09 | 114.24 | 88 | 28 | London NY | $\begin{aligned} & \text { Aug-30 } \\ & \text { Oct-24 } \end{aligned}$ | Refined Oil <br> Chalk, Barrels |
|  |  |  |  |  | 28 |  |  |  |
| 1883 | Feb | 576.69 | 306.37 | 8 | 26 | L'pool | Dec-21 | Refined Oil |
|  |  |  |  | 8 | 26 | NY | Mar-07 | Salt |
| 1883 | Apr | 1,671.35 | 887.90 | 8 | 26 | L'pool | Apr-26 | Refined Oil |
|  |  |  |  | 8 | 26 | NY | Jun-26 | Various |
| 1883 | Aug | 4,531.03 | 2,407.11 | 8 | 26 | Antwerp | Sep-01 | Refined Oil |
|  |  |  |  | 8 | 26 | NY | Oct-23 | Various |
| 1883 | Nov | 4,539.89 | 2,411.82 | 8 | 26 | L'pool | Dec-10 | Refined Oil |
|  |  |  |  | 8 | 26 | NY |  | Various |

Notes: Abbreviations used in the table are as follows: E. Bigelow Sons and Company (EBS); Spencer's Island shareholders (SI), Shares (Shrs); New York (NY); Liverpool (L'pool).
Sources: SPC Letters from J. F Whitney \& Co. and John Bigelow to SIC, 1882 to 1883, passim; Stanley T. Spicer, Captain from Fundy, 87, with the number of shares held by George Spicer adjusted to underlying, rather than officially registered, numbers. George D. Spicer held six shares throughout this period. Based on Stanley Spicer's estimates it would appear that not all dividends received during the period have been identified through the letters remaining in the Spicer private collection.

Jacob Spicer were all larger ship investors than George. However, while captains' incomes remained steady from year to year, investors could not count on the level of dividends from trip to trip. Table 3.5 shows the dividends paid from voyages by the $E$. $J$. Spicer between September 1882 and December 1883.

While the Stephen D. Horton was being constructed, the profitability of the main vessels upon which its investors were relying to provide the funds for their new investment appear to have been highly variable. Just when it mattered most in terms of capital calls, during the last quarter of 1882 and first quarter of 1883 , dividend income

[^105]from most vessels fell sharply. ${ }^{132}$ Cash flow management was a major exercise right from
the start, so it is not surprising that from time to time the business had to juggle the accounts to make ends meet. In January and February 1883, Nathan Eaton made two calls on investors in quick succession, probably for a total of $\$ 16,000 .{ }^{133}$ Even so, money remained tight the following month and John Bigelow advised Nathan on a number of options for managing the cash squeeze on the company. ${ }^{134}$ The firm's master mariners were stretched by calls so close together, and the sudden death of one of their number restricted financial capability still further. Samuel Williams fell from the Hannah Blanchard and drowned at sea on 5 February $1883 .{ }^{135}$ Williams' death meant the business
lost a strategist, a source of capital and, potentially, even its ability to operate unless

[^106]reconstituted. ${ }^{136}$ His wife, Antoinette, was aboard the vessel at the time and reportedly suffered a temporary mental breakdown. After a few weeks back on shore she appears to have been restored sufficiently to agree to take over her late husband's interests in the company and part of his commitments for the vessel under construction. ${ }^{137}$ The SIC managed its way through this cash squeeze aided, in part, by earlier distributions of voyage profits and an additional $\$ 600$ in cash funding from J. F. Whitney and Company in March. John Bigelow arranged for J. F. Whitney and Company to remit all dividends due to E. J. Spicer's Spencer's Island and Canning shareholders directly to SIC and suggested more of shares in the Stephen D. Horton be taken up by financially strong investors. ${ }^{138}$ Prior to this, the shipping agents remitted Minas Basin investors' share of $E$. J. Spicer's earning to John as managing owner at E. Bigelow Sons \& Co., whereas the new arrangement ensured that funds reached SIC's coffers faster.

[^107]It is to the SIC and J. F. Whitney and Company's credit that business continued without interruption during these challenging economic circumstances. The situation the high profile acquirer of Payzant \& Bigelow's assets, David M. Dickie, found himself in during 1883 exemplifies prevailing business challenges. That year mortgagees seized some of Dickie's vessels and offered them for sale. ${ }^{139}$ Despite the difficulties faced by the SIC, or perhaps because of the manner in which they were handled, the foreign investors appeared happy both with the construction of the Stephen D. Horton and the prospects for further investment. ${ }^{140}$

In late July 1883, George was in New York awaiting both E. J. Spicer's loading for his next voyage to Antwerp and Stephen D. Horton's launch. ${ }^{141}$ There he found that "[t]here is a good chance to get another ship taken up here. So I hope when the 'Horton' is off and things settled up there can be arrangements made to build again." ${ }^{, 142}$ SIC's lead New York advocate, George, and other shareholders canvassed prospective investors about another vessel over the next two months. Once they found sufficient interest, SIC began construction in October 1883 before final accounts on the Stephen D. Horton had even been settled. ${ }^{143}$ This new vessel, named after Charles Sumner Whitney, eldest son

[^108]and employee of J. F. Whitney and Company principal James Whitney, took twenty-three months to complete. ${ }^{144}$ Soon after the Charles $S$. Whitney was launched, the company commenced building the George T. Hay, named after a New York harbour pilot who had a close relationship with the Whitney Company and later became a partner in the firm. ${ }^{145}$

The geopolitical climate was extremely volatile in 1885 as people speculated about the possible outbreak of war, compounding already difficult conditions in maritime freight markets. ${ }^{146}$ In April 1885, J. F. Whitney and Company mused that there were already too many sailing vessels for the limited amounts of freight business going and it appears to have been difficult to secure investors for all sixty-four shares in the new vessel to be built at Spencer's Island. ${ }^{147}$ Yet, within a few months the decision was made

[^109]to commence the George T. Hay as freights rebounded dramatically. The improved market enabled the Charles $S$. Whitney to earn a $\$ 2,317$ profit on its maiden voyage from Spencer's Island to Liverpool despite a still sub-par British market for Canadian timber. ${ }^{148}$

Building vessels was only part of the SIC story. Their effective operation was also a critical determinant of the company's success. The owners appointed one of their number as managing owner. ${ }^{149}$ He was responsible for deciding which charters to accept, in consultation with the shipping agent, arranging insurance for the vessel, and distributing voyage profits to the other owners. ${ }^{150}$ The managing owner was recorded by the Registrar of Vessels and could be changed by a written statement sent to the registrar and signed by owners together holding a majority of the shares. ${ }^{151}$ Given the significant funds flowing through the managing owner's accounts, it was important that he was both highly respected by the other owners and in a sound financial position. When John Bigelow's firm began to struggle with mounting debt loads, SIC decided it was imprudent to retain him in this position for the Stephen D. Horton. Already E. J. Spicer's managing owner, John must have been disappointed when the Horton's owners decided

[^110]on an alternative arrangement in which management was shared between the Spicer brothers and J. F. Whitney and Company, with Johnson Spicer officially listed in that role at the Parrsboro Registry office. ${ }^{152}$ A few months later, George Spicer replaced John as managing owner of E. J. Spicer following E. Bigelow Sons and Company's failure. ${ }^{153}$

A key to good operating performance was for vessels to travel as quickly and often as possible fully laden with fee-paying cargoes, and to minimize time afloat loaded merely with ballast or empty barrels. Once in a major Atlantic port town, vessel owners hoped to be offered a variety of cargoes, a circumstance which did not exist in the upper Bay of Fundy. During the 1870s and 1880s, timber was the only noteworthy local cargo, although later in the century, ship owners also considered the established gypsum business while the upsurge in the coal trade out of Parrsboro offered another option. In the meantime, demand and prices for timber in the British market dropped markedly. Each Spencer's Island ship's maiden voyage to Britain was intended to get it into mainstream business rather than to generate the type of superior profits that were achieved on timber deliveries in the first half of the century. ${ }^{154}$ Still, ship owners began preparations for maiden voyage cargoes well in advance of launch date.

[^111]In May 1883, the SIC investigated loading options for the Stephen D. Horton. ${ }^{155}$
Timber was the only realistic cargo but the British market was so poor that major
Parrsboro lumber dealers B. Young \& Son considered pulling out of the deals [bulk sawn timber] export business altogether. ${ }^{156}$ In addition, the planned launch date for the Stephen D. Horton was delayed from late June until at least August for unspecified reasons. In light of the economic uncertainties, B. Young \& Son replaced their firm offer to load the vessel with a promise to consider it when the time came. ${ }^{157} \mathrm{~T}$. L. DeWolfe \& Co. put in a firm offer later that month and was probably awarded the contract as there appears to be no further correspondence on the matter. ${ }^{158}$ The Horton sailed from Spencer's Island bound for Liverpool on 27 September, loaded with " 74 x standards of dial [deal] @ 62/6 [ $£ 3.125]$ " some of which was lashed to the vessel above deck. ${ }^{159}$

It proved even more difficult to arrange a load for the Charles $S$. Whitney's maiden voyage two years later. ${ }^{160}$ By mid-June it became evident that there were no

[^112]offers to load at Spencer's Island, which was what SIC shareholders and local timberlotowners wanted. Meanwhile the rates offered for freights from West Bay at Parrsboro had fallen to uneconomic levels. ${ }^{161}$ Loading the Charles S. Whitney anywhere else appeared too complicated because of the combined effects of the vessel's large size and the Bay of Fundy's extreme tides. ${ }^{162}$ The SIC turned down William Thompson \& Co.'s offer for loading at West Bay and stitched together alternate arrangements with B. Young \& Son for the Charles S. Whitney to be loaded at Spencer's Island in mid-July. ${ }^{163}$ When Captain George arrived at Liverpool, he wrote back to the SIC enthusiastic about his ship's performance during the crossing but concerned that he would be kept in port because of the depressed market for deals. ${ }^{164}$ The situation was not aided by the poor quality of some of the wood; the Liverpool lumber merchant confided that it would have been better had

[^113]George 'lost' the timber above deck at sea enabling an insurance claim, for that was worth more to him lost than delivered. ${ }^{165}$

Either the shipping agent or the managing owner was responsible for insuring the cargoes, and in SIC's early years, most of the policies were written in Nova Scotia. ${ }^{166}$ The SIC insured all its vessels as well as freight not already covered by the consignees. Vessel insurance was paid annually and charged directly to the owners, or sometimes deducted from voyage profits prior to their division and distribution. ${ }^{167}$ Later, responsibility for these financial arrangements was split between the managing owner and J. F. Whitney and Company. During the latter part of the nineteenth-century some Maritimes shipowners forwent insurance as part of their cost cutting measures, ${ }^{168}$ but there is no evidence that SIC ever did so.

Insurance of the vessels and their cargoes at sea protected the capital invested but not the investors themselves. ${ }^{169}$ Volatile dividend flows and generally difficult business conditions continued to plague the businessmen of the region. E. Bigelow Sons \& Co. finally succumbed under the weight of mounting debts and insufficient cash flows,

[^114]declaring bankruptcy in early $1885 .{ }^{170}$ A newspaper clipping dated 25 February and
attached to Ebenezer Bigelow's diary records the demise of the family business:
> E. BIGELOW \& CO. of Canning have assigned to Chas. E. Borden of Canning and R. M. Rand of Canard. They have been struggling under the difficulties of depressed freights, to which most ship owners have been subjected of late, and have had to succumb. Being obliged to borrow they gave one bank $\$ 12,000.00$ mortgage on ships to help them but on being required to procure a good endorser in addition, found it impossible. A private party furnished temporary aid, but some of their endorsers refused to continue and this necessitated their stopping. Liabilities are variously estimated at $\$ 35,000.00$ to $\$ 50,000.00$. The endorsers are made first preferential, after them the mortgagors. Their failure in spite of honest efforts to conduct their business, has inspired much sympathy. ${ }^{171}$

Nathan Eaton acquired father-in-law John's, and Gideon Bigelow's, shares in SIC the previous November, as the Bigelow brothers undertook an ultimately unsuccessful survival effort to rein in commitments and raise cash. ${ }^{172}$ Nathan became an investor in subsequent vessels built at Spencer's Island, but during his first year as an owner in the company, he made reduction of operating costs ashore the top priority as financial challenges intensified. After the Charles S. Whitney was launched in August 1885, it was unclear whether the company would construct another ship, and general business at the store was well down on the previous year as the economic decline bit nationwide. On 12

[^115]September, Nathan was typically circumspect in his letter to Dewis Spicer, who was aboard E. J. Spicer at the time:

We are getting things straightened up around here but are not doing much business. Piling the yard full of timber but what will be done with it we do not know. I expect to occupy the shop this winter alone, as we have to cut down expenses. Robt Spicer expects to move first of October. I expect then to step down the hill to his place. I saw Mrs Spicer [Dewis's wife Emma] and your two little ones last night at Robt's they are all nice and smart.

The language hides a stark reality. The performance of vessels already at sea appeared insufficient to justify investment in another and local business at the store dropped off so alarmingly that SIC shareholder, Henry Bigelow, was laid off from the store. ${ }^{174}$ The difficult times that appear to have been the norm during most of the 1880 s intensified and it is possible that, but for the contribution from international seafaring, this community might well have imploded.

Changes were also afoot amongst the other shareholders. Robert Spicer decided to move to a farm in Diligent River ${ }^{175}$ and sold his interest in the company to Johnson Spicer about this time. ${ }^{176}$ The new arrangement meant that Nathan Eaton and Johnson Spicer each owned two of the eight shares in the company, with George Spicer, Antoinette Jenks (previously Williams), Henry Bigelow and Amasa Loomer retaining

[^116]one each. ${ }^{177}$ The shareholding structure remained unchanged for six years, beyond the completion of the 1,721 ton Glooscap, which proved to be the last of the large squarerigged ships built at Spencer's Island when it slid down the skids in $1891 .{ }^{178}$ A new round of changes began in 1893 when Henry Bigelow sold his SIC share to Nathan, although his reasons for doing so are unknown. ${ }^{179}$

Nathan was an opportunist and, in addition to his investment in the SIC, he was a promoter of, and initial investor in, Parrsboro Shore Telephone Co. (Limited), the first telephone company in Nova Scotia outside Halifax. ${ }^{180}$ This business commenced operation in the summer of 1885 , and its first shareholders included businessmen from Parrsboro and along the shore. The improvement in speedy communications proved a boon to maritime merchants and timber exporters alike. ${ }^{181}$ Shares in telephone and telegraph companies were to become cornerstones of the investment portfolios of several

SIC shareholders although the Parrsboro version later gained a poor reputation due to insufficient maintenance which impaired its performance during inclement weather.

[^117]Overall, Nathan's business approach was commercially effective but did not endear him to some of the locals as a poem still recollected today indicates. ${ }^{182}$

SIC's shipbuilding activities and, more particularly, the business of vessel ownership and operation through to 1895 , are investigated in Chapter Four. That chapter also ties operating returns on owned-vessels back to new construction decisions during the period. It appears that the remaining shareholders and most of the New York contributors remained confident more years than not about the long term economic viability of both endeavours, despite the difficulties encountered during the last half of the 1880s. The New York-Spencer's Island business connection also withstood the death of James Whitney in December 1886, following which his son Charles joined Henry Buschman as a senior partner at the New York commission agency. ${ }^{183}$ The members of SIC and J. F. Whitney and Company exhibited considerable commercial acumen and adroitness in an environment which forced many others to retrench or withdraw from the industry. ${ }^{184}$ Participants in both firms appear to have accumulated considerable wealth through their interlinked activities over the life of the business, with the greatest gains accruing to the New Yorkers.

[^118]This was a period during which steam and steel ships moved increasingly to the fore, displacing wind-powered wooden vessels on more international trade routes. However, well before steamships gained the upper hand there was an almost wholesale desertion of the industry by eastern continental Canadians other than those along the Nova Scotian side of the upper Bay of Fundy. ${ }^{185}$ In contrast, SIC's shareholders engaged in a profitable expansionary strategy during the 1880 s, supported by local and American investors in the vessels the company built. The SIC was not the only maritime entity in the Minas Basin to diverge from the Atlantic Canadian norm, nor the only one to gain access to American capital, and it did so for sound economic reasons. SIC's shareholders, and the local community, benefited from the company's continuing activities for more than a decade after the Maritime Canada's merchant marine began to diminish. Even after the SIC was broken up in 1895 - by design of its members - its business streams and the post-1885 shareholders all achieved positive financial outcomes into the twentiethcentury. It was simply their forms and locations which changed.

[^119]
## Chapter Four:

## The Business of Shipping, 1880-95

Formed in 1880, the Spencer's Island Company (SIC) built and managed squarerigged sailing vessels for international trades and operated the community's major store. The company's expansion through its first decade is congruous with Minas Basin's largest port, Windsor, where total registered tonnage peaked in 1891, but contrasts with the situation for most of the Maritimes' ocean-going fleets. Elsewhere in the region, shipowners were engaged in a progressive withdrawal about the time of SIC's formation. By 1891, Maritimes-registered tonnage was 27.4 percent below the level eleven years earlier. ${ }^{1}$ The Atlantic Canada Shipping Project (ACSP), the largest investigation into the regional merchant marine's changing fortunes, did not uncover the reasons behind this divergence in performance. ACSP included Windsor in its database but undertook little research into the factors behind that port's continued growth and none into whether these may have been more widely applicable on the Nova Scotian side of the Bay of Fundy. ${ }^{2}$

This chapter addresses a lacuna in maritime historiography by way of case study: the SIC is an excellent example of Maritime Canadian entrepreneurial endeavour in the latter part of the nineteenth-century and may represent a microcosm of what occurred more generally around the Minas Basin.

In aggregate, Minas Basin-registered tonnage was probably greater by 1890 than any single port region in the Maritimes other than Saint John, New Brunswick. As

[^120]Rosemary Ommer reflects, the Windsor-registered fleet continued to grow into the early 1890s, despite there being a "clear failure of the wooden sailing ship industry" elsewhere in the Maritimes by then. ${ }^{3}$ Meanwhile, shipbuilding and vessel management remained central to Spencer's Islanders', and probably Minas Basin's, economic well-being during the nineteenth-century's final decade. Within a narrow range of available commercial choices, shipping's financial returns justified new investment until at least the late 1880s. Capital was relatively accessible from United States-based investors and distributions from vessel voyages. After prospective returns dropped below the hurdle rate for the construction of new deep-water ships, investors in Spencer's Island-built ships still retained and operated their most efficient vessels into the twentieth-century. Furthermore, the region remained a major builder and operator of more specialized coastal vessels beyond World War I.

The existing literature records neither the importance of American capital through registered mortgages nor dividends from existing vessels in the investment equation. ${ }^{4}$

These two sources of funds were of central importance to Minas Basin's shipbuilding industry and the retention of vessels, especially once new manufacturing enterprises captured a greater portion of Nova Scotia's available capital. ${ }^{5}$ These capital sources appear to be amongst the decisive factors behind the continued growth of SIC, and the region's merchant marine during most of the last quarter of the nineteenth-century. The

[^121]thesis finds that SIC's shareholders accumulated considerable financial capital during their productive lives and it appears highly likely that their involvement in this company significantly enhanced their ability to make commercial, personal and family life choices.

This chapter investigates SIC-managed vessels' financial performance over three time-periods: the early 1880s, the balance of that decade and the early 1890 s. The first two of these encapsulate partial-equilibrium phases for sailing vessels before steampower and iron hulls achieved global ascendancy. ${ }^{6}$ The chapter investigates freight revenues in each period as well as two major shipping cost considerations: transit times and wage rates. In addition, the SIC-built Charles S. Whitney's earnings are compared with published material for some Finnish and Nova Scotian vessels. SIC-managed vessels achieved significantly higher returns than most Yrjö Kaukiainen investigated in the Finnish deep-water fleet but were little different to those sampled by Eric W. Sager with Gerald Panting. ${ }^{7}$

Factors such as capital availability, access to the new technologies of steampower and iron hulls, alternative investment opportunities and investor preferences all played a part in the differing outcomes for the Scandinavian, Atlantic Canadian and Minas Basin merchant marines during the latter part of the nineteenth-century. This chapter compares SIC's responses to changing market conditions to those the ACSP team members, and other scholars such as T. W. Acheson, ascertained for North Atlantic sail-

[^122]vessel owners and the broader economy, respectively. ${ }^{8}$ Sager with Panting considers that
Maritimes' ship owners withdrew from shipbuilding and ownership to take advantage of burgeoning land-based opportunities behind the National Policy's protective curtain. ${ }^{9}$ Introduced in 1879, this Federal initiative skewed the investment equation in favour of westward-looking manufacturing initiatives. ${ }^{10}$ Spencer's Island-based investors were less well placed to capitalize on these, but had greater access to capital than many compatriots during the 1880s. SIC continued its traditional business instead, adapting to competitive challenges, as did many operators around Minas Basin. ${ }^{11}$

Helge Nordvik reports that Scandinavians accelerated their transition to iron, steel and steam from the 1890 s aided by improved capital markets there, ${ }^{12}$ whereas SIC's

[^123]United States-based supporters redirected their interests away from Minas Basin about the same time. SIC could not make the transition to costly new-technology ships in the absence of American capital, nor is there any evidence to suggest its local owners ever desired to do so. ${ }^{13}$ SIC was effectively wound up in 1895 , and the owners pursued individual interests.

## SIC's Business Composition and the Nature of Commercial Flows in Shipping

The SIC's mariner shareholders managed vessels built at the 'Island' and members' share of vessel profits passed through the company accounts. Each business component was linked with the others but managed differently. The store provided relatively stable cash-flow and was a locus for purchased shipbuilding materials; the construction activities provided employment, boosting the local economy and enhancing demand for goods and services provided by the store; and the profits from ship operation and seafaring wages represented important local sources of capital for vessel construction and retention.

This chapter investigates SIC's ship management activities during the 1880s and first half of the 1890 s, together with the actions its members took in response to changing market conditions and new competitive challenges. Chapter Three introduced the relationship between shipbuilding and operating performance. Up to the mid-1880s, local investors ploughed dividends from existing vessels back into the construction of new

[^124]ships within a virtuous economic circle. That chapter revealed that about ninety-five percent of the funds local investors applied to the 1,626 ton Stephen D. Horton, launched in 1883 , came from shipping dividends. ${ }^{14}$ Prospective investment in new vessels was inextricably tied to existing vessels' financial performance and expectations for future profitability. Chapter Three also included a diagrammatic representation of the typical commercial flows for shipbuilding. This chapter investigates the commercial flows relating to vessel ownership and operation; Figure 4.1 indicates the general nature of these flows; the situation for any specific voyage or vessel could be materially different.

Typically, a vessel contracted to collect cargo from a freight owner or customer (C) at a designated port utilizing the services of a commission agent (A) such as J. F. Whitney and Company. From the freight, net of commission, the Master Mariner (M) paid the wages of officers and crew (L), goods and services (S) supplied to the vessel during the voyage including in-port charges, as well as any repairs and maintenance. Before embarking on the next transit, the master mariner arranged for the remittance of the net proceeds due the owners, usually via the commission agent and/or other banking service providers who in turn forwarded the profits to the managing owner ( O ). ${ }^{15}$ To the extent that shareholders resided far from the managing owner it was sometimes more

[^125]Figure 4.1: The Commercial Flows in Vessel Ownership and Operation

Managing Owner
Other Investors
Mortgage Holder
Commission Agent
Source: Based on various primary sources from the Nova Scotia Archives and Records Management;
Source: Based on various primary sources from the Nova Scotia Archives and Records Management;
Maritime Museum of the Atlantic. The vessel image is copyright to Graham McBride.

expedient for the intermediary to make the dividend distributions directly once the voyage accounts had been signed off. Shareholders who mortgaged all or part of their stake, utilized these funds to meet financing costs and reduce the principal outstanding.

Chapter Three demonstrates that most mortgages held against shares in SIC-built vessels were actually a technique to get around British and American legislation restricting foreign ownership in vessels. Registered mortgages also represented a preferential form of security. British Empire legislation provided mechanisms for the holders of mortgages registered against shares in British-registered vessels to protect their investment should owners or masters act imprudently or be declared bankrupt. The role of mortgages in nineteenth-century ship-ownership has previously received scant attention. This thesis reveals their importance to SIC's shipbuilding activities, and for many vessels registered at Windsor between 1873 and 1883.

New York-based merchants represented the largest occupational and geographically based investor grouping in SIC-built vessels and the mortgages they held masked direct investments. These merchants and other United States professionals also held registered mortgages over nine percent of Windsor's total newly registered tonnage between November 1873 and 1883; they effectively held sway over more than a quarter of the shares in vessels together accounting for 12.3 percent of the port total. The American contribution to shipbuilding in the region was significant regardless of the split between bona-fide lending arrangements and effective, or masked, direct investment. Americans' concentration in specific ocean-going vessels suggests they held considerable power over the direction of the region's shipbuilding and ongoing vessel operations.

## Capital Sources for Stephen D. Horton's Construction

The deep-water fleet was a powerful contributor to the economies of counties around Nova Scotia's Minas Basin. Dividends shareholders received represented a substantial financial injection, although net wages received by maritime workers from the region were also important. ${ }^{16}$ If the SIC's experience is indicative of the wider situation around Minas Basin, dividends from vessels represented the major capital source for investment in new vessels in a coastal region where shipbuilding was the most important local manufacturing industry until very late in the century.

The 1,626 ton Stephen D. Horton was the first ship SIC built after 1880. Table 4.1, overleaf, summarizes the estimated capital sources for vessel construction. For local investors, profit distributions from existing voyages were more important than all others combined. Producers of staples such as Canadian timber-lot owners and sawmillers, along with skilled tradesmen, provided less than five percent of the real capital for new vessels, although they benefitted to a much greater extent as recipients of payouts. Shipbuilding was also an important forward linkage for regional timber traders. However, capital requirements for ever-larger deep-sea vessels became so great by the 1880s that when SIC began shipbuilding it depended far more on foreign capital and ongoing voyage profits than local staples trade revenues.

In the case of Stephen D. Horton, completed in August 1883, local investors relied on dividends from existing vessels for sixty percent of their share of the cost of hull

[^126]Table 4.1: Sources of Capital for Stephen D. Horton

|  | Cn\$ | Ppn Tot | Ppn H\&S |
| :--- | ---: | ---: | ---: |
| Local Investors: |  |  |  |
| Dividends from Vessels | 13,500 | $21.3 \%$ | $29.5 \%$ |
| Mariners' Salaries | 2,500 | $3.9 \%$ | $5.5 \%$ |
| Storekeeping | 1,500 | $2.4 \%$ | $3.3 \%$ |
| Farming and Sawmilling | 1,000 | $1.6 \%$ | $2.2 \%$ |
| Other incl. sale of shares in vessels | 1,800 | $2.8 \%$ | $3.9 \%$ |
| Taking shares in lieu of skilled labour, | 2,100 | $3.3 \%$ | $4.6 \%$ |
| materials | 22,400 | $35.3 \%$ | $49.0 \%$ |
|  | 2,700 | $4.3 \%$ | $5.9 \%$ |
| Other Canadian Merchants: | 20,600 | $32.4 \%$ | $45.1 \%$ |
| Foreign Investors: | 45,700 | $72.0 \%$ | $100.0 \%$ |
| Capital for Hull and Spars Account | 17,800 | $28.0 \%$ |  |
|  | 63,500 | $100.0 \%$ |  |
| Outfit finance |  |  |  |

Notes: Estimates rounded to nearest Canadian hundred dollars.
Abbreviations used: Canadian dollars (Cn\$); Proportion of the vessel's total capital cost (Ppn Tot); Proportion of construction cost allocated to Hull and Spars Account (Ppn $\mathrm{H} \& S$ ). This sum was then divided by sixty-four to establish the cost of shares issued to investors.
Sources: Grant private collection, Shipbuilding Journal for Stephen D. Horton, photocopies held in Conrad Byers private collection; Spicer private collection, Letters to Spencer's Island Company (SIC), 1881-1884; Nova Scotia Archives and Records Management (NSARM), Spicer family fonds, 1997-174/014; Spencer's Island Company fonds, 1997-174/015-018.
and spars, with master mariners' tapping their income accounts for another eleven percent. A similar amount was contributed by Halifax merchants T. \& E. Kenny and Company (T. \& E. Kenny). ${ }^{17}$ Together, Canadian investors provided 54.9 percent of the share capital with the balance accounted for by foreign investors, mostly those associated

[^127]with New York-based J. F. Whitney and Company. ${ }^{18}$ Vessel profitability determined the extent to which capital was available to build and retain vessels. For local investors, this circular relationship was paramount. The American merchants generally had deeper pockets and more diverse interests, but these too were oriented to the merchant sailing industry. ${ }^{19}$

The next section investigates three shipping business components: revenues, costs and profitability. Owners could enhance revenues through cargoes carried and port destinations while master mariners attempted to minimize ocean transit times and seafarers' wages, which represented sailing vessels' largest cost component. While neither owners nor masters could do much to affect port turn-around times, they determined where to send their wooden vessels for maintenance, a significant expense as vessels aged.

## Shipping Revenues

Owners and masters sought the best cargoes and freight rates possible for their vessels. Ships switched between trade routes and commodities as their relative

[^128]profitability changed. ${ }^{20}$ These actions could have a significant impact on the bottom line. ${ }^{21}$ A good example of this was when freight rates for petroleum from the United States to Europe, and the associated empty barrel back-freight, resulted in marginal round-trip profits. Some Spencer's Island-built vessels were redeployed on the Britain-toSouth America coal trade with a grain cargo return, a move that resulted in much improved dividends to owners.

Master mariners earned their livelihoods aboard the vessels. This ensured they had a degree of agency in determining the return on their invested capital, something not possible if they took shares in distant manufacturing enterprises. In addition, few alternate occupations in Cumberland County offered similar income levels. Furthermore, Maritime Canadian captains also went to sea with their families more frequently than those commanding vessels registered in most other countries. ${ }^{22}$ This reduced onshore household operation costs. ${ }^{23}$ Together, these factors enhanced captains' relative financial positions and probably contributed to their greater preparedness to accept lower cash returns in shipping than other investments, as well as lower returns than other investors

[^129]would consider unless additional factors came into play. ${ }^{24}$ J. F. Whitney and Company was one business that fitted the integrated interest criteria. In addition to its commission of between 3.3 percent and 5 percent on cargoes handled, the shipping agent gained a comparative advantage through being able to offer the best quality vessels to its customers and by managing financial arrangements for the voyages. ${ }^{25}$ In addition, SIC afforded its New York investors 'bragging rights,' by naming three ships after J. F. Whitney and Company members or associates, in an approach akin to the modern era's naming rights for major buildings.

## The Spencer's Island Company Experience

George Spicer gained his master mariner's papers in 1868 , followed by brothers Johnson, Dewis and Edmund in 1872, 1879 and 1886 respectively. ${ }^{26}$ Together with brother-in-law Samuel Williams, the Spicers formed the main pool from which captains of SIC-built or managed vessels were drawn. ${ }^{27}$ In 1880, George took first command of $E$.

[^130]Figure 4.2: Painting of E. J. Spicer


Source: Spicer private collection. Painted by Antonio Nicolo Gasparo Jacobson, 1880.
$J$. Spicer, named after his wife Emily Jane, handing over captaincy of the J. F. Whitney to his newly accredited brother, Dewis. ${ }^{28}$ Johnson remained the master of Servia, a 1,309 ton ship built at Maitland, until he took command of SIC-constructed Stephen D. Horton upon its launch in $1883 .{ }^{29}$

[^131]George and Dewis Spicer's voyages together provide a comprehensive picture of SIC's principal markets. ${ }^{30}$ Dewis was not a SIC member but he was a key employee and shareholder in several of its vessels. ${ }^{31}$ J. F. Whitney's voyages whilst under his command between 1880 and 1884 are an important part of the SIC story. ${ }^{32}$ Its freight returns indicate the state of the North Atlantic petroleum trade, a core business for Spicercaptained vessels and their primary commission agents, J. F. Whitney and Company. ${ }^{33}$

## Freight Rates in the Early 1880s

Prior to the mid 1880s, Spencer's Island-built ships sailed almost exclusively from New York, their primary port, to the United Kingdom and Europe with barrels of petroleum and naptha, returning with low value items such as empty barrels and scrap iron to provide ballast and to at least cover costs. ${ }^{34}$ This remained economically effective

[^132]until the mid 1880s despite poor capacity utilization in terms of remunerative tonnages
carried on the home leg. It also meant that vessels, and their crews, spent more time in port than atop the high seas. ${ }^{35}$ Over the four year period, 1880-1883, the freight rates Dewis Spicer received for petroleum products ranged between two shillings, seven and a half pence ( $2 / 7.5$ ) and three shillings nine pence (3/9). ${ }^{36}$ As Table 4.2 shows, the average freight income for rolling sets of three round trips ranged from \$5,827 to \$6,540 between January 1880 and December 1883. Rates were highly variable from voyage to voyage but there is no evidence of any downward trend. General costs remained relatively stable but the wages bill rose markedly higher during the period, ${ }^{37}$ so dividend distributions to J. F. Whitney's owners were probably below those George Spicer recorded for $1879 .{ }^{38}$
late 1883, J. F. Whitney returned to New York from London bearing a load of coal. The E. J. Spicer also returned twice in ballast in 1880 and 1881 which may indicate that the owners and commission agents considered it to be more rewarding to expedite the vessel's return to New York for another cargo of petroleum-based products.
${ }^{35}$ Daniel Vickers, with Vince Walsh, Young Men and the Sea: Yankee Seafarers in the Age of Sail (New Haven and London: Yale University Press, 2005), 99-103, refers to this as being common in the eighteenthcentury.
${ }^{36}$ NSARM, Spicer Family fonds, 1997-174, passim. Dewis received the lowest rate of two shillings, seven and a half pence ( $2 / 7.5$ ) in February 1880 and the highest of $3 / 9$ in January 1881, May 1882, September 1882, and November 1883.
${ }^{37}$ Ibid, Disbursement Accounts April 1882 and August 1883. The Appendices include details of Dewis Spicer's Disbursement Accounts. Expenses for the March 1882 and July 1883 voyages were boosted by unusual costs. See, also, Eric W. Sager, Seafaring Labour: The Merchant Marine of Atlantic Canada, 18201914 (Montreal and Kingston: McGill-Queen's University Press, 1989), 215-217.
${ }^{38}$ Stanley T. Spicer, Captain from Fundy, 87. George recorded the receipt of $\$ 677.97$ in dividends on his six shares in J. F. Whitney in 1876 and $\$ 842.01$ on eight shares in 1879. Stanley Spicer found this figures in George's diaries. They equate to $\$ 7,232$ and $\$ 6,736$ in total distributions to owners, in 1876 and 1879 , respectively. The Stock and Petroleum Exchange of New York reported that the average price for crude petroleum on the market in 1879 was US $\$ 0.86$ per barrel, reaching its highest level for the year of US $\$ 1.28$ in December and a low of US $\$ 0.63$ in June. The average in 1880 was US $\$ 0.95$, with a high of US $\$ 1.24$ in June and a low of US\$80 in April. This indicates that relative demand improved in 1880 compared to 1879. While it does not necessarily mean that demand for petroleum carrying vessels increased faster than their supply, it appears reasonable to assume that freight rates did not fall materially between the two years: History of the New York Stock Exchange, the New York Stock Exchange Directory, the Produce, Consolidated Stock and Petroleum, and Cotton Exchanges, and the New York and London Clearing House Systems (New York: The Financier Company, 1887), 107. In 1883, J. F. Whitney's owners received at least two dividends in 1883, one in August and the other in December. Together, these amounted to $\$ 3,996$, so

Table 4.2: J. F. Whitney's Freight Revenues, Rolling Three-Trip Averages, 1880 to 1883

| Est. Date Range | Direction | Freight <br> Approx US\$ | Round <br> Trip US\$ | RT US\$ <br> EJS Equiv |  |  |
| :--- | :--- | ---: | ---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Jan '80 to Jan '81 | East | 4,990 |  |  |  |  |
| Mar '80 to Mar '81 | West | 838 | 5,827 | 11,271 |  |  |
| Jun '80 to Apr '81 | East | 5,424 |  |  |  |  |
| Aug '80 to Jun 81 | West | 841 | 6,265 | 12,118 |  |  |
| Dec '80 to Sep '81 | East | 5,142 |  |  |  |  |
| Feb '81 to Oct '81 | West | 900 | 6,041 | 11,685 |  |  |
| Mar '81 to Feb '82 | East | 5,044 |  |  |  |  |
| May '81 to Mar '82 | West | 1,264 | 6,307 | 12,200 |  |  |
| Aug '81 to May '82 | East | 5,140 |  |  |  |  |
| Sep '81 to Jul '82 | West | 1,147 | 6,287 | 12,160 |  |  |
| Jan '83 to Sep '82 | East | 5,351 |  |  |  |  |
| Feb '82 to Nov '82 | West | 1,189 | 6,540 | 12,650 |  |  |
| Apr '82 to Mar '83 | East | 5,133 |  |  |  |  |
| Jun '82 to Apr '83 | West | 871 | 6,004 | 11,613 |  |  |
| Aug '82 to Jul '83 | East | 5,152 |  |  |  |  |
| Oct '82 to Aug '83 | West | 923 | 6,075 | 11,750 |  |  |

Notes: To better indicate the nature of cargo markets Dewis Spicer experienced over time, a three-voyage rolling average has been applied.
Abbreviations used: The equivalent revenues $E$. J. Spicer could achieve on a return trip at the same freight rates, if its cargo and capacity utilization rate were the same as $J . F$.
Whitney's (RT US\$ EJS Equiv).
Source: NSARM, Spencer's Island Company fonds, 1997-174/015-018.
Eastward freights generated nearly eighty-four percent of round trip revenues, and the general goal was for the westward cargo to merely offset a major portion of costs on the return to New York. This pattern of profits on outgoing versus incoming voyages may have been typical for New York-based Canadian vessels during the period. The 1,309 ton E. J. Spicer achieved a much higher level of profitability than did the J. F. Whitney. The
until further information is uncovered, it is not possible to make a definite conclusion on the vessel's profitability during the period.
ship typically carried ninety-three percent more petroleum barrels and required only eighteen men to operate, forty-four percent more than the 701 ton barque. ${ }^{39}$
J. F. Whitney and Company directed voyages and related financing to and from Europe in consultation with George Spicer, and assisted by T. \& E. Kenny's officers and associates in London and Rotterdam. ${ }^{40}$ The commission agents also kept Dewis abreast of what was happening with his brothers and other Nova Scotian captains, as well as changes in the supply of vessels seeking new charters in New York. ${ }^{41}$ George Spicer paid close attention to operating expenses and his letters include advice to Dewis about preparing disbursement accounts and costly tricks to watch out for when the new captain was bound for new ports. ${ }^{42}$ It was also vital to monitor the periodic repairs and

[^133]maintenance costs for wooden vessels as these could be substantial, with cost and quality of work varying considerably from port to port and between service providers. ${ }^{43}$

In the mid 1880 s , it became more difficult to find good cargoes for vessels of $J$.
F. Whitney's size and within another eighteen months it appeared increasingly likely that the petroleum market would not recover sufficiently to sustain vessels much under 1,000 tons. ${ }^{44}$ The petroleum market's downward shift was so marked that two shillings per 40 barrels was considered a good rate, whereas the norm was better than three shillings and sixpence three years earlier. ${ }^{45}$ The owners and agents entertained a wider range of options including timber from the Bay of Fundy; in prior years, Spencer's Island-built vessels

[^134]only carried deals on their maiden voyage to the British Isles. ${ }^{46}$ SIC vessels also carried some westbound cargoes on the owners' account in another effort to boost returns. ${ }^{47}$

Freight Rates Over the Balance of the 1880 s
Challenges for sailing-ship owners intensified in the second half of the 1880s. Commission agents, T. \& E. Kenny and J. F. Whitney and Company, together with SIC's seafaring managing owners and individual master mariners, all worked together to secure the best freights possible for vessels. ${ }^{48}$ From 1884, North Atlantic petroleum freight rates dropped decisively, undermining vessel returns. ${ }^{49}$ Dewis's round-trip freights aboard E. J. Spicer from late 1884 to 1888 averaged US\$8,413 or twenty-nine percent less than the average imputed for EJS equivalent round-trips between 1880 and 1883. In response, the managing owners of Spencer's Island-built vessel shifted their modus operandi during the balance of the 1880s. While historians now view such changes as the beginning of the retreat by square-rigged sail vessels from the world's oceans, those engaged in the

[^135]industry appear to have considered their actions merely as prudent strategic shifts in the challenging, but still viable, sailing ship sector.

Sailing vessel owners found trade on traditional routes less tenable but those with sufficiently large vessels capitalized on new market opportunities. George and Johnson Spicer chartered SIC-managed vessels, through their agents, to carry more valuable westbound cargoes such as chalk and increased the range of North American ports and cargoes for the eastward passage. They also added a new triangular trade whereby SICmanaged ships carried petroleum barrels to Europe, transferred to Cardiff for coals bound for South America, primarily La Plata, and returned north with grain and other primary products. T. \& E. Kenny's London office took on a more prominent role, commissioning SIC vessels from Europe to Southern Atlantic destinations. Investors in Spencer's Islandbuilt vessels also rationalized their fleet, recognizing that bigger ships offered greater economies of scale and coped better with the demands of long sea voyages carrying a wide range of cargoes. Consequently, SIC began construction of its largest ever vessel, the 1,721 ton Glooscap, while $J$. F. Whitney's owners sold the small, but by then inefficient stalwart. ${ }^{50}$ More specialized, smaller vessels rigged as schooners also had a place on coastal routes, so SIC entered this niche market as well. ${ }^{51}$

The Spicer brothers' ocean passages extended beyond the North Atlantic and the nature of trading changed to tramping: going wherever the best cargoes could be had.

[^136]This meant longer voyage times but also resulted in much higher vessel capacity utilization rates and improved profitability. South America is a good example of one region opened up by a flood of capital from major European merchants and financiers. ${ }^{52}$

Argentina and Uruguay became important destinations for some Spencer's Islandcaptained vessels over the balance of the century. ${ }^{53}$ Argentina, for example, increased its demand for British coal 222 percent in the five years to 1885 , compared with the preceding equivalent period, and a further 156 percent in the next five. ${ }^{54}$ This market accounted for only a fraction of Britain's total coal exports around the world, a proportion of which went to bunkers and coaling stations for use by steamships, ${ }^{55}$ but it offered adroit sailing-vessel owners a grand business opportunity. The region's exports of livestock, arable products and raw materials also grew rapidly, providing valuable cargoes for north-bound voyages. ${ }^{56}$ SIC-managed vessels did not engage in the livestock

[^137]trade, but cargoes carried included other commodities such as grains and hides, as well as nitrate from Chile. ${ }^{57}$ Dewis made his first voyage to South America's east coast with a load of coal in 1889 for which E. J. Spicer earned US\$15,483, well above its returns on historic routes. ${ }^{58}$

Other markets such as those in Asia and the South Pacific also exhibited strong trade growth during the second half of the nineteenth-century. Sailing vessels remained highly competitive on these routes into the late-1880s. The sail-dominated trade to and from East Asia was affected by declining transit charges for steam-ships through the Suez Canal in the 1880s, but SIC's experience supports Gerald S. Graham's contention that the Australian export market remained the preserve of sailing vessels for most of that decade. ${ }^{59}$ In 1888, George Spicer made his first voyage to Eastern Asia, via Cape of Good Hope, with cases of refined oil for customers in Shanghai. The vessel was paid US\$24,575, a sufficiently good level to encourage the owners of Spencer's Island vessels

[^138]
## Freights in the 1890s

By 1890 , the deep-water coal trade from Britain was over-crowded. Sail vessels displaced from other routes impacted on both rates offered and SIC-ships' ability to secure cargoes. ${ }^{61}$ Meanwhile, South America no longer represented the treasure trove it had a few years earlier as steamers evolved, wresting away more of the market. ${ }^{62}$ East Asia and Australia offered better prospects. SIC vessels were chartered with increasing frequency to the Pacific Rim and sailed to ports across the globe in search of good freights. In this new business environment, owners and masters worked together to "fix" - secure and finalize - charter-party contracts well in advance of vessels reaching their destination port. ${ }^{63}$ The longer lead times and greater mix of countries involved made

[^139]financing arrangements more complex but J. F. Whitney and Company remained able to secure finance at better rates through Baring Brothers and Company than offered through the charterers or elsewhere. ${ }^{64}$

Dewis and George made several voyages to deliver case oil and general cargo to
Australian ports, aboard Charles S. Whitney and Glooscap respectively, where they picked up various cargoes for transit elsewhere, including shale bound for Europe and Newcastle coal for Asia. ${ }^{65}$ Brothers Johnson and Edmund, who gained his master's papers in 1886, were more frequently deployed on the North-South Atlantic trade routes. ${ }^{66}$ By 1894 , competition was intense on all fronts, as two of J. F. Whitney and Company's letters to Dewis Spicer indicate. On 10 October that year, the commission agent wrote:

After your arrival [from Sydney] ... write us what freights are in London, and also the condition of the vessel, so as to determine her

[^140]future direction. The "Geo. T. Hay" we were obliged to close at a low rate of freight for Coals to Montevideo or La Plata, 9/6 and 10/0. If there is anything doing here [New York] that will pay the vessel to come across, we can always load her with Chalk in London, but at present the outlook is not encouraging.

Geo. sailed from Newcastle on Sept $7^{\text {th }}$ - he had a very good dispatch [turn-around time] there. We are trying to fix the "Glooscap" [George's vessel] to the States, but so far have not succeeded, the rates being lower than we will accept. ${ }^{67}$

Three months later, J. F. Whitney and Company's letter to Dewis, dated 7 December 1894, noted both the market challenges and the integrated decision making process:

We received a cablegram from Messrs. Kenny, Mahon \& Co stating that the best business offered was Coal from Cardiff or Newport to Cape Town @ 11/3. After consulting with Capt. Johnson, we concluded there was no money in this business, and wired them declining the offer. Should nothing offer to the River [Plate] before the Ship is ready, or other business that is more favourable, we think the Ship had better bring over a cargo [of] Chalk to New York, when we can either get a River freight from here, or general cargo to Australia. ${ }^{68}$

It appears clear that by 1894 owners of large square-rigged sailing ships faced severe challenges to profitable operation. Less than a year later, SIC effectively disbanded and its members went their separate ways, although the sailing vessels themselves continued to traverse the high seas into the twentieth-century.

## Vessel Operating Costs

Sail vessel owners and masters paid close attention to operating costs. Sager with Panting relays the view of one Nova Scotian managing owner as being representative of the position in the 1880 s. ${ }^{69}$ Robert Quirk wrote in a letter to a broker in Galveston that

[^141]"[s]hipowning is such a poor business that every attention must be given to the minutest detail." ${ }^{70}$ The masters of SIC-managed vessels were just as vigilant when it came to managing operating costs and they were capable of extracting the best out of their vessels at sea. Rapid passages were one part of the equation, another was labour costs. ${ }^{71}$ Spencer's Island masters outperformed most of their peers on both counts.

## North Atlantic Transits

Sailing captains' competitive currency was speed. Several historians record that Maritime Canadian masters, especially the Nova Scotians, squeezed the maximum possible performance from their vessels, for which they gained a reputation as 'drivers. ${ }^{72}$ A 1901 news article on Spencer's Island pays particular attention to the Spicer brothers' most speedy passages across the Atlantic and around the globe. ${ }^{73}$ There may have been few better drivers than Captain George Spicer. George's passages aboard the E. J. Spicer and Charles S. Whitney between 1881 and January 1888 are summarized in Table 4.3 overleaf. His outbound voyages averaged twenty-four days and the return journeys thirtyseven days, the difference between the two legs due primarily to prevailing wind effects.

Sailing vessels' rapid transits on the valuable New York to Europe route aided their relative competitive position over steam-propelled ships until the latters' technology

[^142]Table 4.3: George Spicer's Voyages, 1881 to January 1888

| Activity | Frequency <br> (number) | Average <br> Duration <br> (days) |
| :--- | ---: | ---: |
| In American Port |  |  |
| Eastward passage | 17 | 36.2 |
| In European Port | 18 | 23.9 |
| Westward passage | 18 | 36.9 |
|  |  | 36.6 |
| Ratio of Sea to Land days |  | $96 \%$ |

Source: Data derived from Stanley T. Spicer, Captain from Fundy, 114-119.
improved sufficiently and transport of passengers became a highly profitable exercise in its own right, providing sizable cash inflows on the westward leg. ${ }^{74}$ Sager with Panting found that in the 1880s, Atlantic Canadian registered vessels' average passage times from New York to Liverpool, London and Antwerp were 31.9, 30.7 and 33.6 days respectively ${ }^{75}$ George's performance over a similar period was about a week quicker.

Not only did this expedite the delivery of cargo, it also reduced wage costs as the crew was usually discharged once the vessel was in port. ${ }^{76}$

Vessels plying the North Atlantic trades often spent less than half their operational lives at sea, ${ }^{77}$ but sea captains could do little to influence port turn-around times. Consequently, it is no surprise that George's port stays were of similar duration to those Sager with Panting determines for four major Atlantic Canadian fleets in the

[^143]1880s. ${ }^{78}$ Daily cash costs in port remained considerable and represented an impost on the voyage still to be undertaken. When the owners changed the ports of call to include those in the Southern Atlantic and across the globe, they significantly altered this split. Vessels then spent long periods at sea with less opportunity for repairs and maintenance. Those engaged on the longest trade routes needed to be sound in all respects if they were to have a reasonable prospect of reaching their destinations, let alone have a long duration in the business. It is therefore noteworthy that no SIC-built vessel was lost at sea due to poor construction or inadequate maintenance during the company's existence. ${ }^{79}$

## Dealing With the Largest Operating Cost: Wages

C. Knick Harley estimates that wages, including captain's salaries, made up about forty-five percent of the non-capital cost-share of sail vessels in the nineteenth-century. ${ }^{80}$ Although this ratio changed over time, it is clear that manning levels and pay rates had a significant impact on the bottom line. Eric Sager records that "Bluenose" masters were subject to few regulatory controls on labour and sought to minimize both manning levels and wage rates. ${ }^{81}$ A review of Dewis Spicer's wage books for two voyages suggests SIC's vessel masters placed at least as much emphasis on labour costs as their compatriots.

[^144]Table 4.4: Wages Recorded on Two of Dewis Spicer's Voyages (£ per month)

|  | Charles $S$. |  |
| :--- | :--- | :--- |
| Vessel | E. Spicer | Whitney |
| Registered Tons | 1,318 | 1,754 |
| Date | 27 April 1889 | 22 Sept 1893 |


| Rank | Number | Rate | Total (£) | Number | Rate | Total (£) |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
| Mate | 1 | 40.00 | 40.0 | 1 | 8.50 | 8.5 |
| Boatswain | 1 | 25.00 | 25.0 | 1 | 5.50 | 5.5 |
| Cook and Steward | 1 | 35.00 | 35.0 | 1 | 7.50 | 7.5 |
| Carpenter | 1 | 23.00 | 23.0 | 1 | 6.00 | 6.0 |
| Able-bodied seaman | 1 | 15.00 | 15.0 | 1 | 3.00 | 3.0 |
| Able-bodied seamen | 10 | 3.00 | 30.0 | 13 | 2.75 | 35.8 |
| Other | 3 | 5.83 | 17.5 | 2 | 1.00 | 2.0 |
| TOTAL CREW | 18 | 10.31 | 185.5 | 20 | 3.41 | 68.3 |
| Per thousand tons | 13.7 |  | 140.7 | 11.4 |  | 38.9 |

Sources: NSARM, Spencer's Island Company fonds, 2007-013/04, 174/016 \#6

If the two examples shown in Table 4.4 are typical, SIC-managed vessels had lower wage bills than the average for Bay of Fundy registered vessels. These two snapshots of Dewis's wage books indicate that labour rates aboard his ships were lower than the average for both Windsor and Saint John vessels in 1889 and 1893. In 1893, Dewis Spicer paid his able-bodied seamen (ABs) eight percent less than four years earlier. While the point-to-point comparison may have captured a short-term high and low year for wages, ${ }^{82} \mathrm{ABs}$ aboard Dewis's ships received about ten shillings less per month than the average for those on Saint John vessels in 1889 and about five shillings

[^145]less in $1893{ }^{83}$ Windsor-registered vessels paid their ABs about five shillings per month more than Saint John rates in 1889, although the gap narrowed by $1893 .{ }^{84}$

On average, Dewis paid officers and specialist crew members well above the average for fleets from either port in both periods, but his rates dropped more quickly than the norm between 1889 and 1893. Officers and petty officers received seventy-eight percent less in 1893 than four years earlier and this significantly reduced the per-man average wage bill. Meanwhile, Dewis's salary remained little changed at about $\$ 80$ per month. ${ }^{85}$ The increasing gulf between the wages of master and others on the quarterdeck of Dewis-captained vessels is consistent with Sager's findings for those from Atlantic Canada generally. ${ }^{86}$ These changes probably made it more difficult to attract the most experienced and capable officers and crew. ${ }^{87}$ In addition, majority Canadian crews were increasingly supplanted by northern European and multi-national ones, as shipowners and master mariners sought the lowest-cost work force from an international labour pool.

Larger vessels utilizing new materials also required less manpower per ton for their operation. Dewis carried 13.7 men per thousand tons aboard the 1,318 ton $E . J$. Spicer in 1889 and 11.4 men per thousand tons aboard the 1,754 ton Charles $S$. Whitney four years later. These figures are similar to those Sager reports for Yarmouth vessels in

[^146]Table 4.5: Men per Thousand Ton Ratios in British and Yarmouth Sailing Vessels, 1880-99

| Decade | 1,000 to 1,499 <br> tons |  | More than <br> 1500 tons |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Yarmouth | Britain | Yarmouth | Britain |
|  | 14.2 | 20.2 | 12.1 | 27.8 |
|  | 13.0 | 20.0 | 11.6 |  |

Source: Sager, Seafaring Labour, 215, using Yarmouth Crew Lists and one per cent sample of British Empire Crew Lists, Maritime History Archive.
the two periods, as shown in Table 4.5, but well below those for a sample of British vessels. ${ }^{88}$ The decline in manning rates was partly achieved through technology improvements, but also because shipowners pressed the captains of their vessels to reduce their single most expensive operating item: wage costs. ${ }^{89}$ In addition, Dewis sometimes undermanned his vessels to keep costs down, ${ }^{90}$ a tactic Sager records becoming common amongst Atlantic Canadian masters after $1870 .{ }^{91}$

Overall, we can make the following suggestions about labour costs aboard SICmanaged vessels. In the late 1880 s, SIC ship captains probably paid those on the quarterdeck much better than the average for Bay of Fundy vessels while Atlantic Canadian ships also went to sea with less men-per-ton than British vessels. In addition, SIC and Maritime shipowners generally retained a cost advantage over American-registered vessels, which were restricted by that country's legislated requirements. ${ }^{92}$ From the late 1880s, Spencer's Island masters cut the overall wage bill even more aggressively than their regional counterparts to mitigate the impact of declining revenues. Furthermore, it

[^147]appears that Spicer-captained vessels maintained faster trans-Atlantic passages than many of their peers, thereby enhancing their relative labour cost position. ${ }^{93}$

## Market Intelligence and Attitudes to New Seagoing Technologies

SIC's seafaring shareholders, their master mariner employees and commission agents, J. F. Whitney and Company and T. \& E. Kenny - later Kenny, Mahon \& Company - in Europe, utilized extensive information networks across the globe to find the best cargo opportunities. They took into account transit costs, anticipated in-port charges - which varied considerably from place to place and over time - and the personal requirements of ship masters. ${ }^{94}$ George and Johnson Spicer were very active in this process and the final decision generally lay with whichever one of the two was managing owner of the vessel concerned. To make the best decisions, SIC owners and operators needed to be well-informed about the state of their business.

Correspondence between SIC's shareholders, shipmasters, the company's shipping agents and other business associates contained important market intelligence. ${ }^{95}$ In addition, J. F. Whitney and Company produced weekly freight circulars which quoted freight rates for key cargoes, charters arranged during the week to various ports of importance and the general state of the maritime transport market. ${ }^{96}$ The Weekly Freight Circular was also published in some Nova Scotian newspapers including the Cumberland

[^148]Leader. ${ }^{97}$ Furthermore, the captains of SIC-managed vessels and their commission agents actively utilized telegraph services wherever they were across the globe, utilizing coded messages to maintain the primacy of information conveyed. ${ }^{98}$ Along Minas Basin's northern shores, the Parrsboro Shore Telephone Company also enabled rapid relay of information. ${ }^{99}$ Thus there is no doubt that SIC's managing owners were well informed about changing conditions in this highly competitive market-place, including steampowered and iron-hulled vessels' encroachment and the impact this had on displacing competing sail vessels in some regions which then over-supplied others.

SIC's shareholders, the company's shipping agents and other business associates did not express any significant concerns about iron or steam vessels in their correspondence to Dewis Spicer during the 1880s, although all relevant parties were cognisant of the greater role both were playing in the industry. Close British associates such as Bristol-based tug-boat operators C. J. King \& Sons began to take advantage of opportunities the new technology vessels offered. In 1889, C. J. King \& Sons expanded its operations to provide services to steamers although its members also took four shares in Glooscap, the largest square-rigger built at Spencer's Island, in a sign of confidence in the role still to be played by sailing vessels. ${ }^{100}$ Meanwhile, Sam King kept the Spicers up-to-date about the inroads ever larger steamers were making into the oil trade to Bristol. ${ }^{101}$

[^149]
## J. F. Whitney and Company's letters more frequently employed disquieting terms

 when describing the state of the freight market. Whereas poor markets during the first half of the 1880s were described in terms such as "dull," or "no better," by 15 March 1887, the commission agent wrote that "[f]reights are ruinously low $1 / 9$ being the rate," and on 19 April 1887 that "[f]reights have never been so low hard to get $1 / 7 \frac{1 / 2, "}{}{ }^{\prime \prime 2}$ At the same time, SIC was building another vessel at Spencer's Island, the George T. Hay, in which T. \& E. Kenny's Halifax operators and New York chandler Mark Shaw took eight shares. ${ }^{103}$ The vessel was named after a member of J. F. Whitney and Company and officers there took mortgages over additional shares. ${ }^{104}$ These actions suggest that the New York and Halifax merchants still saw a future for square-riggers. T. \& E. Kenny also acquired interests in second-hand iron vessels including the 1,715 ton Eskasoni, the 1,664 ton Raven's Hall and the 1,664 ton Castle Roy. ${ }^{105}$ Kenny[^150]sought Dewis's opinion on the firm's acquisitions when he was in the same port. ${ }^{106}$ There is no indication in the merchant's responses to Dewis's subsequent letters that he expressed any qualms that such vessels could drive sailing ships out of business. The sea captain appeared more concerned with the personal health risks associated with taking a cargo to Rio de Janeiro when he found that he had been chartered to take coal there in April 1889. ${ }^{107}$

By 1894, it was probably clear to SIC's members and J. F. Whitney and Company that stream-powered iron-hulled vessels were gaining the ascendancy in the Atlantic and parts of Asia. Perhaps, they became cognisant of the latest technological development which Graham considers to be the most significant "portentous" point in the transition from sail to steam ocean transport: the perfection and increasingly widespread utilization of the high-pressure, triple-expansion screw engine after 1885. ${ }^{108}$ It likely took a few years for commercial vessels utilizing the new screw engine to be rolled out, and so this development was unlikely to have been a major factor until the late 1880s. It is unclear when SIC's key players became aware of this new challenge to the trades the company

[^151]plied but it is probably no coincidence that SIC and J. F. Whitney and Company did not invest in any more large ships after 1889.

## Financial Performance of SIC-Managed Vessels

To properly assess the economic circumstances SIC faced, it is essential to understand the financial returns it achieved from its managed vessels. This thesis analyzes the returns on three of the four large square-riggers SIC constructed in the decade to $1891 .{ }^{109}$ Of these, only the Charles $S$. Whitney operated for more than a five year period during SIC's existence. ${ }^{110}$ This section summarises its financial performance from the launch in 1885 to 1899 , four years after SIC was effectively disbanded. ${ }^{111}$ Dewis was a part-owner in Charles $S$. Whitney from construction until he sold his two shares to brother-in-law Levi Atkins in August 1896, so the internal rate of return (IRR) to that date is also included. ${ }^{112}$

The Charles $S$. Whitney's initial voyage profits were applied to the outfit account, and associated finance charges, which appears to have been extinguished by mid-1886. Thereafter, the owners received distributions averaging 21.7 percent per annum on initial cost of shares in the five and a half years to December 1891. In the subsequent halfdecade, the return fell to 4.9 per cent per annum. This clearly indicates the sharp

[^152]Table 4.6: Charles S. Whitney's Financial Performance, 1885-1899

| Constructed in 1885 at a total cost of (Canadian dollars): |  |  |  |  |  |  |  | $64,586^{1}$ <br> NPAID/ <br> Dep'd <br> Value <br> (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dividends paid |  | $\begin{array}{r} \hline \text { CFROI } \\ \text { Hull \& } \\ \text { Spars } \\ (\%) \\ \hline \end{array}$ |  | Imputed Outfit A/c Balance | Imputed <br> Voyages <br> Returns <br> (\$) | CFROI <br> /Total Cost $\qquad$ | NPAIBD on Dep'd Value (\%) |  |
| Year | Total (\$) $\qquad$ |  |  |  |  |  |  |  |
| 1885 | 0 | 0.0 |  | 64,586 | 32,293 | 50.0 | 14.0 | 8.7 |
| 1886 | 1,600 | 3.4 |  | 33,585 | 35,185 | 54.5 | 14.2 | 3.9 |
| 1887 | 0 | 0.0 |  |  | 0 | 0.0 | -4.2 | -14.5 |
| 1888 | 10,560 | 22.7 |  |  | 10,560 | 16.4 | 16.9 | 6.5 |
| 1889 | 25,600 | 55.1 |  |  | 25,600 | 39.6 | 58.1 | 47.8 |
| 1890 | 4,800 | 10.3 |  |  | 4,800 | 7.4 | 12.2 | 1.8 |
| 1891 | 12,800 | 27.5 |  |  | 12,800 | 19.8 | 36.2 | 25.8 |
| 1892 | unknown |  |  |  |  |  |  |  |
| 1893 | 6,173 | 13.3 |  |  | 6,173 | 9.6 | 21.7 | 11.4 |
| 1894 | 0 | 0.0 | ${ }^{3}$ |  | 0 | 0.0 | 0.0 | -10.4 |
| 1895 | 0 | 0.0 | ${ }^{3}$ |  | 0 | 0.0 | 0.0 | -10.4 |
| 1896 | 5,232 | 11.3 |  |  | 5,232 | 8.1 | 25.6 | 15.2 |
| 1897 | 1,240 | 2.7 |  |  | 1,240 | 1.9 |  |  |
| 1898 | 4,799 | 10.3 |  |  | 4,799 | 7.4 |  |  |
| 1899 | 8,992 | 19.3 |  |  | 8,992 | 13.9 |  |  |
| Total | 72,804 |  |  |  |  |  |  |  |

Notes: Figures for Dewis Spicer share grossed up to represent total ownership interests.
Abbreviations: "CFROI": Cash Flow Return on Investment (Net of Insurance) per annum "NPAIBD": Net Profit after Insurance and before Depreciation "NPAID": Net Profit after insurance and Depreciation
${ }^{1}$ Cost of Hull \& Spars, separate financing for the outfit account of $\$ 18,105$
${ }^{2}$ Assumes outfit account and interest paid off through voyage profits by August 1886.
${ }^{3}$ It is unclear whether dividend distributions were before or after insurance 1889 to 1898
${ }^{4}$ Dividends improved toward the end of the century, as did major repair costs.
Dewis Spicer sold his 2/64ths share in the vessel to Levi Atkins for $\$ 600$ on 13 August 1896.
The Implied Internal Rate of Return (IRR) to 1896 is 7.9 percent; the implied depreciation rate is 11.6 percent per annum, and the return on hull and spars is 8.30 percent per annum.

[^153]deterioration in business conditions during the latter period. Overall, Dewis achieved an internal rate of return on his Charles $S$. Whitney shares of 7.9 percent per annum after insurance costs. This was better than bank deposit rates of around three percent per annum but barely enough to justify the investment on its own risk-adjusted merits. Given the outlook for future returns, it is not surprising that Dewis divested his stake. By 1896, Dewis had retired from seafaring taking over the family farm after father Jacob's death, whereas his brother-in-law, Levi Atkins, was still going to sea and share ownership provided him a priority right to captain the vessel. ${ }^{113}$

## The Economics of Shipping Investment

The ultimate economic consideration in capital project decision making is the relationship between investment profitability - its future net cash inflows - and its initial cost. C. Knick Harley emphasises that decisions to invest in new productive capital are a function of their expected returns:

The demand for ships, either wood or metal, sail or steam, is a derived demand. Shipowners will purchase ships if the present value of expected returns is greater than or equal to the cost of the ship. In competitive equilibrium the present value of expected returns will equal the cost of the ship. If one type of ship offers a stream of net returns with present value less than its competitor that ship must cost proportionately less or not be purchased. Over time various factors influence supply and demand curves for the different capital goods and the composition of purchase alters. ${ }^{14}$

Of course, this does not recognize that investors have other investment options or integrated investment considerations. It is not just whether a specific investment is

[^154]justified on its own merits - the absolute equation. Just as importantly, how does the prospective investment stack up against alternative opportunities and how does it dovetail with other dependent economic activities? Many of the Maritimes' entrepreneurs displayed a preference for land-based investments, but within the portfolio of opportunities afforded Minas Basin's businessmen and mariners, sea-oriented enterprises remained a viable, even preferred, option through most of the 1880s.

Harley also provides a persuasive case for viewing the evolving nature of the late nineteenth-century ocean-going transport sector in a dynamic context. ${ }^{115}$ The era was marked by substantial changes in international trade routes, generally declining but volatile freight rates within a deflationary environment, and adaptation by ship owners and operators to changing competitive conditions. ${ }^{116}$ Within this general picture, there were periods of temporary or partial equilibrium between competing segments ${ }^{117}$ such as Canadian wooden sail-ship operators, Scandinavian maritime merchants and European steamship companies. Harley also considers the question of access to capital in his thesis from an industry perspective and determines that the barriers to entry were low. ${ }^{118}$

This framework is useful for considering SIC as a specific operator within the industry. New ship investment decisions were closely tied to the participants' expectations both for its prospective profitability and others they already had interests in

[^155]which would contribute a portion of the capital required. It was also a function of their integrated circumstance or the associated functionality of the investment in terms of other, often larger, business interests. These were amongst the considerations for major players but the issues were much simpler for the locals, even though they may have been part of a much more integrated economic design. In the case of SIC's Minas Basin residents, the majority of the funds to pay for new investments came from existing vessels. The locals depended on distributed profits and a continuing supply of foreign capital to maintain shipbuilding operations. During SIC's life there appear to have been two periods of partial equilibrium in vessel profitability. The first carried through the first years of operation to 1884 , when its managed vessels primarily operated in the North Atlantic petroleum trade achieving satisfactory voyage profitability and justifying new vessel construction. The second period of partial equilibrium lasted over the balance of the decade when SIC's vessels stretched out over trade-routes across the globe to sustain satisfactory returns.

## Comparative Analysis of Freight Rates and Business Performance

Maritime historiography contains little on shipping's financial performance until the second half of the twentieth-century when economic historians and cliometricians became more prevalent. ${ }^{119}$ However, the body of analytical work into the economics of wooden sail shipping businesses remains minuscule. Yrjö Kaukiainen's 1990 observation

[^156]that most efforts so far utilize freight indices and assumptions about cargo sizes, types, atsea operating costs and in port charges remains valid. ${ }^{120}$ In the absence of information about the changing mix and nature of cargoes over time, this approach does not provide a satisfactory proxy for actual business performance. ${ }^{121}$ Some scholars have utilized Scandinavian records as private archives - which include owners and companies' profit and loss accounts - became available. ${ }^{122}$ Still, Lewis R. Fischer's 1995 view that scholarship into the business of shipping during Canada's Age of Sail was virtually nonexistent remains valid. ${ }^{123}$

Kaukiainen's investigation of a sample of Finnish shipping owners' accounts
provides a useful yardstick against which to measure the performance of SIC's Charles $S$.

[^157]Whitney. ${ }^{124} \mathrm{He}$ finds that the gross incomes for his sample of vessels declined thirty percent from 1868-72 to the periods in the mid to late 1880s and early 1890 s. ${ }^{125}$ The freight and gross income all declined more than general prices as represented by the

British Wholesale Price Index, which declined an average of twenty-two percent over the same period and may be reasonably indicative of deflationary pressures during this part of the nineteenth century. ${ }^{126}$ ACSP and Kaukiainen determine that in aggregate the vessels in their sample or estimation sets remained profitable through most of the second half of the nineteenth-century, ${ }^{127}$ but ACSP's claim that there were substantial "potential profits" for the Saint John fleet between 1871 and 1891 is not yet supported by empirical evidence. ${ }^{128}$ This thesis does not investigate any New Brunswick-based vessels, and the only near-complete published records for Maritime Canadian sailing vessels are for six

[^158]Table 4.7: Net Result for a Sample of Six Nova Scotian Deepwater Vessels, 1876-92 (Per Year and Net Ton)

| Period | Average Net Profit |  |  | Average $\mathrm{Val} / \mathrm{Ton}$$(\mathfrak{f})^{*}$ | Return on Capital* |  | Return Excl. John Mann |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Before <br> Depn (f) | After Depn <br> (£) |  | $\begin{gathered} \text { Before } \\ \text { Depn (\%) } \\ \hline \end{gathered}$ | After <br> Depn <br> (\%) | N | Before Depn <br> (\%) | After Depn (\%) |
| 1876-79 | 2 | 1.52 | 1.22 | 3.80 | 40.0 | 32.0 | 1 | 32.8 | 25.6 |
| 1878-82 | 3 | 1.25 | 0.87 | 4.06 | 30.8 | 21.5 | 2 | 25.1 | 15.7 |
| 1881-84 | 4 | 0.91 | 0.63 | 3.89 | 23.5 | 16.1 | 3 | 20.3 | 13.1 |
| 1883-87 | 3 | 0.63 | 0.39 | 3.80 | 16.5 | 10.1 | 3 | 16.5 | 10.1 |
| 1886-89 | 4 | 0.70 | 0.43 | 3.89 | 18.1 | 11.1 | 4 | 18.1 | 11.1 |
| 1888-90 | 3 | 0.92 | 0.69 | 3.45 | 26.7 | 20.0 | 3 | 26.7 | 20.0 |
| 1888-92 | 1 | 1.04 | 0.72 | 4.32 | 24.1 | 16.8 |  | 24.1 | 16.8 |

Notes: * Return on Capital calculated using income net of estimated depreciation expense as a percentage of depreciated value. Kaukiainen used slightly lower depreciation rates than Those typically applied by ACSP and Sager with Panting in Maritime Capital. Canadian dollars converted to British Pounds Sterling at the official exchange rate of 4.866.
Vessels in the sample were between 913 and 1,757 registered tons.
Source data for this table: Derived from, Sager with Panting, Maritime Capital, Appendix C, 216-221.
registered in Nova Scotia. ${ }^{129}$ This thesis summarizes their performance in Table 4.7. The results are shown in a format similar to that Kaukiainen utilized in his study. ${ }^{130}$

The only publicly available information on the financial performance of Maritime Canadian deep-water vessels suggests that Nova Scotian shipowners experienced better returns from their deep-water vessels than did the Finns. On average, the vessels in the table above achieved double digit returns on diminishing value through the 1880 s and early 1890s whereas Kaukiainen finds that the Finnish deep-water fleet achieved

[^159]negligible net overall return on capital over the last fifteen years of the nineteenthcentury. ${ }^{131}$ This suggest that returns on capital were higher for Maritime Canadian deepwater vessel owners than those from Finland, ${ }^{132}$ supporting Sager with Panting's contention that while earnings on Maritime vessels into the mid 1880s fell far short of the substantial returns of the 1860 s and 1870 s, they remained sufficient to justify continued involvement in the industry. ${ }^{133}$ SIC's Charles S. Whitney achieved higher financial returns than the Nova Scotian vessels included in the table above before 1890, and lower thereafter. ${ }^{134}$ It appears that the Charles S. Whitney was more profitable for its investors

[^160]during the 1880s than most competing ships. Along with other SIC-managed vessels, it provided sufficient distributions to both justify and support further investment in shipping. ${ }^{135}$

This contrasts with the general situation in Maritime Canada. Sager with Panting reports that ship owners were increasingly despondent about the prospects for their seatransport businesses, continuing their retreat from the maritime realm by selling used vessels to Scandinavian and other operators. ${ }^{136}$ Owners and investors located in major urban centres dismantled their fleets to take advantage of landward opportunities. In contrast, Windsor's registered tonnage increased at an accelerating rate towards $1890 .{ }^{137}$ SIC also increased its fleet and it appears that several other Nova Scotia-side Bay of Fundy operators did likewise. The owners of large well-managed Nova Scotian ships generally appeared to derive fair, albeit risky, investment returns during the second half of the 1880s. The rapid decline in Maritime Canada's merchant marine elsewhere appears to have been a function of new land-based opportunities and limited capital resources to exploit them.

## New Investment Opportunities

In Maritime Canada, merchant shipping became a relatively less attractive industry as new investment options opened up ashore. The Macdonald Government's

[^161]1879 National Policy applied substantial new duties on manufactured imports to stimulate domestic production. ${ }^{138}$ T. W. Acheson records that behind this protective curtain, Nova Scotia recorded greater industrial growth than other east Canadian provinces, with New Brunswick's Saint John not far behind. ${ }^{139}$ The Maritimes business community sought to transform the region from a shipping and staples exporter into Canada's industrial centre with limited capital and labour resources. ${ }^{140}$ Its shipping fleet represented a substantial capital pool allocated to a highly variable and increasingly difficult industry whereas the National Policy's protective curtain afforded apparently greater certainty for manufacturing enterprises ashore. These converging forces were probably major factors behind Maritime Canadian shipowners' switch from sea to land. ${ }^{141}$ Acheson considers that Maritime industrial growth occurred unevenly during the 1880s based more on entrepreneurial zeal and local capital than a wider inflow of Canadian funds:

The factors which produced this curious distribution of growth centres were human and historical rather than geographic. The one characteristic shared by them all was the existence in each of a group of entrepreneurs possessing the enterprise and commercial resources necessary to initiate the new industries. Strongly community-oriented, these entrepreneurs attempted, during the course of the 1880 's, to create viable manufacturing enterprises in their local areas under the aegis of the protective tariff. Lacking the resources to survive the prolonged economic recessions of the

[^162]period, and without a strong regional metropolis, they acquiesced in the 1890's to the industrial leadership of the Montreal business community. ${ }^{142}$

SIC's experience appears consistent with the picture Acheson paints. SIC's members were highly community-oriented, their capital and entrepreneurial skills were oriented to shipbuilding and seafaring, and their greatest practical manufacturing capability was the transformation of trees. Some merchants in larger communities around Minas Basin diversified into insurance, banking and a variety of manufacturing concerns, ${ }^{143}$ although whether this reduced the pool of locally available capital for shipbuilding is unclear. Sager, Fischer and Ommer argue persuasively that the sharp improvement in prospective returns from landward opportunities "dramatically [increased] the opportunity costs in shipping," despite the latter industry's continued viability. ${ }^{144}$ Maritime Canadian capitalists' limited access to capital and the shift in expected returns between land and sea investments forced decisions between them. This may be a critical factor behind the divergent performances of investors in Minas Basin's merchant marine and those elsewhere in eastern continental Canada. Sager with Panting does not recognize capital limitations when concluding that the Maritimes industry was

[^163]"doomed not by the inevitable advance of technology [n]or by impersonal market forces but by the [decisions of the] Maritimers themselves."145

The men and women who invested in SIC-built and managed vessels through the 1880s were primarily either locally based or had personal ties to those in the region. Even more importantly, SIC and several other Minas Basin shipping enterprises had access to a ready flow of foreign capital in the form of New York J. F. Whitney and Company and its associates in that metropolis. These characteristics accord with Acheson's view about investment and capital in the region. Once shipping returns deteriorated to the point that new investment in the industry could no longer be justified, the New York pipeline dried up, although J. F. Whitney and Company continued to act as agent for SIC-managed vessels. The Spicer brothers also began to consider alternative land-based investments. In 1894, George and Dewis Spicer looked into building a pulp mill at Spencer's Island. ${ }^{146}$ The project never proceeded, but it does suggest that they too sought to take advantage of the National Policy's protective curtain as shipping returns spiralled down.

The outlook for most deep-sea going square-rigged sail vessels appeared increasingly bleak as the 1890 s progressed. The flow of capital necessary for continued construction at Spencer's Island diminished to a trickle. The fall-off in dividends from vessels meant there was an insufficient pool of funds available locally and New York investors were no longer interested in financing construction of large deep-water squareriggers. However, there still appeared to be good opportunities for specialized craft such as schooners for coastal and niche market business. The last square-rigger built at the Island, and the last vessel to carry SIC's flag, was the 509 ton barquentine Perfection

[^164]launched in $1893 .{ }^{147}$ Foreign investors took small stakes in or mortgages over shares in her. ${ }^{148}$

There is no sign that SIC ever contemplated a transition to steel-hulled or steam vessels. Even if it had, the New York-based investors who provided much of the capital for ships built between 1880 and 1893 had no compelling reason to support such a move. They could more easily invest closer to home or into established businesses in Europe if they so chose. ${ }^{149}$ Furthermore, the company's main shipbuilding sponsor, J. F. Whitney and Company, was a shipping commission agent first and foremost. It merely took interests in vessels to enhance its core-business returns, not the other way round. The agent appears to have continued to perform strongly well into the twentieth century during which it developed new associations with Scandinavian and other European steam-ship companies. ${ }^{150}$

SIC still had a pool of ocean-going captains to draw on, but as time passed there were fewer vessels to command. After Dewis Spicer retired, brother-in-law Levi Atkins took over the Charles $S$. Whitney while George and Edmund continued to captain ships into the twentieth-century. Levi eventually moved to New York as did many other master

[^165]mariners who wished to remain in the industry, but George and Edmund chose to remain at Spencer's Island. Emily Jane Spicer and Emma Spicer agitated against any of their sons going to sea. They sought land-based careers for their children and all but one who reached adulthood went on to successful futures. The one exception resulted in tragedy. George finally acquiesced to his eldest son's enthusiasm for a seafaring life, breaking the promise he made beside Emily Jane's deathbed. It was a decision that came back to haunt him after he watched Whitney drown at sea in $1898 .{ }^{151}$

## A Changing of the Guard at Spencer's Island and New Beginnings

By the mid 1890s, several SIC members had new personal ambitions beyond the hamlet's particular constraints. In 1894, the firm comprised five shareholders: merchant Nathan Eaton with three shares, mariners Johnson and George Spicer with two and one respectively, and shipbuilder Amasa Loomer and Samuel Williams' widow, the since remarried Antoinette Sayre, with one share each. Toward the end of that year, Nathan realized the company would not build any more large vessels and that its activities would be scaled back accordingly. He did not intend to regress to small-time storekeeping and relocated his family back to the house in Canning he had retained throughout his residence at Spencer's Island. ${ }^{152}$ Providentially, George's son Percy was unable to secure suitable employment in Boston following his completion of a business diploma at St .

[^166]John Business College. ${ }^{153}$ He returned to Spencer's Island to work at the store, officially taking over the following year on 28 October $1895 .{ }^{154}$ On this date, SIC formally ended its nearly fifteen-year involvement with shipbuilding and was effectively discontinued. ${ }^{155}$ Nathan commuted between Spencer's Island and Canning during a transitional phase, before settling at the latter. ${ }^{156}$

Amasa Loomer also had no business reason to remain at Spencer's Island. The prospect of building a few schooners probably held less appeal than relocating to Massachusetts, home both to his forebears and recently arrived granddaughter. ${ }^{157}$ Amasa and Amanda emigrated to the United States in 1895 and settled in Belmont, Massachusetts, where they took care of their grandchild after son Guy lost his first wife. ${ }^{158}$ Johnson Spicer was master of the Perfection until 1895, when he stepped aboard the Glooscap to spell his brother George. ${ }^{159}$ Johnson's previous command, the Perfection,

[^167]burned in the North Atlantic in August 1896, ${ }^{160}$ but it appears that he intended to retire anyway. ${ }^{161}$ The Parrsboro Leader reported that " $[t]$ he three last trips [aboard the Glooscap] were a little too rich for Capt. [Johnson] Spicer, who although loving to look on blue water, after such an experience as that decided that the peculiar blue of the waters of the Basin of Minas as viewed from Spencer's Island would just suit him." ${ }^{162}$

With the exception of George Spicer, who continued to ply the high seas until 1911, ${ }^{163}$ SIC's former shareholders thereafter pursued opportunities ashore or, in the case of Amasa Loomer, merely retired. ${ }^{164}$ Nathan Eaton joined the Cornwallis Creamery Company as Secretary-Treasurer in $1895 .{ }^{165} \mathrm{He}$ went on to establish Eaton and Company which reportedly grew to be the largest grain and feed business in the region and in later years became active in real estate. ${ }^{166}$ Johnson moved to Parrsboro where he owned and operated the highly successful Newville Lumber Company, aided by nephew Percy

[^168]Spicer. ${ }^{167}$ In 1898, Antoinette married for a third time and also moved to Parrsboro where her new husband ran the local telephone company. ${ }^{168}$ All the SIC's post 1890 shareholders lived long lives in relative financial comfort. The SIC had served its purpose. Its owners formed the company in 1880 to capitalize on a major commercial opportunity in shipbuilding and vessel management, and within a year it was integrated with the local community's sole shop keeping business. The combined enterprise's shipbuilding activities were supported, even sponsored, by American capitalists for more than a decade. When SIC could no longer fulfill its originating objectives, the shareholders took the sensible course and wound up the company. It had been a dutiful servant, contributing significantly to their material wealth, and probably enhanced their standing in the community. For all associated with it, the SIC had undoubtedly been a financially successful enterprise.

[^169]
## Chapter Five:

## Conclusion

Around Nova Scotia's Minas Basin, ownership of deep-water sailing vessels increased for more than a decade after Atlantic Canada's registered tonnage began a rapid retreat from its 1879 peak. By the early 1890s, Windsor and other Minas Basin ports accounted for more than a quarter of the Maritimes' total ocean-going fleet, but the reasons for this region's divergent performance remain little understood. This thesis investigated the Spencer's Island Company (SIC), a shipbuilding and managing enterprise which operated between 1880 and 1895, to uncover what enabled it to expand profitably during a period when its counterparts in the largest urban centres were withdrawing from the merchant marine.

The thesis makes the following contributions to Canadian and maritime historiography. Firstly, it found that local investors were capital constrained and relied heavily on profits from existing vessel voyages and foreign investors. United Statesbased merchants were increasingly significant financial contributors to Windsorregistered ocean-going vessels from the 1870s and major investors in SIC-built ships between 1880 and 1891. American capital's role in the Maritimes' land-oriented industries has previously been recognized, but not its merchant marine. Shipbuilders and fleet owners on Nova Scotia's Atlantic coast and in New Brunswick do not appear to have had the same degree of access to American capital. This may have been a factor in their more rapid withdrawal from the industry. Secondly, the thesis revealed that registered mortgages were important instruments for investment in the Upper Bay of Fundy's ocean-going fleet. Mortgages provided holders with specific security during a time when unlimited liability was more common, and British legislation extended full
benefits to foreign mortgagees. Furthermore, foreign mortgage-holders did not put the flagged status of British ships at risk, whereas direct registered investment in ships' shares would do so. Some American investors took advantage of these provisions to invest in Nova Scotian shipping whilst United States regulations constrained the international competitiveness of that country's merchant marine. Thirdly, this thesis tied together existing industry-based literature with a specific business case study and determined that some Nova Scotian shipowners' ocean-going vessels remained relatively profitable for a decade after the provincial downturn in fleet ownership. This is the first detailed micro-economic investigation into one of the Maritimes' sailing ship businesses.

SIC operated for only so long as it was profitable to do so, and when the window of opportunity closed, the company was wound up. SIC could not have continued to build ships unless existing vessels remained sufficiently profitable to provide local investors with new capital and the outlook maintained the interest of its New York-based supporters. The thesis took a case study approach but its findings are probably more widely applicable to Minas Basin's shipping industry. It uncovered widespread use of mortgages registered in favour of foreigners to support maritime investment and this region continued to increase its investment in sailing vessels for more than a decade after the Maritimes as a whole began to dismantle its fleets.

The thesis utilized Nova Scotia Archives and Records Management's (NSARM's) extensive primary sources relating to SIC-built vessels and one of its employees, Dewis Spicer, together with private collections of letters, financial records and photographs held by descendants of company owners as well as material held by local historians. These provided a comprehensive picture of the people involved in the SIC, its shipbuilding
costs and the financial performance of some vessels. This biographical and microeconomic approach was intertwined with Atlantic Canada Shipping Project's (ACSP's) industry-based papers, along with publications by project members and historians such as Charles Knick Harley, Gerald S. Graham and Richard Rice. ${ }^{1}$ The ACSP, the largest datadriven investigation into Atlantic Canada's ocean-going merchant marine, includes important information on the Windsor shipping registry, but not Parrsboro where SIC registered the vessels it built. Until now, nobody has investigated the reasons behind the Windsor registry's divergent performance from the other major Maritimes ports. This thesis argued that during the 1880s, financial returns were sufficient to justify retention of large, well-maintained sailing vessels, despite the relative change in the prospective risk/reward ratio following the National Policy's introduction in 1879. The Policy skewed the playing field toward westward-looking, land-based investments for those who could take advantage of new opportunities. The two critical issues appear to be, who was in the best position to develop new manufacturing enterprises, and where would the capital come from? Acheson points out that there were pockets of entrepreneurship throughout the Maritimes, but capital was a significant constraint during the region's early

[^170]industrialization. ${ }^{2}$ Ambitious businessmen sought capital from wherever it was available and in some cases this meant liquidating interests in shipping.

Some Minas Basin entrepreneurs involved in shipbuilding and ownership, especially those on its northern shores, had more access to capital and less reason to pursue alternative paths. Both factors were applicable in SIC's case. The company's members were highly community oriented, were supported by American capital and their own shipbuilding and seafaring entrepreneurial skills. Their greatest practical manufacturing capability was the transformation of trees into ships.

This thesis also uncovered evidence that SIC's situation was not unique. The Windsor and Parrsboro Shipping Registers and New York Times reports revealed American capital's important role in Nova Scotia-side Bay of Fundy shipbuilding and operation. In particular, New York-based J. F. Whitney and Company was the commission agent for numerous Nova Scotian-registered vessels and its members held mortgages over shares in many vessels. The thesis also tied the land to the sea for, as Daniel Vickers and others report, these were not separate spheres; rather the lives of men and women who lived beside the sea were integrally linked to the ocean's highways and the industry that operated on them. ${ }^{3}$

In light of the capital constraints T. W. Acheson identified during the Maritimes' industrialization, ${ }^{4}$ this thesis analyzed the capital sources for the first ship SIC built after 1880, the 1,626 ton Stephen D. Horton. This confirmed that the most important sources

[^171]for SIC's shipbuilding activities were beyond Nova Scotia's shores: dividends from vessels already operating on the high seas and New York merchants.

These multi-level and cross-tier bindings were laid out in three broadly chronological and thematic chapters. Chapter Two included a collective review of SIC's owners and New York-based associates up to 1880, and their links to the Maritimes' merchant marine. Chapter Three explored the reasons for SIC's formation, its shipbuilding activities between 1880 and 1885 and its importance to the local community. Chapter Four assessed the business performance of some Spencer's Islandbuilt vessels. It tied together primary documents on freight rates and costs with the work of other historians on these for the Atlantic Canadian and North Atlantic ocean-going transport industry, and compared SIC-managed vessel returns with previously published samples of Nova Scotian and Finnish vessels. This multi-pronged approach reveals a holistic picture of SIC's members operating within their community and in collaboration with United States-based merchants in an ocean-going industry that relied on a multitude of skilled professionals at sea and ashore.

Nine local entrepreneurs came together between 1880 and 1881 to establish Spencer's Island's largest business enterprise shortly after mounting debts and inadequate cash flows forced the hamlet's sole shipbuilding and storekeeping partnership to declare bankruptcy. The grouping was linked by bloodlines and common commercial interests and capitalized on its relationships to secure local and international investors in the vessels it built. SIC's most important association was with New York-based investors, particularly ship-broker and commission agent J. F. Whitney and Company, through George D. Spicer and its other sea-captain shareholders. Together, SIC and the New

Yorkers operated as partners across two nations to own and, in some aspects, co-manage vessels built at Spencer's Island. Although J. F. Whitney and Company's leading role as commission agent for nine percent of Nova Scotia's registered tonnage is a matter of public record, its significant contribution to Bay of Fundy shipbuilding and vessel ownership is unrecognized. In part, New Yorkers' absence from Atlantic Canadian maritime historiography is due to the form their investments took. Few New York residents were citizens of the British Empire, a required status for investors in Canadianbuilt vessels intending to sail under the British flag. Ships' British status brought easier access to international ports and greater flexibility with respect to crewing levels and payment rates than American-registered vessels which, in turn, were limited to those built in the United States. There was no such restriction on the provision of mortgage finance. British law established rights and protections for registered mortgagees whatever their nationality. These included the ability to protect the security of their investment against prejudicial actions by ship owners and masters, and claims from lower ranking creditors in the event of shareholder bankruptcy. Unregistered mortgages and shareholdings were not entitled to these protections.

American citizens utilized Britain's mortgage laws to secure capital provided to Bay of Fundy shipbuilders, and sometimes to mask their investment in the shares of the vessels constructed there. In SIC's case, New Yorkers provided as much capital for new vessels as Minas Basin's entrepreneurs with most going into unreported share ownership, but covered by registered mortgages. SIC eschewed debt-raising for the hull and spars, although outfit costs were financed by loans to be paid out of future voyage profits. New York's J. F. Whitney and Company frequently picked up the financier responsibility for
the outfit account soon after launch date. SIC's access to New York capital enabled it to continue its shipbuilding operations long after owners in centres such as Saint John, Halifax and Yarmouth slashed new investment.

Vessel profitability was also of paramount importance, as both a source of funds and justification for adding vessels to fleets. During the 1880s, Minas Basin investors in SIC-built ships derived the bulk of their capital for new shares from dividend distributions by existing vessels. This represented a virtuous economic cycle; as long as sufficient cash flowed in, local capitalists were able to take up additional shares. Some shipbuilding materials were sourced locally, such as timber for the hull, but the majority came from further afield and were paid for by issuing commercial notes subsequently redeemed for cash. Capital was a relatively scarce commodity for Maritimes entrepreneurs during the late nineteenth-century's long economic depression, limiting their ability to expand existing businesses or to adequately capitalize new land-based opportunities. SIC's members appear to have been no less entrepreneurial than those elsewhere, but their expertise was oriented to shipbuilding and seafaring. They also sought to enhance their community's economic well-being, utilising regional and foreign capital to maximise the potential value of local skills and resources.

SIC's seafaring members, as well as its commission agents and shipmasters, played important roles in maximizing the performance of Spencer's Island-built vessels. The two senior captains, George and Johnson Spicer, worked with J. F. Whitney and Company and Halifax-based T. \& E. Kenny and Company's European offices to secure the best possible cargoes and rates taking into account seasonal volatility in key markets and changing competitive conditions, capitalizing on new opportunities wherever these
opened up. SIC was initially a specialist exporter of petroleum from New York to Europe, from where its vessels usually returned with minimal loads ahead of their next eastward cargo. Petroleum was such a profitable trade that until the mid-1880s the company could justify its low vessel capacity utilization rates on return journeys. SIC responded to the sharp drop in petroleum freight rates from 1884 by redirecting its managed-vessels to carry coal and other products from Europe to southern Atlantic ports, returning north with cargoes of locally produced commodities.

A new partial-equilibrium between sailing and steam ships existed for several years, but by the end of the 1880s, iron-hulled and steam-powered ships encroached on sail's main trading routes throughout the Atlantic. SIC and its agents sent Spencer's Island-built trampers around the globe to secure the best cargoes, and these large, robust vessels remained profitable into the 1890s. The Spicer-brother captains also played an important role in financial performance by achieving rapid transits and minimizing manning levels and wage rates. During its early years, the captains of SIC-managed ships probably paid those on the quarterdeck premium rates, but not their able-bodied seamen. As competitive conditions intensified and freight rates declined, the sampling undertaken in this thesis suggested the company's master mariners cut their overall wage bills at least as much as did their Atlantic Canadian and British peer-group. In addition, SIC captains sometimes resorted to under-manning to minimize costs, a tactic that Eric W. Sager reports being relatively common aboard Atlantic Canadian vessels. ${ }^{5}$ These actions together enabled most SIC-managed ships to remain profitable into the 1890s, but not at a level to justify investment in, or to provide local investors with sufficient capital for, new

[^172]large sailing vessels. In 1891, SIC launched its last and largest ship, the 1,721 ton Glooscap, although it also entered more specialized trades, building a tern and a schooner during the next two years. The Glooscap was a replacement for Stephen D. Horton which burned at sea in 1888 , and it was partially funded by insurance proceeds shareholders received.

United States investors continued to supply SIC with capital up to the 509 ton Perfection's launch in 1893, suggesting that they saw a continuing profitable role for wooden sailing vessels long after Canadian historians consider the Maritimes' merchant marine remained economically viable. This thesis maintained that investors in SIC-built vessels received reasonable returns on their investments during the 1880s. Thereafter returns fell to levels little better than bank rates, except in the Perfection's case. By 1894, it became clear that SIC's shipbuilding days were over and the company was effectively wound up the following year. Master builder Amasa Loomer emigrated to Massachusetts and merchant Nathan Eaton returned to Canning on the other side of Minas Basin where he achieved great financial success and personal recognition. Johnson Spicer retired from the sea, although he built more schooners on his own account into the twentieth-century. Johnson moved to Parrsboro, where he took a controlling interest in a major timber mill. In contrast, George Spicer remained the Glooscap's master until 1910 and he remained a Spencer's Island resident for the rest of his life.

There is no evidence that SIC's members ever considered shifting to iron-hulled steam vessels although J. F. Whitney and Company later became involved with European steamship companies and Charles S. Whitney was interested in the United States Shipbuilding Company. There was limited scope to build steamships along the Parrsboro
shore and, in any case, the Spicer wives did not want their sons, or daughters, to undertake careers afloat. Emily Jane and Emma Spicer, for example, were well aware of the riskiness of life at sea as both had spent much of their early married lives atop the oceans with their husbands, George and Dewis respectively. Furthermore, there was no longer any financial imperative to justify their offspring taking such risks. A review of George and Johnson's probate records indicates that both men left relatively large estates. They derived substantial wealth from their investments in SIC and the ships that it built; it appears that this was true for all five of the company's final shareholders. Descendants' recollections of family stories indicate that the Spicer brothers enjoyed full social and financially comfortable lives, more than adequately providing for their families including numerous children who sought educational advancement and careers.

SIC is an excellent example of a business opportunity grasped by enterprising Nova Scotians with capital support from local investors and American citizens. SIC did what it was designed to do. It was a means to an end, not an end in itself. The company generated considerable income for its shareholders and the local community. The owners recognized its time was passing in the mid-1890s and wisely adjusted their scopes. For fifteen years SIC was Spencer's Island's largest business, was directly or indirectly responsible for several community projects and was one of Minas Basin's major employers. The company was also an important timber consumer and facilitator of timber exports for local woodlot holders. Although there was still wood to be exported, by 1895 SIC had served its purpose, and its owners went onto other things. The company clearly meets the thesis's tests for success outlined in Chapter One.

Figure 5.1: Replica of the Flag Flown by Spencer's Island Company Vessels


Source: Spicer private collection

There may be other Minas Basin shipbuilding and managing companies which also performed similarly during the 1880s when most of the Maritimes' shipowners were dismantling their fleets due to volatile returns, constrained capital positions and apparently better prospects behind the National Policy's protective curtain. This thesis represented an early step to better understanding the economic circumstances, competitive considerations, capital and other constraints in an important Atlantic Canadian sub-region during the first few decades following Confederation.

## Appendix I: Chronology of SIC-Related Events

| Year | Month | Event | Shipbuilding |
| :---: | :---: | :---: | :---: |
| 1879 | Feb | Firm of Payzant \& Bigelow collapses |  |
| 1880 | May | Construction of $E$. J. Spicer begins A new shipbuilding company formed Robert Wesley's father Isaac Spicer dies |  |
|  | Oct | E. J. Spicer launched |  |
| 1881 | Dec | Nathan \& Minnie Eaton move to Spencer's Island Merged store and shipbuilding form new SIC |  |
| 1882 | Mar | Construction of S. D. Horton begins |  |
|  | Aug | Daniel Spicer murdered aboard E. J. Spicer |  |
| 1883 | Feb | Samuel Williams drowns at sea |  |
|  | Aug | S. D. Horton launched |  |
|  | Oct | Construction of C.S. Whitney begins |  |
| 1884 | Mar | Nathan's father Levi Eaton dies |  |
|  | Nov | Nathan Eaton buys John \& Gideon Bigelows' shares |  |
| 1885 |  | Gideon Bigelow emigrates to California |  |
|  | Feb | Firm of E. Bigelow Sons \& Co. collapses |  |
|  | Aug | C. S. Whitney launched |  |
|  | Oct | Construction of G. T. Hay begins |  |
|  |  | Robert Spicer moves to Diligent River |  |
| 1886 |  | Johnson Spicer buys Robert Spicer's shares |  |
|  | Jan | Gideon Bigelow killed in work accident, USA |  |
|  | Dec | James F. Whitney dies |  |
| 1887 | Aug | G. T. Hay launched |  |
|  | Dec | Construction of Germ begins | Germ |
| 1888 | Aug | Germ launched |  |
|  | Dec | S. D. Horton burns at sea and is lost |  |
| 1889 | Feb | S. D. Horton insurance payout |  |
|  | Apr | Construction of Evolution begins | Evolution |
|  | Jun | Construction of Glooscap begins |  |
|  | Sep | Evolution launched |  |
| 1891 | Aug | Glooscap launched |  |
| 1892 | Mar | Construction of Exception begins |  |
|  | Oct | George's wife Emily Jane Spicer dies of cancer | Exception |
|  | Oct | Exception completed |  |
| 1893 |  | Nathan Eaton buys Henry Bigelow's shares |  |
|  | Mar | Construction of Perfection begins |  |
|  |  |  | Perfection |
|  | Oct | Perfection completed |  |
| 1894 | Dec | Nathan Eaton returns to Canning |  |
| 1895 |  | Amasa Loomer emigrates to Massachusetts |  |
| 1895 | Oct | SIC effectively wound up |  |
|  | Oct | Percy Spicer buys SIC operating assets |  |
| 1896 |  | Dewis Spicer retires from seafaring |  |
|  | May | Jacob Spicer dies |  |
| 1896 | Aug | Perfection burns at sea and is lost |  |
|  |  | Johnson Spicer ends sea career |  |
| 1898 | Nov | George's son Whitney Spicer drowns at sea |  |
| 1910 | Jul | George Spicer retires from seafaring |  |

Sources: Spicer private collection; Grant private collection, NSARM, Parrsboro Shipping Registers;
NSARM, Spencer's Island Company fonds; NSARM, Spicer family fonds; Stanley T. Spicer, Captain from Fundy; Dalhousie University Library and Archive, Bigelow family records.

Appendix II: Jacob and Mary Spicer Family - Part 2




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| :---: |


Appendix V: Levi Eaton Family


Appendix VI: Maritime Canadian Vessels' Engagements with United States Ports in 1883

| Ships Bound to USA by Port of Registry |  |  |  | Clearances from N.Y. |  |  | Commissioned by J.F. Whitney and Co. in$1880$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Port | Vessels | Reg. <br> Tons | Voyages | Vessels | Reg. <br> Tons | Voyages |  |  |
|  |  |  |  |  |  |  | Vessels | Tons |
| N. S. West Coast |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Yarmouth | 106 | 107,321 | 193 | 45 | 33,758 | 59 | 2 | 1,451 |
| Windsor | 78 | 80,013 | 170 | 98 | 71,961 | 219 | 32 | 26,165 |
| Maitland | 25 | 21,522 | 39 | 16 | 13,715 | 26 | 10 | 9,768 |
| Annapolis | 16 | 13,444 | 30 | 14 | 10,556 | 30 |  |  |
| Parrsboro | 10 | 8,625 | 24 | 32 | 12,164 | 78 | 4 | 1,820 |
| Digby | 9 | 6,475 | 11 | 6 | 2,852 | 6 |  |  |
| Weymouth | 3 | 2,699 | 5 | 3 | 2,693 | 3 |  |  |
| Canning | 1 | 1,249 | 4 |  |  |  |  |  |
| Amherst | 1 | 1,099 | 2 | 2 | 1,463 | 1 | 4 | 3,796 |
| Truro |  |  |  |  |  |  | 1 | 447 |
| Total | 143 | 135,126 | 285 | 171 | 115,404 | 363 | 51 | 41,996 |
| Other <br> Maritimes | 401 | 356,007 | 635 | 426 | 124,290 | 361 | 11 | 6,688 |
| Total | 544 | 491,133 | 920 | 597 | 239,694 | 724 | 62 | 48,684 |
| Mainland Canada | 5,386 | 1,175,627 |  |  |  |  |  |  |

Sources: New York Maritime Register, 1883, "Vessels in the Port of New York and Vicinity," and "Vessels Homeward Bound for the Port of New York," as presented in: Keith Matthews, "The Canadian Deep Sea Merchant Marine, and the American Export Trade, 1850-1890," in Volumes Not Values: Canadian Sailing Ships and World Trades, David Alexander and Rosemary Ommer, eds. (St. John's: Memorial University of Newfoundland, 1979), 216; Canadian Sessional Papers, 1873-1910, as presented in Keith Matthews, "The Shipping Industry of Atlantic Canada: Themes and Problems," in Ships and Shipbuilding in the North Atlantic Region, Keith Matthews and Gerald Panting, eds. (St. John's: Memorial University of Newfoundland, 1978), 10.

Appendix VII: Vessels Under Charter to J. F. Whitney and Company in 1880 as Reported in the New York Times

| Type | Name | Port of Registry | Reg. <br> Tons | Built | Where | Owners |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ship | Cumberland | Amherst, N.S. | 1555 | $11^{\prime} 76$ | Maccan, NS | T. E. Kenny \& Co |
| Bark | Flora | Amherst, N.S. | 571 | $8^{\prime} 75$ | Maccan, NS | T. E. Kenny \& Co |
| Bark | Lalla | Amherst, N.S. | 1099 | $11^{\prime} 74$ | Maccan, NS | T. E. Kenny \& Co |
| Bark | Mary W. Pipes | Amherst, N.S. | 571 | 9 '78 | Nappan, NS | J. R. Pipes |
| Bark | Chevalier | Ayr, Scot | 856 | '52 | Miramichi Richibu'to | T. Steele |
| Bark | Jehu | Ayr, Scot | 428 | '56 | NB | T. Steele |
| Bark | Brazilian | Banff, Scot | 235 | 9 '69 | Lossiemouth | A. Cook \& Co. |
| Bark | Thorvaldsen | Bergen | 693 | $10^{\prime} 72$ | Bergen | Jo'ch'mL'mk'hl |
| Bark | Annie | Glasgow | 505 | $11^{\prime} 64$ | Maitland, NS | Browne \& Watson |
| Bark | Margaret Mitchell | Glasgow | 650 | $10^{\prime} 75$ | Maitland, NS | Browne \& Watson |
| Bark | Capri | Halifax | 896 | 8'75 | Maitland, NS | Jer'mi'h Northrop \& O |
| Bark | Florence L. | Halifax | 742 | $10^{\prime} 78$ | Bass River | R \& G Lewis |
| Bark | Lady of the Lake | Halifax | 542 | 12 '73 | Economy,NS |  |
| Ship | McDougal | Halifax | 1174 | 8 '73 | 5 Mile River | John Stairs \& Co |
| Bark | Nevada | Halifax | 674 | $11^{\prime} 71$ | Colchester | S Vaughan \& Co |
| Bark | Scotland | Halifax | 511 | 10 '69 | 5 Mile River | Geo Troop \& O |
| Brig | Teviot | Halifax | 260 | 11 '68 | Princeport | John Taylor \& O |
| Bark | Ocean Express | Halifax | 489 | $1^{\prime} 72$ | Barrin'ton | Wm. J. Lewis |
| Bark | Alice Roy | Halifax, N.S. | 610 | 10 '66 | Maitland, NS Sum'side, | Wm Douglass \& O |
| Bark | PawashicK | Liverpool | 359 | 11 '69 | PEI | E. Fry |
| Brig | Victor | Lunenberg | 216 | $7{ }^{\prime} 74$ | Wallace, NS | L. Anderson \& Co |
| Bark | Erinna | Maitland | 130 | 10 '77 | Maitland, NS | A \&W. Smith \& O |
| Ship | Gloaming | Maitland | 1490 | 7 '79 | Maitland, NS | J.\& E. Kenny \& Co |
| Bark | Laura Emily | Maitland | 768 | $9^{\prime} 75$ | Maitland, NS | T. E. Kenny \& Co |
| Bark | Midas | Maitland | 839 | 8 '70 | Maitland, NS | J. Northrup \& Co |
| Ship | Minnie Swift | Maitland | 1150 | 7 '76 | Selma, NS | Chas. Cox \& Co |
| Bark | Osmond $O^{\prime}$ Brien | Maitland | 878 | 7 '77 | Noel, NS | Osmond O'Brien \& O |
| Bark | Sarah Ellen | Maitland | 745 | $9^{\prime} 74$ | Noel, NS | Osmond O'Brien \& O |
| Ship | Senator | Maitland | 1474 | 6 '78 | Maitland, NS | J. Northup \& Co |
| Ship | William Douglass | Maitland | 1263 | $8^{\prime} 75$ | Maitland, NS | Stairs \& Morrow |
| Bark | William J. Stairs | Maitland | 1061 | $8{ }^{\prime} 78$ | Maitland, NS | Stairs, Son \& O |
| Bark | Saranac | New York | 1080 | 11 '80 | Kenneb'k Me | Simpson \& Shaw |
| Bark | Monsoon | Newry, Ir | 678 | '53 | Bath, Me | M. Hunter |
| Bark | Gladovia | Parrsboro | 657 | 8 '77 | Advocate | N B Norris \& O |
| Brig | Ivanhoe | Parrsboro | 263 | $8^{\prime} 76$ | Advocate | Wm. Temple |
| Bark | J. F. Whitney | Parrsboro | 700 | 12 '72 | Parrsboro | W H Payzant |
| Brig | J. L. Stewart | Parrsboro | 200 | 975 | Parrsboro | J. Crane \& O |


| Bark | Aspotogon | Pictou | 574 | $10^{\prime} 76$ | Riv John, NS | J. B. Duffus \& O |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bark | Karoon | Truro, N.S. | 447 | $11^{\prime} 78$ | Green Oak | A W Smith \& O |
| Brig | Alice Bradshaw | Windsor, N.S. | 293 | $10^{\prime} 75$ | Chevarie, NS | B. C. Bradshaw |
| Brig | Alida A. Smith | Windsor, N.S. | 180 | 5 '76 | Chevarie, NS | Roderick Rose |
| Bark | Antwerp | Windsor, N.S. | 1031 | 1174 | Avondale | JE Newcombe \& Co |
| Bark | Belgium | Windsor, N.S. | 670 | $10^{\prime} 70$ | Windsor, NS | Geo. Armstrong \& O |
| Bark | Brimiga | Windsor, N.S. | 597 | $9{ }^{\prime} 73$ | Maitland, NS | E. Churchill \& Son |
| Bark | Calcutta | Windsor, N.S. | 1269 | 876 | Parrsboro | Payzant,Bigelow \& O |
| Ship | Cashier | Windsor, N.S. | 1379 | 7 '76 | London'y NS | T. E. Kenny \& Co |
| Brig | Catherine Morris | Windsor, N.S. | 138 | '65 | Parrsboro | E. Churchill \& Sons |
| Ship | Coringa | Windsor, N.S. | 1343 | 4'79 | Harvey, NB | Bennett Smith |
| Ship | D. H. Morris | Windsor, N.S. | 1197 | 9'76 | Walton, NS | D.H. Morris \& O |
| Bark | Emma Payzant Hannah | Windsor, N.S. | 846 | $10^{\prime} 73$ | Avondale | G P Payzant \& O |
| Bark | Blanchard | Windsor, N.S. | 991 | $9^{\prime} 78$ | Avondale | G P Payzant \& Co |
| Bark | Hattie H. | Windsor, N.S. | 403 | $11^{\prime} 72$ | Newport, NS | John A. Harvie \& O |
| Bark | Havre <br> J. H. Marsters aka | Windsor, N.S. | 641 | 8 '79 | Hantsport | E.Churchill \& Sons |
| Bark | J. H. Masters | Windsor, N.S. | 632 | $10^{\prime} 78$ | Cheverie, NS | J H Marsters \& O |
| Brig | J. Williams | Windsor, N.S. | 338 | 12 '71 | Parrsboro | G. P. Payzant |
| Bark | John A. Harvie | Windsor, N.S. | 1048 | 976 | Avondale | John A. Harvie \& O |
| Ship | John Mann | Windsor, N.S. | 1043 | 6'67 | Windsor, NS | Bennet Smith \& Co |
| Bark | La Gloire | Windsor, N.S. | 1138 | 7 '62 | Hantsport | E. Churchill |
| Brig | Martha J. Brady Mary Fraser aka | Windsor, N.S. | 287 | 7 '75 | Cheverie, NS | R. Rose |
| Ship | Mary Frazer | Windsor, N.S. | 1174 | $8{ }^{\prime} 75$ | Newport, NS | G. P. Payzant |
| Bark | Mavis | Windsor, N.S. | 869 | 11 '78 | Noel, NS | Osmond O'Brien |
| Ship | Minden* | Windsor, N.S. | 1312 | $9{ }^{\prime} 79$ | Hantsport | J B North \& Co |
| Bark | N. B. Morris | Windsor, N.S. | 699 | 8 '80 | Advocate | Wm. Moore \& O |
| Bark | Nimbus | Windsor, N.S. | 1252 | 10 '78 | Millcreek | C R Burgess |
| Bark | Pactolus | Windsor, N.S. | 556 | $10^{\prime} 71$ | Noel, NS | Osmond O'Brien |
| Bark | Richard Pearse | Windsor, N.S. | 367 | 10 '69 | Avondale | E H Curry \& Co |
| Brig | Rozella Smith | Windsor, N.S. | 508 | 11 '73 | Walton, NS | Simpson \& Shaw |
| Ship | Sultan | Windsor, N.S. | 1323 | 10 '79 | Windsor, NS | Geo. Armstrong |
| Bark | Sultana | Windsor, N.S. | 812 | $9 ' 77$ | Kempt, NS | Geo. Armstrong \& O |
| Brig | Toronto | Windsor, N.S. | 483 | $10^{\prime} 76$ | Hantsport | E Churchill \& Sons |
| Ship | Warsaw | Windsor, N.S. | 1346 | 7 '76 | Newport, NS | Fred.Curry \& Co |
| Bark | Mizpah | Yarmouth | 898 | 9 '73 | Clare, NS | Hugh Cann \& O |
| Bark | Vibilia | Yarmouth | 553 | 9 '70 | Clyde River | J D Coffin \& Co |

Sources: Proquest Historical Newspapers: New York Times articles in 1880, retrieved from http://proquest.umi.com.ezproxy.library.dal.ca, May 2008. American Lloyd's Register of American and Foreign Shipping, 1881. Where not listed therein 1880, and failing that, Record of American and Foreign Shipping, 1881. All registers sourced from, Mystic Seaport website, http://www.mysticseaport.org/library/initiative/ShipRegisterList.cfm, retrieved January to May 2008.

Notes: * This vessel appears to be incorrectly reported in New York Times as "Meriden."

Appendix VIII: Summary of Initial Vessel Owners Registered by Port of Windsor, 1851 to 1890

| Registry | NS | NB | PEI | Oth <br> BNA | Canada Total | USA | Britain | Ire | Oth \& Unkn | Total | $\begin{aligned} & \text { Ppn } \\ & \text { USA } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C. Breton | 546 | 1 | 1 | 7 | 555 |  | 1 | 2 | 3 | 561 | 0.0\% |
| Halifax | 5,765 | 44 | 11 | 83 | 5,903 | 22 | 46 | 3 | 31 | 6,005 | 0.4\% |
| Charlot'n | 51 | 21 | 4,208 | 7 | 4,287 | 3 | 70 | 4 | 3 | 4,367 | 0.1\% |
| Saint John | 277 | 8,529 | 2 | 11 | 8,819 | 91 | 102 | 8 | 28 | 9,048 | 1.0\% |
| Miramichi | 5 | 938 | 17 | 2 | 962 |  | 24 | 2 | 4 | 992 | 0.0\% |
| Pictou | 1,528 | 4 | 11 | 9 | 1,552 | 21 | 6 |  | 2 | 1,581 | 1.3\% |
|  |  | 40 |  |  | 40 |  |  |  |  | 40 | 0.0\% |
| Windsor | 3,679 | 47 |  | 3 | 3,729 | 54 | 20 | 3 | 1 | 3,807 | 1.4\% |
| Yarmouth | 4,962 | 17 |  | 5 | 4,984 | 13 | 14 | 3 | 4 | 5,018 | 0.3\% |
| Total | 16,813 | 9,641 | 4,250 | 127 | 30,831 | 204 | 283 | 25 | 76 | 31,419 | 0.9\% |

Notes: Notes: Regions shown: Nova Scotia (NS); New Brunswick (NB); Prince Edward Island (PEI); Other British North America (Oth BNA); England, Wales and Scotland (Britain); Ireland (Ire); Other owners including those of unknown residence (Oth \& Unkn); Owners residing in USA as a percentage of total initial owners (Ppn USA).
Sources: Data retrieved from Maritime History Archive, "Ships and Seafarers of Atlantic Canada," (St. John's: Memorial University of Newfoundland, 1998), CD.

## Appendix IX: Vessels Built at Spencer's Island

|  |  |  | Year <br> Vessel Name | Rig | Tons |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Reg. | Port | Builder |  |  |  |
| Amazon (M. Celeste) | Brigant. | 198 | 1861 | Parrs. | Joshua Dewis |
| W. H. Bigelow | Brigant. | 280 | 1863 |  | TEB or Alex Huntley |
| Cumberland | Barque | 554 | 1865 | Parrs. | TEB or Alex Huntley |
| J. F. Whitney | Barque | 701 | 1872 | Parrs. | Thomas E. Bigelow |
| Calcutta | Barque | 1283 | 1876 | Windsor | Amasa Loomer |
| Servia | Ship | 1309 | 1878 | Windsor | Amasa Loomer |
| Athlon | Ship | 1406 | 1879 | Windsor | Amasa Loomer |
| E. J. Spicer | Ship | 1317 | 1880 | Parrs. | Amasa Loomer |
| Stephen D. Horton | Ship | 1626 | 1883 | Parrs. | Amasa Loomer |
| Charles S. Whitney | Ship | 1651 | 1885 | Parrs. | SIC |
| George T. Hay | Ship | 1647 | 1887 | Parrs. | SIC |
| Germ | Schoon. | 95 | 1888 | Parrs. | SIC |
| Evolution | Schoon. | 173 | 1889 | Parrs. | SIC |
| Glenara | Schoon. | 72 | 1891 | Parrs. | John Fitzgerald |
| Glooscap | Ship | 1721 | 1891 | Parrs. | SIC |
| Exception | Tern | 380 | 1892 | Parrs. | SIC |
| Packet | Schoon. | 49 | 1892 | Parrs. | Burpee L. Tucker |
| Perfection | Barquent. | 509 | 1893 | Parrs. | SIC |
| May | Schoon. | 12 | 1895 | Parrs. | Robert Spicer |
| Maple Leaf | Schoon. | 98 | 1900 | Parrs. | Johnson Spicer |
| M. J. Taylor | Tern | 377 | 1901 | Parrs. | Johnson Spicer |
| Ophir | Tern | 249 | 1901 | Parrs. | Johnson Spicer |
| Coral Leaf | Tern | 374 | 1902 | Parrs. | Johnson Spicer |
| Emily | 59 | 1902 | Parrs. | Johnson Spicer |  |
| Myrtle Leaf | Schoon. | 336 | 1903 | Parrs. | Johnson Spicer |
| Silver Leaf | Tern | 283 | 1903 | Parrs. | Johnson Spicer |
| William Melbourne | Tern | Tern | 435 | 1917 | Parrs. |
| Sea Boy | Schoon. E. Pettis | 29 | 1918 | Parrs. | Johnson Spicer |
| Minas Prince | Tern | 457 | 1919 | Parrs. | J. E. Pettis |
| Minas Princess | Tern | 465 | 1919 | Parrs. | Fowlerhead Shipbuilding Co. |
| Rupert K. | Tern | 378 | 1920 |  | Stanley M. Field |
|  |  |  |  |  |  |

Sources: NSARM, Parrsboro and Windsor Shipping Registries; Stanley T. Spicer, Sails of Fundy: The Schooners and Square-riggers of the Parrsboro Shore (Hantsport: Lancelot Press, 1984), 89-116, and Saga of the Mary Celeste: The Story of a Mystery Ship, and A Compilation of Sailing Vessels Built at Spencer's Island (Hantsport: Lancelot Press, 1989, reprinted 1991), 11-14.

## Appendix X: George Spicer's Voyages, Mid-1880 to Mid-1895

| Year | Date | Days | Action | Location | Cargo |
| :--- | :--- | :--- | :--- | :--- | :--- |

Ship: E. J. Spicer, 1318 reg. Tons

| 18 <br> 18 | Nov-26 |  | Depart | Spencer's Island | Ballast |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec-03 | 7 | Arrive | Norfolk, Virginia |  |
|  | Jan-14 | 41 | Depart |  | 4,685 Bales Cotton and Mixed Cargo |
|  | Feb-03 | 20 | Arrive | Liverpool, Eng. |  |
|  | Feb-19 | 16 | Depart |  | Ballast |
|  | Mar-11 | 21 | Arrive | New York |  |
|  | Apr-20 | 40 | Depart |  | 8,376 Barrels Refined Oil |
|  | May-14 | 24 | Arrive | London |  |
|  | May-31 | 17 | Depart |  | Ballast |
|  | Jul-08 | 38 | Arrive | New York |  |
|  | Aug-09 | 32 | Depart |  | Refined Oil |
|  | Aug-30 | 21 | Arrive | London |  |
|  | Sep-21 | 22 | Depart |  | 1,000 Tons Chalk |
|  | Oct-22 | 31 | Arrive | New York |  |
|  | Dec-02 | 41 | Depart |  | Refined Oil |
|  | Dec-24 | 22 | Arrive | Liverpool, Eng. |  |
| 188 | Jan-27 | 33 | Depart |  | 1,396 Tons Salt |
|  | Mar-04 | 37 | Arrive | New York |  |
|  | Apr-19 | 46 | Depart |  | 8,479 Barrels Refined Oil |
|  | May-10 | 21 | Arrive | London |  |
|  | May-31 | 21 | Depart |  | Chalk, Baled Rags and Paper |
|  | Jul-09 | 39 | Arrive | New York |  |
|  | Aug-07 | 29 | Depart |  | Refined Oil |
|  | Aug-30 | 23 | Arrive | London |  |
|  | Sep-22 | 23 | Depart |  | Chalk and Empty Barrels |
|  | Oct-24 | 32 | Arrive | New York |  |
|  | Nov-27 | 34 | Depart |  | 8,411 Barrels Refined Oil |
|  | Dec-21 | 24 | Arrive | Liverpool, Eng. |  |
| 188 | Jan-13 | 22 | Depart |  | 439 Tons Salt |
|  | Mar-07 | 54 | Arrive | New York |  |
|  | Apr-02 | 26 | Depart |  | Refined Oil |
|  | Apr-26 May-28 | 24 | Arrive | Liverpool, Eng. |  |
|  | $\begin{array}{r} \text { May-28 } \\ \text { Jun-26 } \end{array}$ | 32 | Depart Arrive |  | Soda Ash, Beer, Rags, Empty Barrels |
|  | Aug-06 | 41 | Depart | New York | 8,545 Barrels Refined Oil |
|  | Sep-01 | 26 | Arrive | Antwerp |  |
|  | Sep-28 | 27 | Depart |  | Iron, Wire, Cement, Empty Barrels |
|  | Oct-23 | 25 | Arrive | New York |  |
|  | Nov-15 | 23 | Depart |  | Refined Oil |
|  | Dec-10 | 25 | Arrive | Liverpool, Eng. |  |
| 188 | $\begin{array}{r} \text { Jan-15 } \\ \text { Mar-01 } \end{array}$ | 35 | Depart <br> Arrive |  | Bleaching Powder, Soda Ash |


| 1884 | Apr-04 | 34 | Depart | New York | Refined Oil |
| ---: | ---: | ---: | ---: | :--- | :--- |
|  | May-01 | 27 | Arrive | Antwerp |  |
|  | May-31 | 30 | Depart |  |  |
|  | Jul-12 | 42 | Arrive | New York |  |

George Spicer returned to Spencer's Island in August and remained home for a year helping to finish the new ship Charles $S$. Whitney. Dewis Spicer over E. J. Spicer.
Ship: Charles $S$. Whitney, 1754 reg. Tons

| 188 | Aug-25 | 409 | Depart | Spencer's Island | Lumber |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sep-14 | 20 | Arrive | Liverpool, Eng. |  |
|  | Oct-12 | 28 | Depart |  | Soda Ash |
|  | Nov-02 | 21 | Arrive | New York |  |
|  | Dec-10 | 38 | Depart |  | 11,320 Barrels Refined Oil |
|  | Dec-30 | 20 | Arrive | London |  |
| 1886 | Jan-28 | 28 | Depart |  | 1,200 Tons Chalk, 7,123 Barrels |
|  | Mar-21 | 53 | Arrive | New York |  |
|  | May-03 | 43 | Depart |  | 11,345 Barrels Refined Oil |
|  | May-26 | 23 | Arrive | London |  |
|  | Jun-19 | 24 | Depart |  | 802 Tons Cement, 8,000 Barrels |
|  | Aug-06 | 48 | Arrive | New York |  |
|  | Sep-11 | 36 | Depart |  | 11,557 Barrels Refined Oil |
|  | Oct-10 | 29 | Arrive | Antwerp |  |
|  | Nov-21 | 42 | Depart |  | Wire and Empty Barrels |
|  | Dec-26 | 35 | Arrive | New York |  |
| 188 | Jan-29 | 33 | Depart |  | 11,506 Barrels Refined Oil |
|  | Feb-22 Mar-19 | 24 | Arrive Depart | London |  |
|  | Apr-17 | 29 | Arrive | New York | Iron Rails, Cement, Empty Barrels |
|  | Jun-02 | 46 | Depart |  | 11,582 Barrels Refined Oil |
|  | Jul-05 | 33 | Arrive | London |  |
|  | Jul-31 | 26 | Depart |  | 1,540 tons Cement, 6,000 Barrels |
|  | Sep-01 | 32 | Arrive | New York |  |
|  | Oct-04 | 33 | Depart |  | 11,541 Barrels Refined Oil |
|  | Oct-29 | 25 | Arrive | Liverpool, Eng. |  |
| 188 | Nov-30 Jan-16 | 32 46 | Depart <br> Arrive |  | Beer, Spirits, Salt, Iron Rails, Barrels |

George Spicer returned to Spencer's Island for six months.
Command of the Charles S. Whitney temporarily passed to another.

| 1888 | Jul-03 | 169 | Depart | New York | 66,117 Cases Refined Oil |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec-02 | 152 | Arrive | Shanghai* |  |
|  | Dec-20 | 18 | Depart |  | Ballast |
|  | Dec-31 | 11 | Arrive | Ilo Ilo, Philippines |  |
| 1889 | Jan-18 | 17 | Depart |  | 1,651 Tons Sugar |
|  | Jan-25 | 7 | Arrive | Manila |  |
|  | Feb-21 | 27 | Depart |  | As above plus 6,500 Bales Hemp |
|  | Jun-16 | 116 | Arrive | New York* |  |
|  | Jul-25 | 39 | Depart |  | 11,465 Barrels Refined Oil |
|  | Aug-19 | 25 | Arrive | London |  |
|  | Sep-25 | 37 | Depart |  | 4,500 Casks Cement |
|  | Oct-24 | 29 | Arrive | New York |  |
|  | Nov-20 | 27 | Depart |  | 66,650 Cases Refined Oil |
| 1890 | Apr-23 | 154 | Arrive | Shanghai* |  |
|  | Jun-30 | 68 | Depart |  | 896 Bales Wool and Straw Braid |
|  | Jul-20 | 20 | Arrive | Hong Kong |  |
|  | $\begin{array}{r} \text { Aug-16 } \\ \text { Jan-12 } \end{array}$ | 27 148 | Depart Arrive |  | Wool, Straw Braid, Pepper |

George Spicer returned to Spencer's Island for eight months thereafter
taking command of the new ship Glooscap
Dewis Spicer took over command of the Charles S. Whitney
Ship: Glooscap, 1860 reg. Tons

|  | Sep-15 | 247 | Depart | Spencer's Island | Lumber |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct-15 | 30 | Arrive | Liverpool, Eng. |  |
|  | Nov-07 | 23 | Depart |  | Ballast |
|  | Nov-09 | 2 | Arrive | Cardiff, Wales |  |
|  | Dec-18 | 39 | Depart |  | 2,922 Tons Coal |
| 1892 | Feb-11 | 54 | Arrive | Capetown, Sth Afr. |  |
|  | Mar-12 | 30 | Depart |  | Ballast |
|  | May-22 | 71 | Arrive | Taltal, Chile |  |
|  | Jun-22 | 31 | Depart |  | 21,158 Bags Nitrate |
|  | Sep-05 | 75 | Arrive | New York |  |

George Spicer returned to Spencer's Island to be with his terminally ill wife Emily Jane who died in October.
Brother Edmund took temporary command until George rejoined the vessel on January 26.

| 1893 | Mar-13 | 189 | Depart | New York | Case Oil and General Cargo |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jun-18 | 97 | Arrive | Melbourne, Aust.* |  |
|  | Sep-02 | 76 | Depart |  | Wool, Tallow, General Cargo |
|  | Dec-10 | 99 | Arrive | London |  |
| 1894 | Jan-24 | 44 | Depart |  | 5,700 Casks Cement |
|  | Mar-12 | 48 | Arrive | New York |  |
|  | Apr-30 | 49 | Depart |  | General Cargo |
|  | Aug-02 | 94 | Arrive | Newcastle, Aust.* |  |
|  | Sep-07 | 36 | Depart |  | 2,600 Tons Coal |
|  | Oct-30 | 53 | Arrive | Manila |  |
|  | Dec-14 | 45 | Depart |  | Ballast |
|  | Dec-17 | 3 | Arrive | Ilo Ilo, Philippines |  |
| 1895 | Jan-12 | 25 | Depart |  | 2,900 Tons Sugar |
|  | Apr-29 | 108 | Arrive | $\begin{array}{\|l} \hline \begin{array}{l} \text { Halifax, Nova } \\ \text { Scotia* } \end{array} \\ \hline \end{array}$ |  |

George Spicer returned to Spencer's Island for the rest of the year.
Johnson Spicer took temporary command of the Glooscap.

Notes: * These voyages were via Cape of Good Hope.
Source: Stanley T. Spicer, Captain from Fundy: The Life and Times of George D. Spicer, Master of Square-rigged Windjammers (Hantsport: Lancelot Press, 1988): 114-122.
Appendix XI: Some Freights Carried by Vessels Under Dewis Spicer's Command, 1880 to 1894

| Depart | Arrive | Est. Arrival | $\begin{gathered} \hline \text { Cargo } \\ \text { Type } \end{gathered}$ | Cargo <br> Volume | $\begin{aligned} & \text { Rate } \\ & \text { £:s:d } \end{aligned}$ | Freight Approx US\$ | $\begin{gathered} \hline \text { Round } \\ \text { Trip US\$ } \end{gathered}$ | RTUS\$ EJS Equiv ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aboard J. F. Whitney, 701 Registered tons, typical crew: 12 to 13 men excluding captain |  |  |  |  |  |  |  |  |
| New York |  | Feb 1880 | Refined oil | 4,398 Bbls | 2/7.5 | 3,759 |  |  |
| Rotterdam | New York | Apr 1880 | Low value items |  |  | 1,358 | 5,117 | 9,897 |
| New York |  | Jul 1880 | Oil |  |  | 5,788 |  |  |
| Rotterdam | New York | Sep 1880 | Iron, empty bbls |  |  | 551 | 6,339 | 12,261 |
| New York |  | Jan 1881 | Residum [Oil] | 4,537 Bbls | 3/9 | 5,422 |  |  |
| Liverpool | New York | Mar 1881 | Low value items |  |  | 604 | 6,026 | 11,655 |
| New York |  | Apr 1881 | Refined oil | 4,454 Bbls | 3/6 | 5,062 |  |  |
| Rotterdam | New York | Jun 1881 | Low value items |  |  | 1,369 | 6,431 | 12,439 |
| New York |  | Sep 1881 | Naptha | 4,433 Bbls | 3/4.5 | 4,941 |  |  |
| Liverpool | New York | Oct 1881 | Low value items |  |  | 726 | 5,667 | 10,961 |
| New York |  | Feb 1882 | Oil | 4,491 Bbls | 3/5.25 | 5,128 |  |  |
| Amsterdam | New York | Mar 1882 | N.A. |  |  | 1,696 | 6,824 | 13,199 |
| New York |  | May 1882 | Refined oil | 4,453 Bbls | 3/9 | 5,352 |  |  |
| Hamburg | New York | Jul 1882 | N.A. |  |  | 1,018 | 6,370 | 12,321 |
| New York |  | Sep 1882 | Refined oil | 4,582 Bbls | 3/9 | 5,572 |  |  |
| London | New York | Nov 1882 | N.A. |  |  | 854 | 6,426 | 12,429 |
| New York |  | Mar 1883 | Refined oil | 4,511 Bbls | 3/1 | 4,474 |  |  |
| Liverpool | New York | Apr 1883 | N.A. |  |  | 742 | 5,216 | 10,089 |
| New York |  | Jul 1883 | Refined oil, gas |  |  | 5,409 |  |  |
| Liverpool | New York | Aug 1883 | N.A. |  |  | 1,173 | 6,582 | 12,731 |
| New York |  | Nov 1883 | Naptha | 4,457 Bbls | 3/9 | 5,522 |  |  |
| London | New York | Dec 1883 | Coal |  |  | 989 | 6,511 | 12,594 |


| Depart | Arrive | Est. Arrival | $\begin{gathered} \hline \text { Cargo } \\ \text { Type } \\ \hline \end{gathered}$ | Cargo <br> Volume | $\begin{aligned} & \text { Rate } \\ & \text { £:s:d } \end{aligned}$ | Freight Approx US\$ | Round Trip US\$ | $\begin{gathered} \text { RTUS\$ } \\ E J S \text { Equiv } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| Aboard E. J. Spicer, 1318 Registered tons, typical crew: 18 men excluding captain |  |  |  |  |  |  |  |  |
| New York | Antwerp | Sep 1884 | Gazoline, oil | 8,773 Bbls | 2/9.22 | 8,162 |  |  |
| Antwerp | New York | Nov 1884 | N.A. |  |  | 1,451 | 9,613 | 9,613 |
| New York | Antwerp | Jan 1885 | Refined petrol | 8,682 Bbls | 2/4.5 | 7,031 |  |  |
| Antwerp | New York | Mar 1885 | N.A. |  |  | 1,751 | 8,782 | 8,782 |
| New York | Antwerp | Oct 1885 | Refined petrol | 8,715 Bbls | 2/7.5 | 7,679 |  |  |
| Antwerp | New York | Dec 1885 | N.A. |  |  | 1,096 | 8,775 | 8,775 |
| New York | Antwerp | Jul 1886 | Refined petrol | 8,646 Bbls | 1/10.5 | 5,510 |  |  |
| Antwerp | New York | Sep 1886 | N.A. |  |  | 999 | 6,509 | 6,509 |
| New York | Antwerp | Nov 1886 | Refined petrol | 8,765 Bbls | 2/3 | 6,679 |  |  |
| Antwerp | New York | Jan 1887 | N.A. |  |  | 1,183 | 7,862 | 7,862 |


| New York | London <br> New York | Jun 1888 <br> Aug 1888 | Refined oil, kero N.A. | 8,579 Bbls | 1/6.73 | $\begin{array}{r} 4,484 \\ \text { N.A } \end{array}$ | N.A. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New York | Antwerp | Oct 1888 | Refined petrol | 8,555 Bbls | 2/6 | 7,458 |  |  |
| Antwerp | New York | Dec 1888 | N.A. |  |  | 1,477 | 8,935 | 8,935 |
| New York | London | Apr 1889 | Refined oil | 8,600 B (Est) | 2/2 (Est) | 6,254 |  |  |
| London | Cardiff | May 1889 | Towed to colliery |  |  |  |  |  |
| Cardiff | Montevideo | Jul 1889 | Coal | 2,072 tons | 30/6 | 15,483 |  |  |
|  | New York |  |  |  |  |  | 21,737 | 21,737 |
| New York | Colombo | Mar 1890 | Kerosine, oil | 49,535 Cases | 1/2.13 | 14,077 |  |  |
| Colombo | New York | 1890 | N.A. |  |  | 5,551 | 19,628 | 19,628 |


| Depart | Arrive | Est. Arrival | $\begin{aligned} & \hline \text { Cargo } \\ & \text { Type } \\ & \hline \end{aligned}$ | Cargo Volume | $\begin{aligned} & \text { Rate } \\ & \mathrm{f}: s: \mathrm{d} \end{aligned}$ | Freight Approx US\$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aboard Charles S. Whitney, 1754 Registered tons, typical crew: 20 to 21 men excluding captain |  |  |  |  |  |  |
| New York | Sydney, Aust. | Mar 1892* | N.A. |  |  | 10,949 |
| Sydney, Aust. | Rotterdam | Aug 1892* | Shale | 2,601 tons | $20 / 0+$ | 13,630 |
| Rotterdam | London | Feb 1893* | Moss Litter |  | 6/3 | N.A. |
| London | Northfleet | Mar 1893 | In ballast |  |  |  |
| Northfleet | New York | Feb 1893* | Chalk | 2,260 tons | 6/0 | 3,300 |
| Saint John, NB | Fleetwood | Sep 1893 | Deals and other | 768.3 .7 | 36/3 | 6,975 |
| Cardiff | Cape Town | Dec 1893* | Steaming Coal | 2,070 T (Est) | 11/9 | 5,918 |
| Cape Town | Sydney, Aust. | May 1894 | Probably ballast |  |  | N.A |
| Sydney, Aust. | London | Apr 1894* |  |  |  | 14,598 |
| Sydney, Aust. |  | Dec 1894* | General Cargo |  |  |  |

Notes: ${ }^{1}$ EJS Equivalents calculated by grossing up J. F. Whitney cargos by the average ratio between the cargoes carried by the two vessels. Contract rather than estimated arrival date shown thus: "*"
Sources: Data compiled from Nova Scotia Archives and Records Management, Spencer's Island Company Fonds, 1997-174.
Appendix XII: Selected Items From Dewis Spicer's Account With J. F. Whitney and Company, 1882 to 1899

Sources: NSARM, Spencer's Island Company fonds, 1997-174/017, \#13, 15
Notes: Interest on outstanding balances calculated at 4 per cent per annum
A Bill of Sale indicates that Dewis Spicer sold $2 / 64$ share of "Charles S. Whitney" to Levi Atkins for $\$ 600$ on 13 August 1896. However, Dewis continued to receive dividends on 1/64th share from J. F. Whitney \& Company following the sale. This sugggests the sale included deferred payment provisions.
The sale price equates to a depreciation rate of 8.3 percent per annum on the original cost of hull and spars, and 11.6 percent per annum on total cost

Appendix XIII: Estimated Cash Returns to J. F. Whitney's and E. J. Spicer's Owners in Available Years to 1883

| Year | Assumed Cost Hull and Spars |  | Year Month |  | Dividends to Owners |  | CFROI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total \$ | $\begin{aligned} & \hline \text { Per } \\ & \text { Ton } \end{aligned}$ |  |  | $\begin{array}{r} \hline \text { Sum } \\ \$ \\ \hline \end{array}$ | Ann. Tot \$ |  |  |
| J. F. Whitney, 701 Reg. Tons, completed in November 1872 |  |  |  |  |  |  |  |  |
| 1871-72 | 22,723 | 32.41 | 1876 |  | 7,232 | 7,232 | 31.8\% | 2 |
|  |  |  | 1879 |  | 6,736 | 6,736 | 29.6\% |  |
|  |  |  | 1883 | Aug | 2,259 |  |  |  |
|  |  |  |  | Dec | 1,737 | 3,996 | 17.6\% | 2 |
| E. J. Spicer, 1317 Reg. Tons, completed in October 1880 |  |  |  |  |  |  |  |  |
| 1879-80 | 35,575 | 27.01 | $\begin{array}{r} 1881- \\ 82 \end{array}$ |  | 203 | 203 | 0.6\% | ${ }^{2}$ |
|  |  |  | 1883 | Feb | 577 |  |  |  |
|  |  |  |  | Apr | 1,671 |  |  |  |
|  |  |  |  | Aug | 4,531 |  |  |  |
|  |  |  |  | Nov | 4,540 | 11,319 | 31.8\% | 2 |

Notes: These are the only years for which we have found dividend information. It is possible that actual distributions in 1882 and 1883 were higher as only partial information is available. It is difficult to determine whether the J. F. Whitney dividends in 1876 and 1879 represent typical years for its owners or the industry generally during the 1870s. "CFROI": Cash Flow Return on Investment (Net of Insurance) per annum
${ }^{1}$ Cost of Hull \& Spars assuming twenty percent more per ton than the E. J. Spicer.
${ }^{2}$ It is unclear whether dividend distributions were before or after insurance costs
${ }^{3}$ It appears reasonable to believe that the E. J. Spicer paid off the bulk of its outfit account of $\$ 11,467$ plus associated interest costs by September 1882, before distributions were made to the vessel's owners Letters from J. F. Whitney and Company to Dewis Spicer indicate that it paid at least two dividends to E. J. Spicer owners in the second half of 1887. After a loss on the round trip to March 1887, owners received $\$ 1,116.96$ in July and $\$ 2,253.19$ in November 1887 for a total of at least $\$ 3,370$ that year.

Sources: Stanley T. Spicer, Captain from Fundy, 87; Spicer private collection, Letters to the SIC Company, 1880 to 1886, passim; Figures for George D. Spicer share grossed up to represent total Ownership interests and rounded to nearest dollar; NSARM, Spicer Family fonds, 1997-174/015.


Notes: Dates for dividends based on declared date, other items on payment date.
"CFROI": Cash Flow Return on Investment (Net of Insurance) per annum
${ }^{1}$ Cost of Hull \& Spars, separate financing for outfit account of \$17,773
${ }^{2}$ It appears reasonable to believe that the bulk of the outfit account and associated interest costs were paid off through voyage profits by October 1884.
${ }^{3}$ The returns in 1888 are only for completed voyages. The $S$. D. Horton was destroyed by fire at sea on 27 December, 1888.
The Implied Internal Rate of Return (IRR) is 3.69 percent and the implied depreciation rate on the hull is 12.44 per cent per annum. This suggests the hull was insured for only part of its value

Sources: Nova Scotia Archives and Records Management, Spicer Family Fonds, 1997-174/018 \#16, Dewis Spicer Notebooks; Spencer's Island Company Fonds, 1997-174/017, \#13,15. Figures for Dewis Spicer share grossed up to represent total ownership interests and rounded to nearest dollar.
Appendix XV: Estimates of Cash Returns to Charles S. Whitney's Owners, 1885 to 1899

Sources: NSARM, Spicer Family Fonds and Spencer's Island Company fonds.

Appendix XVI: Estimated Cash Returns to Glooscap's Owners, 1891 to 1899
Glooscap, 1860 Reg. Tons, completed for \$67,030 in September 1891

| Year | Actual Cost <br> Hull and <br> Spars |  | Year Month |  | Dividends to Owners |  | CFROI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total \$ | $\begin{aligned} & \text { Per } \\ & \text { ton } \end{aligned}$ |  |  | Sum \$ | Ann. Tot \$ |  |


| 1889-91 | 52,076 | 28.00 | 1891-97 |  | 0 | 0 | 0.0\% | 2 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1898 |  | 2,480 | 2,480 | 4.8\% | 3 |
|  |  |  | 1899 | Feb | 15,387 | 15,387 | 29.5\% | 3 |

Notes: Dates for dividends based on declared date, other items on payment date.
"CFROI": Cash Flow Return on Investment (Net of Insurance) per annum
${ }^{1}$ Cost of Hull \& Spars, separate financing for the outfit account of $\$ 14,954$
${ }^{2}$ It appears reasonable to believe that the outfit account and associated interest costs were paid off through voyage profits by July 1898
${ }^{3}$ It is unclear whether dividend distributions were before or after insurance
Sources: Nova Scotia Archives and Records Management, Spicer Family Fonds, 1997-174/018 \#16, Dewis Spicer Notebooks; Spencer's Island Company Fonds, 1997-174/017, \#13,15. Figures for Dewis Spicer share grossed up to represent total ownership interests and rounded to nearest dollar.

## Appendix XVII: Extract From the Cumberland Leader, 4 January 1889

## Shipping Intelligence

## PORT OF PARRSBORO.

## ARRIVED.

Schrs. Lord Mayo. Dexter; Cecelia, Benjamin Hope, Moore; B. N. Fullerton, Howard, St. John. Twilight, Newcomb, Maitland.

## CLEARED.

Schrs. Roland, Hatfield; Flora E., Durant; Twilight, Newcomb; N. H. Upham, Conlen. St. John. Wioma, Haws, Quaco.

Whereabouts of Parrsboro Vessels.
Bk. Fred E. Scammell cleared at London Nov. $17^{\text {th }}$. For New York.
George T. Hay from Liverpool arrived at Calcutta Oct. $20^{\text {th }}$.
Bk. N. B. Morris cleared at Dieppe Dec. $9^{\text {th }}$ for New York.
Ship E. J. Spicer cleared at Antwerp for New York Nov. $28^{\text {th }}$.
T. H. Rand cleared at London Dec. $26^{\text {th }}$ for New York.

Charles S. Whitney arrived at New York January 2.
Sthr. Germ cleared at Spencer's Island January $5^{\text {th }}$ for Havana.

## SHIPPING NOTES.

NEW YORK, Jan. 3. - The ship Stephen D. Horton, Lewis, from Calcutta, October $9^{\text {th }}$, for New York, with merchandise, was burned yesterday at sea within a few miles of Pernambuco. With the exception of the carpenter and another man, who were drowned, the crew were saved. The Horton was a vessel of 1,626 tons burden, built at Parrsboro, N.S., and owned by the Spencer Island Company of Nova Scotia, Messrs. T \& E. Kenny, of Halifax, and Messrs. J. F. Whitney \& Co. She was launched in 1883 , and was valued at $\$ 75,000$. The cargo was worth $\$ 100,000$, and was consigned to J. F. Whitney \& Co. of this city. Both cargo and vessel were partly covered by insurance. (See General News).

## Weekly Freight Circular,

## J. F. WHITNEY \& CO., SHIP BROKERS

15 State Street, New York, December $29^{\text {th }}, 1888$.
In its general results to the shipping interests, the closing year presents a very marked and gratifying contrast with any of its recent predecessors. The first quarter of the year indicated no appreciable improvement in the ocean carrying trade, but during the second quarter there occurred an almost simultaneous rise in freight rates on both sides of the Atlantic, which gradually extended to all the great ports of the world, and which, during the last quarter, have been upon a higher basis than for several years. In the more important trades the best rates obtained are about one hundred per cent higher than the average figures for the previous year; and
from the lowest depth of depression last year to the present writing the percentage of gain is even greater, notably on barrel petroleum. For example, we append a comparison of the lowest rates accepted in 1887 with the highest obtained in 1883:

## RATES PAID ON REFINED PETROLEUM.

To U. K. And Cont., 1887, bbls., 1s. 6d. and 1s. 7d.; 1888, 4s. 3d. and 4s. 5d.Calentia 1887, cases, 16 cts.; 1888, 40 cts. Japan, 1887, cases, 16 cts.; 1888, 40 cts. Hong Kong, 1887, cases, 18 cts.; 1888, 40 cts; Shanghai, 1887, cases, 26 cts.; 1888, 47 cts. Java, 1887, cases, 22 cts.; 1888, 42 cts.

To the Pacific coast, Australia and New Zealand the rates for general cargo ships have advanced seventy-five to one hundred per cent. from the lowest figures accepted in 1887. Thus on coal and general cargo for San Francisco, $\$ 12$ per ton, deadweight, has been obtained this year, against $\$ 5.50$ and $\$ 6$ last year, while rates for Australia and New Zealand have risen from 20s. and 27 s . 6 d . in 1887 to 37 s . 6 d . and 45 s . in 1888 . Other long voyage trades have shown proportionate gains. In the lumber and timber trades there has been a gratifying improvement, especially during the latter part of the year, business with the River Plate and Brazil ports, in particular, having been so brisk, and the competition for tonnage so sharp, as to force an advance in rates by easy stages to the highest point known in a long series of years. The remarkable absorption of lumber and general cargo from this side of the Atlantic, and of iron, coal, etc., from the other side, by a country so rich in latent resources and so progressive withal as the Argentine Republic, has also been an important factor in the advance of freights in other departments, since it has called into requisition a surprisingly large quantity of tonnage, and thereby materially lessoned the fleet of vessels that otherwise would have been seeking employment in other channels of business, and possibly have interposed a barrier against the general rise. We append a comparison of lowest rates in the lumber and timber trades in 1887, with the highest in 1888.

## LUMBER AND TIMBER FREIGHTS

From United States to River Plate, (lumber), 1887, \$8.50 and \$13; 1888, $\$ 17$ and $\$ 21$. St. John, N. B., to U. K. And Cont., 1887, 80s. and 90s.; 1888, 130s. and 140s.

The grain trade has been comparatively dull during the year, because of a shortage in the what crop, and an exaltation of prices above the views of foreign buyers by speculation. As a consequence, the dependent markets of Europe have been drawing liberally upon the garners of Russia, India, etc., to supply their deficiencies. A large fleet of steamers has therefore found lucrative employment on the other side of the Atlantic, thus materially lessening the supply of this class of tonnage seeking employment at our ports, and contributing to the rise in rates for grain, cotton and other products, awaiting steam transit, to the highest point attained in a lengthened period. Thus, for cargoes of grain from our Atlantic ports to Cork for orders as high as 5 s .6 d . per quarter has recently been paid, against 2 s . and thereabout during the greater part of last year, while rates by the regular lines rose from almost nothing in 1887 to 6 d . and 7 d . per bushel in 1888. The best rates of the current year, however, have not been maintained to the close, owing to the small supply of cereals available and adverse shipping margins. At San Francisco grain freights have advanced from 20s. and 22s. 6d. last year to 37 s . and 42 s . 6 d . at the present time. Cotton, tobacco and naval store freights have shared in the general improvement, though there has been some reaction in rates for the first named staple towards the close. A general improvement has taken place in the West India and other short foreign trades, but it has not been proportionate to the advance in other off-shore departments, because of the large fleet of coasters to draw upon, and of the sharp competition which sailing vessels have been forced to contend with from steamers employed in the traffic between our ports and those of the tropical and semitropical latitudes. Nor has the advance in coast-wise freights been commensurate with the rise in rates for deep water tonnage. Thus coast-wise lumber freights are only about one dollar higher
than the average rates of last year, owing to a material diminution of the building trades, while collier and other long-shore rates have advanced only about twenty-five to thirty-five per cent.

In consideration of the fact that many of the expenses in connection with the management of ships have been sensibly reduced in recent years, the ruling rates of Freight, though very moderate when compared with the more prosperous epochs of the carrying trade, are to be regarded as moderately remunerative. There is so large an element of uncertainty as to the possible or probable duration of the present era of comparatively good business, however, and also as to the prospective encroachment of steam upon the domain of sails, that there is apparently no more disposition to embark in the business of ship-building on this side of the Atlantic than there was when Freights were at the lowest ebb. Nevertheless, with the sailing fleets of all nations, except possibly Great Britain, gradually being reduced by losses and natural decay, it looks to close observers of cause and effect as though there might be fairly good business for ships during the ensuing year at least. As it is, ship owners, agents and masters of vessels are to be congratulated upon the auspicious turn in the tide of affairs which has been setting in their favour during the greater part of the year now closing. A few new tank Petroleum steamers have been added to those employed in the trade last year, but as these additions to the steam fleet have been offset by losses of sail tonnage of about an equivalent carrying capacity, the status of the all carrying trade is practically unchanged.

Business this week has been to a considerable extent circumscribed by the festivities of the holiday season, but the market has been subject to very little change, and a good business in the interchange of products is confidently looked for after the turn of the year, with a continuation of fairly good rates, in view of the continued light supply of tonnage. The UNWONTED activity in the River Plate trade, (which by the perversity of the types last week was made to read UNWARRENTED), has partially subsided, and the highest rates then paid are now scarcely obtainable. There is also a weaker feeling as regards Petroleum freights, and the rates paid last week would have to be shaded a little to insure business. Berth rates by the regular steam lines, on the other hand, are, if anything, a little stronger than last week, under a decrease in available room. Cuba Sugar freights are backward. There was been some business from North Side ports, north of Hatteras, at 15 cts. and 17 cts. per 100 lbs . by steamers, which are obtainable at about these figures for January loading.

Spot No. 2 Red Wiater Wheat closed $\$ 1.02$ 1-2 cts. and $\$ 1.03$ f.o.b. No. 3 Chicago Spring do now usually, $\$ 1.08$ 3-4 delivered. Spot No. 2 Corn, 47 1-4 cts. and 48 cts., and steamer grade, 43 $3-4 \mathrm{cts}$. and 44 cts . delivered, and Refined Petroleum, 7.10.

Source: Transcribed from Cumberland Leader, 4 January 1889, private collection Conrad Byers, Parrsboro, 2008.

# Appendix XVIII: Summary of Probate Record for George Spicer 

| Estate of George Dymock Spicer <br> $\mathbf{1 7}$ November 1937 | \begin{tabular}{\|l|}
\hline
\end{tabular} |
| :--- | ---: |
| Category | $(\$)$ |
| Cash at bank and on hand | 610 |
| Securities for money | 10,714 |
| Bank stock and other stock | 12,137 |
| Book debts and promissory notes* | 4,987 |
| Farming Assets | 500 |
| Real property | 200 |
| Household Furniture | 29,148 |
| Other assets+ |  |
| Total assets |  |
| * Includes: | 3,300 |
| Loan to P. L. Spicer |  |
| Loan to S. W. Spicer | 1,500 |
| + Includes oil paintings of vessels |  |

Source: Amherst Deeds and Land Registry Office, Probate Record 4734.

| Value of Capital Assets realized and distributed 21 September 1937 to 5 January 1939 |  | (\$) |
| :---: | :---: | :---: |
| Cash and Bank Account |  | 610.54 |
| Bonds |  |  |
| Nova Scotia Light and Power 4\% 1957 |  | 982.50 |
| Bolivian Power 8\% 1945 |  | 930.00 |
| Maple Leaf Milling 5.5\% 1949 |  | 227.35 |
| Bell Telephone 5\% 1955 |  | 555.00 |
| Maritime Tel. and Tel. 4.5\% 1966 |  | 542.50 |
| Dominion of Canada 4.5\% 1959 |  | 3,893.75 |
| Province of Nova Scotia Bond 5\% |  |  |
| 1959 |  | 1,160.00 |
| Prince Edward Island Bond 5\% 1950 |  | 1,105.00 |
| Dartmouth Bond 5\% 1953 |  | 530.00 |
| Drummond Realty (\$360 par value) |  | 72.00 |
| Montreal Apartments (\$500 par value) |  | 300.00 |
|  |  | 10,298.10 |
| Preferred and Common Stock |  |  |
| Maple Leaf Milling (Pref.) | 1 | 2.48 |
| Maritime Tel. and Tel. Co. (Pref.) | 209 | 3,448.50 |
| Maritime Tel. and Tel. Co. (Common) | 180 | 2,970.00 |
| New Brunswick Telephone Co. | 75 | 900.00 |
| Bell Telephone Co. | 8 | 1,320.00 |
| Nova Scotia Light and Power | 10 | 960.00 |
| Royal Bank | 10 | 1,880.00 |
| Rights Atlantic Utilities | 106 | 318.00 |
|  |  | 11,798.98 |
| P. L. Spicer Account |  | 2,815.44 |
| S. W. Spicer Notes and Int. Less |  |  |
| Account |  | 1,942.56 |
| Sale of small lot to E. C. Spicer |  | 15.00 |
| Other Accounts |  | 40.18 |
| Total excluding real property |  | 27,520.80 |

[^173]
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[^174]
[^0]:    ${ }^{1}$ There were twelve pence in a shilling and twenty shillings in a pound.

[^1]:    ${ }^{2}$ Glossary definitions principally sourced from Stanley T. Spicer, Masters of Sail: The Era of Squarerigged Vessels in the Maritime Provinces (Toronto: Ryerson Press, 1968), 259-262. Reproduced with permission of the copyright holder, Gwendolyn Spicer.
    ${ }^{3}$ Stanley T. Spicer, Sails of Fundy: The Schooners and Square-riggers of the Parrsboro Shore (Hantsport: Lancelot Press, 1984), 24.

[^2]:    ${ }^{1}$ Eric W. Sager with Gerald E. Panting, Maritime Capital: The Shipping Industry in Atlantic Canada, 18201914 (Montreal and Kingston: McGill-Queen's University Press, 1990), 127.
    ${ }^{2}$ New Brunswick Telegraph Journal, 29 May 2002.
    ${ }^{3}$ For a discussion of this issue see, for example, David G. Alexander's "Economic Growth in the Atlantic Region, 1880 to 1940," in Atlantic Canada and Confederation: Essays in Canadian Political Economy, compiled by Sager, Lewis R. Fischer and Stuart O. Pierson (Toronto: University of Toronto Press, 1983): 51-78, and the various conferences of the Atlantic Canadian Shipping Project, 1977 to 1982. One economic historian traces the region's underdevelopment back to the expulsion of the Acadians in the mid-eighteenth century. See, Julian Gwyn, Excessive Expectations: Maritime Commerce and the Economic Development of Nova Scotia, 1740-1870 (Montreal and Kingston: McGill-Queen's University Press, 1998).
    ${ }^{4}$ In 1880, Captain George D. Spicer, his brother Captain Johnson, brother-in-law Captain Samuel Williams, master shipbuilder Amasa Loomer (who was also Johnson's father-in law), merchant William Henry Bigelow, all from Spencer's Island, joined with John Emerson and Gideon Bigelow, and John's son-in-law, Nathan Eaton, from Canning, to engage in shipbuilding and related activities at the Island. See

[^3]:    NSARM Introductory Notes to Spencer's Island Company fonds, MG1; Stanley Spicer, Sails of Fundy, The Schooners and Square-riggers of the Parrsboro Shore (Hansport: Lancelot Press, 1984), 60-61.
    ${ }^{5}$ See, for example, Eric W. Sager, Lewis R. Fischer and Rosemary Ommer, "Landward and Seaward Opportunities in Canada's Age of Sail," in Lewis R. Fischer and Eric W. Sager, eds., Merchant Shipping and Economic Development in Atlantic Canada (St. John's: Memorial University of Newfoundland, 1982): 18-27; Rosemary Ommer, in "The decline of the eastern Canadian shipping industry, 1880-95," Journal of Transport History 5 (1) (1984): 25-44, finds delayed similarities between Windsor and other ports but no substantial reasons for the intervening divergence.
    ${ }^{6}$ Historians from Memorial University of Newfoundland undertook the largest study ever into Atlantic Canada's nineteenth-century merchant marine between 1975 and 1983. The Atlantic Canada Shipping Project (ACSP) utilized computer technology to build and analyze a massive database in an effort designed to "significantly enrich knowledge of the economic and social history of the Atlantic region and its shipping industry." See, David Alexander, "Objectives and Methodologies of the Atlantic Canada Shipping Project," Journal of the Australian Association for Maritime History, 1 (2) (1979): 36-43. Another substantial quantitative study is Richard Rice, "Shipbuilding in British America, 1787-1890: An Introductory Study," (Phd. thesis: University of Liverpool, 1977). Notable exceptions to the top-down approach include, Meghan P. Hallet, "The Davison Family of Wallace and Pictou: A Case Study in

[^4]:    Maritime Enterprise" (MA thesis: Saint Mary's University, 1998); Gregg A. Finley, "Shipbuilding in St. Martins, 1840-1880: a case study of family enterprise on the Fundy shore" (MA thesis: University of New Brunswick, 1981); Richard Rice, "The Wrights of Saint John: A Study in Shipbuilding and Shipowning in the Maritimes, 1839-1855," in David S. Macmillan, ed., Canadian Business History: Selected Studies, 1497-1971 (Toronto: McClelland and Stewart, 1972).
    ${ }^{7}$ British Merchant Shipping Act, 1854.
    ${ }^{8}$ Benjamin Constant, The Law Relating to the Mortgage of Ships (London: Siren \& Shipping, Limited, 1920), 34-35.
    ${ }^{9}$ David Alexander, "Output and Productivity in the Yarmouth Ocean Fleet, 1863-1901," in David Alexander and Rosemary Ommer, eds., Volumes Not Values: Canadian Sailing Ships and World Trades (St. John's: Memorial University of Newfoundland, 1979), 89.

[^5]:    ${ }^{10}$ Ommer, "The decline of the eastern Canadian shipping industry," 38.
    ${ }^{11}$ T. W. Acheson, "The National Policy and the Industrialization of the Maritimes, 1880-1910," in P. A. Bucker and David Frank, eds., Atlantic Canada After Confederation. The Acadiensis Reader: Volume Two (Second Edition. Fredericton: Acadiensis Press, 1988), 164-165. For an insight into Sager with Panting's views on this issue, see Maritime Capital, 195-202, 131-146.

[^6]:    ${ }^{12}$ J. F. Whitney and Company and its associates were the largest capital providers for SIC-built vessels. During the twentieth century, the shipbrokers acted for and invested in steamships from Europe, the United States and Canada. Its agencies included Finska Angfartygs Aktiebolaget (Finland Steamship Company), Denmark's TORM Shipping Company and Montreal-based Saguenay Terminals. Charles Summer Whitney also became involved with the New York Shipbuilding Company through the American International Corporation. See New York Times, 26 January 1918, 29 November 1949, 28 April 1951. In addition, Halifax merchants and ship investors T. \& E. Kenny and Co. also invested in iron-hulled vessels toward the end of the nineteenth-century.
    ${ }^{13}$ See, for example, Gwyn, Excessive Expectations; S. A. Saunders, The Economic History of the Maritime Provinces, introduction and editing by T. W. Acheson (Fredericton: Acadiensis Press, 1984); Sager with Panting, Maritime Capital; The Conferences of the Atlantic Canada Shipping Project including: Keith Matthews and Panting, Ships and Shipbuilding in the North Atlantic Region (St. John's: Memorial University of Newfoundland, 1978); Rice, "Shipbuilding in British America". Notable exceptions to the top-down approach include Hallet, "The Davison Family"; Finley, "Shipbuilding in St. Martins"; Richard Rice, "The Wrights of Saint John: A Study in Shipbuilding and Shipowning in the Maritimes, 1839-1855," in David S. Macmillan, ed., Canadian Business History: Selected Studies, 1497-1971 (Toronto: McClelland and Stewart, 1972).

[^7]:    ${ }^{14}$ William Hutchison Rowe, The Maritime History of Maine: Three Centuries of Shipbuilding and Seafaring (New York: W. W. Norton and Co., 1948); Samuel Eliot Morison, The Maritime History of Massachusetts, 1763-1860 (Boston and New York: Houghton Mifflin, 1921); Sager, Seafaring Labour: The Merchant Marine of Atlantic Canada, 1820-1914 (Montreal and Kingston: McGill-Queens University Press, 1989). Notable articles combining biographical and financial historical experience include, Lewis R. Fischer and Helge W. Nordvik, "From Broager to Bergen: The Risks and Rewards of Peter Jebsen, Shipowner, 1864-1892," in Sjoefartshistorisk Aarbok, 37 (1985): 37-67.
    ${ }^{15}$ See, for example, Stanley T. Spicer, The Life and Times of George D. Spicer, Master of Square-Rigged Windjammers (Hansport: Lancelot Press, 1988); Robert Louis Boudreau, The Man who loved Schooners (Halifax: Nimbus Publishing, 2000); Ernest K. Hartling, Bluenose Master: The Memoirs of Captain Ernest K. Hartling (Willowdale: Hounslow, 1989); James A. Farquhar, Farquhar's Luck (Halifax: Petheric Press, 1980); Clement W. Crowell, Novascotiaman (Halifax: Nova Scotia Museum, 1979); Lewis Jackson and Ian McKay, eds., Windjammers and Bluenose Sailors: Stories of the Sea by Colin McKay (Lockeport: Roseway Publishing, 1993); Margaret S. Creighton, Dogwatch and Liberty Days: Seafaring Life in the Nineteenth Century (Salem: Peabody Museum of Salem, 1982); Donal M. Baird, Women at Sea in the Age of Sail (Halifax: Nimbus Publishing, 2001). One Atlantic Canadian work which does capture several elements of a combined economic and biographical approach is Stanley Spicer, Masters of Sail: The Era of Square-rigged Vessels in the Maritime Provinces (Halifax: Petheric Press, 1968). Canadian historians have also edited compilations of articles on European shipping businesses and entrepreneurship. See, for example, Lewis R. Fischer and Peter N. Davies, Research in Maritime History, No. 2. From Wheel House to Counting House: Essays in Maritime Business History in Honour of Professor Peter Neville Davies (St. John's: International Maritime Economic History Association, 1992).
    ${ }^{16}$ For a discussion on the merits of this approach and pitfalls to avoid, see, for example, Naomi R. Lamoreaux, "Rethinking Microhistory: A Comment," in Journal of the Early Republic, 26 (2006): 555-561.
    ${ }^{17}$ Frederick William Wallace, Wooden Ships and Iron Men: The Story of the Square-Rigged Merchant Marine of British North America, the Ships, their Builders and Owners, and the Men who Sailed Them (London and Toronto: Hodder and Stoughton, 1924). Similarly, romantic themes are employed by Morison, The Maritime History of Massachusetts; Rowe, The Maritime History of Maine; Howard Irving Chapelle, The History of American Sailing Ships (New York: Bonanza Books, 1935).

[^8]:    ${ }^{18}$ Margaret S. Creighton and Lisa Norling, Iron Men, Wooden Women: Gender and Seafaring in the Atlantic World, 1720-1920 (Baltimore: John Hopkins University Press, 1996) derived its title as a challenge to Wallace's earlier effort. The enduring resonance of Wallace's theme is reflected by Gerald Kenney's Ships of Wood and Men of Iron: A Norwegian-Canadian Saga of Exploration in the High Arctic (Regina: University of Regina, Canadian Plains Research Center, 2004), and S. Craig Taylor's 1975 "Wooden Ships \& Iron Men" board game which has now made the transition to the internet for remote gaming enthusiasts. M. Brook Taylor investigated Frederick William Wallace in "Frederick William Wallace: The Making of an Iron Man," Journal of the Royal Nova Scotia Historical Society (2001): 84107, and A Camera on the Banks: Frederick William Wallace and the Fishermen of Nova Scotia (Fredericton: Goose Lane Editions, 2006).
    ${ }^{19}$ Robert D. Foulke, "Life in the Dying World of Sail, 1870-1910," The Journal of British Studies 3 (1) (1963); Daniel Vickers, "Beyond Jack Tar," The William and Mary Quarterly $3^{\text {rd }}$ Ser., 50 (2) (1993): 419; Jackson and McKay, eds., Windjammers and Bluenose Sailors.
    ${ }^{20}$ See, for example, Charles Knickerbocker Harley, "Shipbuilding and Shipping in the late Nineteenth Century. A Study of Technological Change: Its Nature, Diffusion and Impact," (Phd Thesis: Harvard University, 1972); Douglass C. North, "Sources of Productivity Change in Ocean Shipping, 1600-1850," in The Journal of Political Economy 76 (5) (1968): 953-970; C. Knick Harley, "North Atlantic Shipping in the Late Nineteenth Century Freight rates and the Interrelationship of Cargoes," in Lewis R. Fischer and Helge W. Nordvik, eds., Shipping and Trade, 1750-1950: Essays in International Maritime Economic History (Pontefract: Lofthouse Publications, 1990): 147-171.

[^9]:    ${ }^{21}$ Gerald S. Graham, "The Ascendancy of the Sailing Ship 1850-85," in The Economic History Review (New Series) 9 (1) (1956): 74-88; Eric W. Sager, Seafaring Labour: The Merchant Marine of Atlantic Canada, 1820-1914 (Montreal and Kingston: McGill-Queen's University Press, 1989), 245-246. ${ }^{22}$ Graham, "The Ascendancy of the Sailing Ship 1850-85," 86.
    ${ }^{23}$ Sager, "The Atlantic Canada Shipping Project: A Retrospective and Rejoinder," Newfoundland Studies 5 (1) (1989): 63. Sager records that Alexander believed the ACSP would "pick the industry clean." Alexander, and perhaps others in the team, also considered that their investigation might help explain the region's subsequently slower rate of economic development relative to the rest of Canada. See, also, Alexander, "Objectives and Methodologies of the Atlantic Canada Shipping Project," The Great Circle 1 (2) (1979): 36.

[^10]:    ${ }^{24}$ Sager with Panting, Maritime Capital; Sager, "The Atlantic Canada Shipping Project": 61-68.
    ${ }^{25}$ Sager with Panting, Maritime Capital, 127.
    ${ }^{26}$ Nova Scotia Archives and Records Management (NSARM), George D. Spicer fonds. For example, on 24 July 1880, George appeared impatient for the E. J. Spicer to be completed and recorded in his diary that he wanted the builders to "hurry her up as fast as possible while freight are good."

[^11]:    ${ }^{27}$ Sager with Panting, Maritime Capital, 113-120.
    ${ }^{28}$ See, for example, Fischer and Panting, eds. Change and Adaption in Maritime History: The North Atlantic Fleets in the Nineteenth Century: Proceedings of the Sixth Conference of the Atlantic Canada Shipping Project April 1-April 3, 1982 (St. John's: Memorial University of Newfoundland, 1985). ${ }^{29}$ See, for example, Sager, Seafaring Labour; Colin Howell and Richard Twomey, eds. Jack Tar in History: Essays in the History of Maritime Life and Labour (Fredericton: Acadiensis Press, 1991); Creighton and Norling, Iron Men, Wooden Women; Norling, Captain Ahab Had a Wife: New England Women and the Whalefishery (Chapel Hill: University of North Carolina Press, 2000); W. Jeffrey Bolster, Black Jacks: African-American seamen in the age of sail (Cambridge, Mass.: Harvard University Press, 1997).
    ${ }^{30}$ As Judith Fingard noted, this new wave of research left "captains as though frozen in time" by ignoring the fact that the only path to the quarterdeck for almost all sailors came by way of a stint before the mast: Judith Fingard, Olaf Janzen, Valerie C. Burton, Raoul Anderson, Marcus Rediker, Craig Heron, Robert C. H. Sweeny, Eric W. Sager, "Roundtable reviews of Eric W. Sager, Seafaring Labour: The Merchant Marine of Atlantic Canada, 1820-1914, with a Response by Eric W. Sager," International Journal of Maritime History 2 (1) (1990): 235.
    ${ }^{31}$ Notable exceptions include, Vickers with Walsh, Young Men and the Sea: Yankee Seafarers in the Age of Sail (New Haven and London: Yale University Press, 2005); Creighton and Norling, Iron Men, Wooden Women; Norling, Captain Ahab Had a Wife; Valerie Burton, "The Myth of Bachelor Jack: Masculinity, Patriarchy and Seafaring Labour," in Jack Tar in History, eds. Horwell and Twomey: 179-198. ${ }^{32}$ Vickers with Walsh, Young Men and the Sea, 251.

[^12]:    ${ }^{33}$ See, for example, Thomas William Acheson, Saint John: The Making of a Colonial Urban Community (Toronto: University of Toronto Press, 1985); Acheson, David Frank, James D. Frost, eds., Industrialization and Underdevelopment in the Maritimes, 1880-1930 (Toronto: Garamond Press, 1985); David A. Sutherland, "Halifax Merchants and the Pursuit of Development, 1783-1850," Canadian Historical Review, 59 (1) (1978): 1-17; Daniel Samson, ed. Contested Countryside: Rural Workers and Modern Society in Atlantic Canada, 1800-1950 (Fredericton: Acadiensis Press, 1994); Gwyn, "Comparative Economic Advantage: Nova Scotia and New England, 1720s - 1860s," and Robert H. Babcock, "Re-examining the Economic Underdevelopment of the Maritime Provinces: A Case Study of Portland, Maine, and Saint John, New Brunswick," both in New England and the Maritime Provinces: Connections and Comparisons, eds. Stephen J. Hornsby and John G. Reid (Montreal and Kingston: McGillQueen's University Press, 2005): 94-108 and 175-200, respectively; Sager and Panting, "Staple Economies and the Rise and Decline of the Shipping Industry in Atlantic Canada, 1820-1914," in Change and Adaptation in Maritime History, 3-45; Graham, "The Ascendancy of the Sailing Ship," 74-88; C. K. Hartley, "On the Persistence of Old Techniques: The Case of North American Wooden Shipbuilding," Journal of Economic History 33 (1) (1973): 372-398; Rice, "The Wrights of Saint John"; Nicholas J. De Jong and Marven E. Moore, Shipbuilding on Prince Edward Island: Enterprise in a Maritime Setting 17871920 (Hull: Canadian Museum of Civilization, 1994); Peter Ennals, "'Business for Ships is Miserable Dull:' A New Brunswick Mariner Confronts the Waning Days of Sail," The Northern Mariner IX (1) (January 1999): 23-39; Panting, "Shipping Investment in the urban centres of Nova Scotia," in Merchant Shipping and Economic Development in Atlantic Canada eds. Lewis R. Fischer and Eric W. Sager (St. John's: Memorial University of Newfoundland, 1982): 125-136.

[^13]:    ${ }^{34}$ For discussion of trends and investment patterns in nineteenth-century Atlantic Canada, see, Sager and Fischer, "Patterns of Investment in the Shipping Industries of Atlantic Canada, 1820-1900," Acadiensis IX (1) (1979): 19-43; "Atlantic Canada and the Age of Sail Revisited," Canadian Historical Review, LXII (2) (1982); 125-150. In addition, Alexander and Panting, "The Mercantile Fleet and Its Owners: Yarmouth, Nova Scotia, 1840-1889," Acadiensis VII (2) (1978): 3-28, represents a direct contrast to Spencer's Island. ${ }^{35}$ Acheson, "The National Policy and the Industrialization of the Maritimes," 164-189; Ernest R. Forbes, "In Search of a post-Confederation Maritime Historiography, 1900-1967," Acadiensis 1978 8(1): 3-21; Ian McKay, "A Note on 'Region' in the Writing of the History of Atlantic Canada," Acadiensis, XXIX (1) (2000): 89-101; Acadiensis, XXX (1) (Fall 2000). Special Issue: "Back to the Future: The New History of Atlantic Canada"; Margaret Conrad, "Introduction to the Roundtable on Re-Imagining Regions," Acadiensis XXXV (2) (2006): 127-128.
    ${ }^{36}$ T. W. Acheson, "The National Policy and the Industrialization of the Maritimes," 164-165.

[^14]:    ${ }^{37}$ Fischer, "The Enterprising Canadians: An Assessment of Canadian Maritime History since 1975," in Research in Maritime History, No. 9. Maritime History at the Crossroads: A Critical Review of Recent Historiography, ed. Frank Broeze (St. John's: International Maritime History Association, 1995): 31-52. ${ }^{38}$ While research into steamship entrepreneur Samuel Cunard continues apace, those operating in the age of sail alone appear increasingly under-recognized. See for example: John Boileau, Samuel Cunard: Nova Scotia's Master of the North Atlantic (Halifax: Formac Publishing, 2006); John G. Langley, Steam Lion: A Biography of Samuel Cunard (Halifax: Nimbus Publishing, 2006); Daniel Allen Butler, The Age of Cunard: A Transatlantic History 1839-2003 (Annapolis: Lighthouse Press, 2003). In contrast, there are no major studies into New Brunswick-based merchants Jacob and Howard Troop who controlled Maritime Canada's largest ocean-going sail fleet in the nineteenth-century.

[^15]:    ${ }^{39}$ Success, failure. Dictionary.com, The American Heritage® Dictionary of the English Language, Fourth Edition (Houghton Mifflin Company, 2004). Retrieved from http://dictionary.reference.com/browse/success, 13 October 2008.
    ${ }^{40}$ Roberta J. Park, "Biological thought, athletics and the formation of a 'man of character': 1830-1900," in J. A. Mangan and James Walvin, eds., Manliness and Morality: Middle-class Masculinity in Britain and America, 1800-1940 (Manchester: Manchester University Press, 1987): 17.
    ${ }^{41}$ Many of the primary sources for this thesis were originally held by Dewis Spicer, the third of the four sons of Jacob and Mary Spicer who reached adulthood. All four went to sea, captained Spencer's Islandbuilt vessels and became known as 'the Big Four' around the Bay of Fundy. The letters Dewis received from his older brothers, other SIC shareholders, shipping agents and various business associates are at times deeply personal and at others merely perfunctory. However, they reveal an extensive information network which enabled the Spicers to keep abreast of market developments and competitive trends. The communications also shed light on the brothers' sense of agency and changing attitudes over time.

[^16]:    ${ }^{42}$ Sager with Panting, Maritime Capital, 88-89; Matthews and Panting, Ships and Shipbuilding, 10. In 1879, Canadian registered vessels collectively accounted for $1,332,083$ tons ranking the country fourth in the world. Registered capacity fell twenty-two percent over the next ten years and by 1895 it was down thirty-eight percent. The 1879 country ranking is based on the combined tonnage registered at Canadian and Newfoundland ports. If "Atlantic Canada," is thought of as a separate country, it would have placed sixth on the 1879 ranking tables, just behind Germany. The region's registered tonnage declined twentythree percent, and forty-three percent, from 1879 to 1889, and 1895, respectively.
    ${ }^{43}$ At its peak in 1891, vessels under the mandate of Spencer's Island captains accounting for about 9,900 tons of ocean-going capacity. While not inconsiderable, this still represented only two percent of Nova Scotia's total registered tonnage that year.
    ${ }^{44}$ David Hancock, Citizens of the World: London Merchants and the Integration of the British Atlantic Community, 1735-1785 (Cambridge: Cambridge University Press, 1995).

[^17]:    ${ }^{45}$ Ibid., 10-11.
    ${ }^{46}$ Ibid., 9. Hancock believes that "by combining the private and public lives of real people, keeping them at the center of the story, and merging the accounts of their experiences with the broader explanatory context of the economic and social forces impinging upon men and women in the Atlantic community ... we can gain a more accurate and interesting understanding of the influence of the metropolis on British-American trade in the fifty years before the end of the American Revolutionary War." This thesis attempts a similar approach to uncover the nature of economic and social forces on coastal Nova Scotians during sail's latter years.
    ${ }^{47}$ The thesis reports on all SIC's shareholders - Johnson Spicer, Robert Spicer, Samuel Williams (and his wife Antoinette after Williams' death at sea in 1883), Amasa Loomer, Henry Bigelow, John Emerson Bigelow, Gideon Bigelow and Nathan Eaton.
    ${ }^{48}$ David Stanley, "Review of David Hancock's Citizens of the World: London Merchants and the Integration of the British Atlantic Community, 1735-1785," Directed Readings paper, October 2007, 1. ${ }^{49}$ For example, leading politician Sir Charles Tupper appeared to respect George's business acumen. He was an investor in several Spencer's Island vessels George co-owned and managed. George was also a member of the Masonic Lodge which is strongly suggestive of his 'establishment' status.

[^18]:    ${ }^{50}$ Hancock utilizes this phraseology when describing his subjects. See, for example, Hancock, Citizens of the World, 19.
    ${ }^{51}$ Examples of SIC shareholders' community initiatives include their roles in the construction of a church and a school at Spencer's Island. See, for example, Spencer's Island United Church Women, Spencer's Island Union Church, 1882-1892 (Hantsport: Lancelot Press, 1992).

[^19]:    ${ }^{52}$ The records relating to these vessels include charter contracts, bills of lading, letters from shipping agents, insurers and other interested parties, wage books and various financial journals but no $\log$ books. ${ }^{53}$ J. F. Whitney was built by merchants William Payzant and Henry Bigelow in 1872. George Spicer owned eight of the sixty four shares in the Whitney and was its first captain. When he turned the ship over to Dewis in 1880 it was to take command of the E. J. Spicer, named after his wife Emily Jane. NSARM reports $E$. J. Spicer as the first vessel constructed by SIC although the registry file shows Amasa Loomer as the builder and George Spicer as the largest shareholder. Bigelow family records held by Dalhousie University indicate that E. J. Spicer was a Bigelow-built and managed ship, Dalhousie Library and Archives, Bigelow family fonds, MS-4-92, "List of Vessels built by Bigelows of Canning circa. 18301918." However, the evidence supports Stanley Spicer's interpretation that E. J. Spicer is best regarded as part of a transitional phase: Stanley T. Spicer, Maritimers Ashore \& Afloat. Volume 2: Interesting People, Places and Events Relating to the Bay of Fundy and its Rivers (Hantsport: Lancelot Press, 1994), 84.
    ${ }^{\frac{1}{54} \text { See, for example, Stanley Spicer's manuscript held by Dalhousie University Archives containing notes }}$ on his grandfather along with a list of his voyages: Dalhousie University, Stanley Spicer, Private Manuscripts, MS-2-413; Stanley also provided regional museums with relevant lists of 8,000 vessels built along the Bay of Fundy and its tributaries. Furthermore, the full manuscript from which his book Captain from Fundy was drawn remains in family hands.

[^20]:    ${ }^{55}$ Stanley Spicer, Masters of Sail; Sails of Fundy; Captain from Fundy; The Age of Sail: Master Shipbuilders of the Maritimes (Halifax: Formac, 2001); Maritimers Ashore \& Afloat: Interesting People, Places and Events related to the Bay of Fundy and its Rivers (Hansport: Lancelot Press, 1993).
    ${ }^{56}$ Stanley Spicer, Captain from Fundy, 88-89. Stanley records that George "owned shares in three of the schooners built at Spencer's Island and in one of the square-riggers built in Kingsport, N.S. He was a shareholder in the New York Sailmaking Company and in an axe factory in St. Stephen, N.B., managed by his son-in-law. And he was an early investor in Nova Scotia Telephone stock."
    ${ }^{57}$ Ibid.

[^21]:    ${ }^{58}$ ACSP's research indicates that tonnage registered outside the eight major ports it investigated generally accounted for nearly twenty percent of the total for the region. See Sager with Panting, Merchant Capital, 89. Thus, there may have been numerous seafaring entrepreneurs in coastal communities who controlled significant fractions of the province's merchant marine at that time.

[^22]:    ${ }^{59}$ New York Times, "Marine Intelligence," 1880, passim; Wallace, Wooden Ships and Iron Men, 282.

[^23]:    ${ }^{60}$ NSARM, Spicer family fonds, 1997-174, Letters from Nathan Eaton to Dewis Spicer, 1894. Nathan Eaton left Spencer's Island in 1894 and the following year, George's elder son Percy acquired the SIC's general store. While the store's letterhead still referred to the company as "Spencer's Island Company, Shipbuilders \& Dealers in Timber, Ship Chandlery and General Merchandise," it appears that, by then, its operations had been pared back to timber and general merchandising. 1900 United States Federal Census, retrieved from ancestry.com website, http://search.ancestry.com, 10 April 2008. Master shipbuilder Amasa Loomer moved to Massachusetts in 1895. NSARM, Spencer's Island Company fonds; Canadian Census 1891 and 1901; NSARM, Nova Scotia Historical Vital Statistics, Cumberland County Marriages Register, retrieved from www.novascotiageneology.com, 16 April 2008, Antoinette Williams came into possession of some of husband Samuel's assets after his death at sea, including his SIC share. She married local doctor Clifford Sayre in 1886 and, some years after his demise, she entered into matrimonial union with the head of Parrsboro's telephone company, H. C. Jenks in 1898.
    ${ }^{61}$ NSARM, Nova Scotia Historical Vital Statistics, Cumberland County Marriages Register, retrieved from www.novascotiageneology.com, 16 April 2008. Antoinette Sayer and H. C. (Cory) Jenks married on 21

[^24]:    December 1898. Antoinette probably moved to Parrsboro upon the occasion of her third marriage as the register records that she resided at Spencer's Island at the date of her marriage.
    ${ }^{62}$ Stanley T. Spicer, Captain from Fundy, 104. NSARM, Spicer family fonds, Dewis Spicer diaries. Dewis was never a shareholder in the SIC, but he remained at Spencer's Island after his retirement from seafaring and ran the family farm. Fenwick private collection, family files record that the youngest Spicer brother, Edmund, resided in the house where the siblings were raised, and which was adjacent to Dewis's, for most of his life. Edmund, like Dewis, was never a SIC employee, but he captained some of the ships it built as well as vessels later constructed by Johnson. In 1925, Edmund's wife Ella Blanche moved to Parrsboro to stay at Antoinette's, while her husband continued to captain ships operating from Cumberland County's shores. Shortly after bidding farewell to Ella on 6 September 1926, Edmund suffered fatal injuries in a motor vehicle accident whilst on his way to take command of a vessel due to depart from Port Greville. See, also, NSARM, Nova Scotia Historical Vital Statistics, Cumberland County Death Register, retrieved from www.novascotiageneology.com, 16 April 2008.
    ${ }^{63}$ Cumberland Country Land and Deeds Registry, Probate Record 4603, "Statement of Succession Duty in the Estate of Johnson Spicer, late of Parrsboro, Nova Scotia," 27 June 1923.
    ${ }^{64}$ Cumberland Country Land and Deeds Registry, Probate Record 4734, Inventory and valuation of the Estate of George D. Spicer, 18 November 1937. The valuation included real assets at a nominal value of $\$ 500$.

[^25]:    ${ }^{1}$ See, for example, Eric W. Sager with Gerald Panting, Maritime Capital: The Shipping Industry in Atlantic Canada, 1820-1914 (Montreal \& Kingston: McGill-Queen's University Press, 1990); Rosemary E. Ommer, "The decline of the eastern Canadian shipping industry, 1880-95," in Journal of Transport History 5 (1) (1984): 25-44. The ACSP was the largest investigation ever undertaken into the region's nineteenth-century merchant marine, and this thesis draws extensively from its database and published works.
    ${ }^{2}$ A study into Quebec's merchant marine finds that local ownership was also in decline in that province prior to 1880 . See, Albert Faucher, "The Decline of Shipbuilding at Quebec in the Nineteenth Century," in The Canadian Journal of Economics and Political Science, 23 (2) (1957), 195-215.

[^26]:    ${ }^{3}$ Two other case studies identified are: Greg. A. Finley, "Shipbuilding in St. Martins, 1840-1880: a case study of family enterprise on the Fundy shore," (MA thesis: University of New Brunswick, 1981); and Meghan P. Hallett, "The Davison Family of Wallace and Pictou: A Case Study in Maritime Enterprise," (MA thesis, Saint Mary's University, 1998). Both emphasize an earlier period than this thesis and are more heavily focussed on sociological factors and general market conditions than specific business financial performance.

[^27]:    ${ }^{4}$ Sager with Panting, Maritime Capital, 147, reports that merchant families "remained the dominant form of ownership in the major ports of the Maritimes until the end of the nineteenth century." For a discussion of the family-based structures in latter nineteenth-century rural Nova Scotia see, for example, Stephen Maynard, "Between Farm and Factory: The Productive Household and the Capitalist Transformation of the Maritime Countryside, Hopewell, Nova Scotia, 1869-1890," in Daniel Samson, ed., Contested Countryside: Rural Workers and Modern Society in Atlantic Canada, 1800-1950 (Fredericton, Acadiensis Press, 1994): 70-104. This was not merely a Nova Scotian phenomenon. See, for example, Leonore Davidoff and Catherine Hall on the importance of family in British business enterprises up to the mid-nineteenth century in Family Fortunes: Men and Women of the English Middle Class, 1780-1850 (London and New York: First published by Hutchinson Education, 1987, Revised edition by Routledge, 2002), especially 240-244, 259-260.

[^28]:    ${ }^{5}$ Department of Agriculture, Canada: Historical Abstract and Record, 1885, retrieved from Statistics Canada, Canada Historical Yearbook Collection website http://www66.statcan.gc.ca/cdm4/document.php?CISOROOT=/eng\&CISOPTR=17562\&REC=14, 26 June 2008, 70-79. The yearbook records that at the time of the April 1881 census, the three most populated cities were Montreal at 140,747 , Toronto and suburbs at 91,240 , and Halifax at 36,054 . The fifth most populated city, Saint John, New Brunswick, at 26,127, was Canada's most accessible major centre for those from Spencer's Island. The yearbook also shows that rural Nova Scotians made up eighty-six per cent of the province's total population at that time.

[^29]:    ${ }^{6}$ For a discussion of the origins of the Spencer's Island name, see, David Stanley, "The Spicer of Life, A Maritime Marriage during the Age of Sail: Captain Dewis and Emma Spicer of Spencer's Island, Nova Scotia," (BA thesis, Dalhousie University, 2007), 24-25.

[^30]:    ${ }^{7}$ Businessmen from Cumberland County, especially Parrsboro, also engaged in this trade.
    ${ }^{8}$ For a detailed discussion of the deportation of the Acadians from Nova Scotia see, for example, N. E. S. Griffiths, From Migrant to Acadian: A North American Border People, 1604-1755 (Montreal and Kingston: McGill-Queen's University Press, 2005), and John Mack Faragher, A Great and Noble Scheme: The Tragic Story of the Expulsion of the French Acadians from Their American Homeland (New York and London: W. W. Norton \& Company, 2005).
    ${ }^{9}$ Nova Scotia Archives and Records Management (NSARM), MG100, V01. 31, No. 41: "History of the Spicer family of Spencer's Island, Cumberland County," an unpublished manuscript on microfilm dated 1980; NSARM, MG100, Vol. 81, No. 110: "Spicer," An unpublished manuscript on microfilm by Robert F. Kirkpatrick, dated 23 February, 1988; NSARM, MG100, Vol. 231, No. 15: "Spencer's Island and History of Our Spicer Ancestors Who First Settled Here," an unpublished manuscript on microfilm by

[^31]:    Charlotte (Lottie) Kerr Spicer, dated March 1965; Addie E. Loomer Shepard, The Descendents of Stephen Loomer of New London, Connecticut comprising the first to and including the nineth generation (Allison, Iowa: Addie E. Loomer-Shepard, 1961); The Bigelow Society Website, accessed through http://bigelowsociety.com/rod/bigsoc1.htm, January to May 2008. It is possible that members of the Bigelow and Loomer families knew each other before emigrating.

[^32]:    ${ }^{10}$ The lots allocated to loyalists in and around Spencer's Island usually comprised a relatively short water frontage but then stretched far inland.
    ${ }^{11}$ NSARM, Canada 1881 Census, on microfilm; Family Search.org, Canada 1881 Census Household Records, retrieved from
    http://www.familysearch.org/Eng/Search/frameset search.asp?page=census/search_census.asp, 12 February 2008. Data collected for household families in District 22, Sub-district K, Advocate Harbour, Cumberland County.
    ${ }^{12}$ John Lovell, Lovell's Province of Nova Scotia Directory for 1871, retrieved from Libraries and Archives Canada, Canadian Directories website, http://www.collectionscanada.gc.ca/canadiandirectories/022009-119.01e.php?\&directory id_nbr=7203\&page id_nbr=58006\&interval=10\&\&type=1\&\&PHPSESSID=asc4e571p2 vvr6b97rqctulc54, 15 February, 2007.
    ${ }^{13}$ This orientation to timber was similar to parts of New Brunswick. See, for example, Graeme Wynn, Timber Colony: A Historical Geography of Early Nineteenth Century New Brunswick (Toronto: University of Toronto Press, 1981).
    ${ }^{14}$ Family Search.org, Canada 1881 Census Household Records, retrieved from http://www.familysearch.org/Eng/Search/frameset search.asp?page=census/search census.asp, 12 February 2008. Data collected for Spencer's Island household families in District 22, Sub-district K, Advocate Harbour, Cumberland County. Occupations recorded were: Farmer, 9; Farm Labourer, 2; Farmer's Sons, 4; Ship Captain, 3; Seaman, 6; Carpenter, 11; Ship Rigger, 1; Shipbuilder, 1; Storekeeper, 1; School teacher, 3; Medical Doctor, 1; Shoemaker, 1. The number of seafarers at Spencer's Island is under-represented in the census as it does not include those who were engaged in their employ at the time. For example, George and Johnson's brother Dewis was away.

[^33]:    ${ }^{15}$ Ibid. Data collected for first 120 household families in District 22, Sub-district K, Advocate Harbour, Cumberland County. Occupations recorded were: Farmer, 53; Farm Labourer, 9; Farmer's Sons, 14; Ship Captain, 10; Seaman, 30; Ship Carpenter, 3; Carpenter, 50; Carpenter's sons, 2; Millman, 1; Ship Rigger, 1; Sparmaker, 1; Joiner, 3; Blacksmith, 2; Caulker 3; engineer, 2; Shipbuilder/Shipwright, 2; Storekeeper, 1; School teacher, 5; Medical Doctor, 1; Clergy, 1; Postmaster, 1; Shoemaker, 2; Other, 7; "Not Given," 10. ${ }^{16}$ Ibid.
    ${ }^{17}$ Stanley T. Spicer, Captain from Fundy: The Life and Times of George D. Spicer, Master of Squarerigged Windjammers (Hantsport: Lancelot Press, 1988), 114.
    ${ }^{18}$ Grant private collection, Shipbuilding Journals, photocopies in Conrad Byers private collection, Stephen D. Horton construction costs. These proportionate interests are derived by applying the cost breakdown for the much larger 1,626 ton Stephen D. Horton and should be considered indicative only. The Stephen D. Horton was built between April 1881 and August 1883 for a total cost of $\$ 63,349$. The cost before commissions and adjustments was $\$ 63,728$ comprising Timber costs of $\$ 10,937$, Iron and related costs of $\$ 12,569$, Outfit costs of $\$ 16,072$, and Labour and other costs of $\$ 24,150$.
    ${ }^{19}$ Ibid; Michael D. Bordo and Angela Redish, "Is Deflation Depressing? Evidence from the Classical Gold Standard," (National Bureau of Economic Research, Cambridge, MA, NBER Working Paper Series, Working Paper 9520), retrieved from http://www.nber.org/papers/w9520, 15 March 2008; Bank of Canada, Inflation Calculator, retrieved from http://www.bankofcanada.ca/en/rates/inflation calc.html, 15 March 2008.
    ${ }^{20}$ This view contrasts with Julian Gwyn's argument for the industry as a whole, in Excessive Expectations: Maritime Commerce and the Economic Development of Nova Scotia, 1740-1870 (Montreal and Kingston:

[^34]:    McGill-Queens University Press, 1998), 228-229, that deep-water sailing was an activity thrust upon Nova Scotians by their inability to sell locally constructed vessels in Britain and that, by the end of the period he deals with, the industry generated poor economic returns.

[^35]:    ${ }^{21}$ Spicer private collection, Letters to Spencer's Island Company (SIC) during 1881. Hereafter, this collection will be referred to as: SPC Letters.

[^36]:    ${ }^{22}$ Grant private collection, SIC Journals 1881 to 1891,400 . The entry dated 28 December 1881, records the transfer of company share capital balances from the previous journal. The company was established with $\$ 4,000$ capital, contributed equally by its eight members. SPC Letters, 1880-1886, passim. Prior to 1884 , the letters SIC received from John Bigelow suggest that he was actively involved in all aspects of the business.

[^37]:    ${ }^{23}$ T. W. Acheson noted this issue as a problem for Maritime Canadian industry generally in his important article, "The National Policy and the industrialization of the Maritimes, 1880-1910," in P. A. Buckner and David Frank eds., Atlantic Canada After Confederation. The Acadiensis Reader: Volume Two (Fredericton: Acadiensis Press, Second Edition, 1988): 163-168. SIC was initially capitalized at $\$ 4,000$ by $\$ 500$ investments by each of its initial shareholders. See, Grant private collection, SIC Journals.
    ${ }^{24}$ NSARM, MG100, Vol. 81, No. 110: "Spicer," An unpublished manuscript by Robert F. Kirkpatrick, dated 23 February, 1988; Stanley T. Spicer, Captain from Fundy, 21.
    ${ }^{25}$ Stanley Spicer, Captain from Fundy, 21.
    ${ }^{26}$ Gamblin private collection, Personal scrapbook, "Spencers Island," The Parrsboro Leader, Thursday 25 April, 1901.
    ${ }^{27}$ Stanley Spicer, Captain from Fundy, 25-26

[^38]:    ${ }^{28}$ Ibid., 22, 25-26.
    ${ }^{29}$ Ibid., 26.
    ${ }^{30}$ Ibid.; During the Victorian era it was most common for the marriage of middle class couples to occur only after the prospective husband could show solid financial prospects necessary to support a family. See, for example, Francoise Noel, Family Life and Sociability in Upper and Lower Canada, 1780-1870: A View from Diaries and Family Correspondence (Montreal and Kingston: McGill-Queen's University Press, 2003), 62.
    ${ }^{31}$ Stanley Spicer, Captain from Fundy, 26, 109.
    ${ }^{32}$ The Parrsboro Leader, "Spencers Island," Thursday April 25, 1901; Stanley Spicer, Captain from Fundy, 22,26.
    ${ }^{33}$ Stanley Spicer, Captain from Fundy, 26.
    ${ }^{34}$ Eric W. Sager, Seafaring Labour: The Merchant Marine of Atlantic Canada, 1820-1914 (Montreal and Kingston: McGill-Queen's University Press, 1989), 234.
    ${ }^{35}$ Amherst Land Records and Deeds Office, Parrsboro Book of Deeds, Book 8, Page 385, No. 397; NSARM, Lottie Spicer, "History," 3, 10. George later acquired another half acre of land adjacent to this original lot.

[^39]:    ${ }^{36}$ NSARM, PANS MFM 14569, RG 12, A 1, Vol. 70: Shipping Register, Parrsboro, N.S. on microfilm, shows that George took four shares in the vessel; Stanley T. Spicer, Saga of the Mary Celeste, The Story of a Mystery Ship, and A Compilation of Sailing Vessels Built at Spencer's Island (Hansport: Lancelot Press, 1989, reprinted 1991), 11; 1881 Canadian Census Household Record, retrieved from http://www.familysearch.org/Eng/search/frameset search.asp?PAGE=ancestorsearchresults.asp, 16 March, 2007, shows Minnie Spicer aged 9, Percy 8, Gertrude 6 and Whitney (mistakenly listed as female) less than 1 year old at census date.
    ${ }^{37}$ NSARM MG 100, Vol. 81, No. 110: Kirkpatrick, "Spicer," 3; The Parrsboro Leader, "Spencers Island," 25 April, 1901.
    ${ }^{38}$ The Parrsboro Leader, "Spencers Island," 25 April, 1901; Stanley T. Spicer, Captain From Fundy, 110.
    ${ }^{39}$ NSARM MG 100, Vol. 81, No. 110: Kirkpatrick, "Spicer," 3, reports that Johnson married an unnamed "native of England." Province of Nova Scotia, Nova Scotia Historical Vital Statistics, retrieved from https://www.novascotiagenealogy.com/ResultsPage.aspx, 16 February, 2008, records Johnson as a widower at the time of his second marriage, to Ada Adelia Loomer on 17 July, 1878.
    ${ }^{40}$ Province of Nova Scotia, Nova Scotia Historical Vital Statistics.
    ${ }^{41}$ Ibid.
    ${ }^{42} 1881$ Canadian Census Household Record, retrieved from
    http://www.familysearch.org/Eng/search/frameset search.asp?PAGE=ancestorsearchresults.asp, 16 March, 2007. The 1881 census shows Johnson and Adelia each living under their respective parents' roofs.

[^40]:    ${ }^{43}$ Stanley T. Spicer, Sails of Fundy: The Schooners and Square-riggers of the Parrsboro Shore (Hansport: Lancelot Press, 1984), 93; NSARM, Shipping Register, Windsor, (RG, A1, Vol. 308), on microfilm PANS 14596; Years later, Johnson recollected that he was also involved in the actual building of the vessel: The Parrsboro Leader, "Spencers Island." Stanley T. Spicer, Maritimers Ashore \& Afloat, Volume 2:
    Interesting People, places and Events Related to the Bay of Fundy and its Rivers (Hansport: Lancelot Press, 1994), 80 reports that Bigelow family records reported Gideon Bigelow of Canning as the vessel designer,. ${ }^{44}$ Stanley T. Spicer, Sails of Fundy, 111; NSARM, Windsor Shipping Register; Mystic Seaport, American Lloyd's Register of American and Foreign Shipping, 1879, retrieved from http://www.mysticseaport.org/library/initiative/SPSearch.cfm?ID=876643; The Parrsboro Leader, "Spencers Island," 25 April, 1901.
    ${ }^{45}$ The Parrsboro Leader, "Spencers Island"; Stanley T. Spicer, Sails of Fundy: The Schooners and Squareriggers of the Parrsboro Shore (Hansport: Lancelot Press, 1984), 91.
    ${ }^{46}$ NSARM, MG100, Vol. 81, No. 110: Kirkpatrick, "Spicer," 3.
    ${ }^{47}$ In March 1965, Lottie Spicer recounted that "[a]fter getting what education they could, the boys went to sea and became captains, and the girls mostly married captains," NSARM, "History," 7.
    ${ }^{48}$ Province of Nova Scotia, Nova Scotia Historical Vital Statistics, retrieved from https://www.novascotiagenealogy.com/ResultsPage.aspx, 16 February, 2008; NSARM, 1871 Census Guysborough County, N.S. Canada, Volume 11: Index to Nominal Return of the Living, Compiled by Mary Elizabeth Koen (Swampscott, MA: 1988).

[^41]:    ${ }^{49}$ Mystic Seaport, American Lloyds Register of American and Foreign Shipping 1864, retrieved from http://www.mysticseaport.org/library/initiative/SPSearch.cfm?ID=636517, 17 March, 2008.
    ${ }^{50}$ Stanley, T. Spicer, Sails of Fundy, 101, Stanley T. Spicer's personal card records of sailing vessels built around the Bay of Fundy 1820-1920; Mystic Seaport, American Lloyd's Register of American and Foreign Shipping, 1873, retrieved from http://www.mysticseaport.org/library/initiative/SPSearch.cfm?ID=762572, 17 March, 2008.
    ${ }^{51}$ Province of Nova Scotia, Nova Scotia Historical Vital Statistics, retrieved from https://www.novascotiagenealogy.com/ResultsPage.aspx, 16 February, 2008.
    ${ }^{52}$ Ibid.
    ${ }^{53}$ NSARM, George D. Spicer fonds: 1871-1910, MG1, microfilm reels 11,017-11,024, Diary Friday 9 July 1880. George wrote "Sent out a notice to let Capt Williams place"; 1881 Canada Census, Household Record, retrieved from http://www.familysearch.org/Eng/search/frameset search.asp?PAGE=ancestorsearchresults.asp, 16 March, 2007. The return shows Johnson, Samuel and Antoinette all residing under Jacob and Mary's roof on census day.
    ${ }^{54}$ NSARM, Windsor Shipping Register; Mystic Seaport, American Lloyd's Register of American and Foreign Shipping, 1880, retrieved from http://www.mysticseaport.org/library/initiative/SPSearch.cfm?ID=901271, 17 March, 2008. This bark had a number of key shareholders in common with the J. Williams, most notably managing owner Godfrey $\mathbf{P}$. Payzant and John Sterling of Windsor

[^42]:    ${ }^{55}$ NSARM, Windsor Shipping Register. The eight shares registered in Shaw's name were subject to a mortgage for US $\$ 4,000$ bearing interest at 7 percent per annum in favour of James $F$. Whitney of New York.
    ${ }^{56}$ NSARM, MG100, Vol. 81, No. 110: Kirkpatrick, "Spicer," 3.
    ${ }^{57}$ NSARM, Lottie Spicer, "History," 3; NSARM, MG100, Vol. 81, No. 110: Kirkpatrick, "Spicer," 3.
    ${ }^{58}$ John Spicer also went to sea in his youth but returned home to assist his mother on the family farm following his father's death in 1880 . See, Lottie Spicer, "History."
    ${ }^{59}$ Province of Nova Scotia, Nova Scotia Historical Vital Statistics, retrieved from https://www.novascotiagenealogy.com/ResultsPage.aspx, 16 April, 2008: The marriage certificate records Robert Wesley Spicer's occupation as ship's carpenter.
    ${ }^{60}$ NSARM, Windsor Shipping Register; Province of Nova Scotia, Nova Scotia Historical Vital Statistics, retrieved from https://www.novascotiagenealogy.com/ResultsPage.aspx, 16 April, 2008: The marriage certificate records various details about Robert Wesley and Emma and their parents. Family Search.org, Canada 1881 Census, household records, retrieved from http://www.familysearch.org/Eng/Search/frameset search.asp?page=census/search census.asp, 16 March, 2007, shows Daniel Spicer's occupation as "Seaman."

[^43]:    ${ }^{61}$ Amherst Land Records and Deeds Office, Parrsboro Book of Deeds, Book 8, Page 589, No. 622, dated 23 April 1875; Province of Nova Scotia, Nova Scotia Historical Vital Statistics, retrieved from https://www.novascotiagenealogy.com/ResultsPage.aspx, 16 April, 2008; NSARM, Lottie Spicer, "History," 10 . Charlotte Kerr Spicer was Robert Wesley Spicer's niece and recollects the house being across the road from George's; 1881 Canada Census: Household Record, retrieved from http://www.familysearch.org/Eng/search/frameset search.asp?PAGE=ancestorsearchresults.asp, 16 March, 2007. This records Robert as head of a household and family separate from his mother and siblings, and his occupation as "Farmer."
    ${ }^{62}$ One headstone in the Spicer family plot at Advocate Harbour cemetery records: "Isaac Spicer, 1819 1880"; Charlotte Kerr Spicer, "History," 7, recounted that: "My father [Robert Wesley's youngest brother John], made one voyage around the world. He and his cousin Edmund Spicer, started out to sea in the ship 'Servia' commanded by his cousin Capt. Johnson Spicer, and brother of Edmund. My father was called home after this voyage to take over the homestead of his father, Isaac, who had died. His brother, Robert, also helped. After paying off the other heirs John N. owned the homestead and looked after his mother, Lydia." Canada 1881 Census, suggests that Isaac's widow, Lydia, remained in control of the main family farm.
    ${ }^{63}$ Addie E. Loomer Shepard, The Descendents of Stephen Loomer of New London, Connecticut comprising the first to and including the ninth generation (Allison, Iowa: Addie E. Loomer-Shepard, 1961), No. 1429121.
    ${ }^{64}$ Ibid.;The Bigelow Society Website, accessed through http://bigelowsociety.com/rod/bigsoc1.htm, January to May 2008; Stanley T. Spicer, Maritimers Ashore \& Afloat, Volume 2, 71-84.
    ${ }^{65}$ The Parrsboro Leader, "Spencers Island," 25 April, 1901.

[^44]:    ${ }^{66}$ Addie Shepard, The Descendents of Stephen Loomer, No. 1429121.
    ${ }^{67}$ Ibid.
    ${ }^{68}$ Harold Lister, "Ships and Shipmasters of old Spencer's Island," The Parrsboro Record, Tuesday, November 5, 1974, 1; NSARM, Windsor Shipping Register; Stanley T. Spicer, Maritimers Ashore \& Afloat, Volume 2, 80.
    ${ }^{69}$ NSARM, Windsor Shipping Register.
    ${ }^{70}$ The Bigelow Society website, retrieved from http://bigelowsociety.com/rod7/jus72c11.htm, 23 March, 2008.
    ${ }^{71}$ The Bigelow Society website, retrieved from http://bigelowsociety.com/rod8/wil8c114.htm, 21 February, 2008; NSARM, "History," 8: Charlotte Spicer recounts that "After some years Mr. Cox went back to Canning and W. H. Bigelow from Kingsport came over and joined Payzant in the store business."

[^45]:    ${ }^{72}$ Art Gallery of Nova Scotia, Tall Ships of Atlantic Canada website, retrieved from http://www.atlantictallships.ca/gallery.php?action=display\&ID=304\&OutputType=Ships\&lang=e, 22 January, 2007; Stanley T. Spicer, Saga of the Mary Celeste, 3. Joshua Dewis took sixteen of the sixty-four shares in the vessel himself. Joshua Dewis's brother-in-law Jacob Spicer and his brother Isaac Spicer each took eight shares in the new vessel. The Bigelow Society website, retrieved from
    http://bigelowsociety.com/rod8/wil8c114.htm, 21 February, 2008: Inter-family relationships were further enhanced when Henry Bigelow married Joshua Dewis's daughter.
    ${ }^{73}$ Stanley T. Spicer, Saga of the Mary Celeste, 3. This first vessel built at Spencer's Island later renamed the Mary Celeste gained international notoriety when it was found abandoned at sea with no indication as to the fate of captain, family and crew.
    ${ }_{75}^{74}$ Stanley Spicer, Saga of the Mary Celeste, 4.
    ${ }^{75}$ Ibid. Robert McLellan, who hailed from Economy, owned four shares in the Amazon.
    ${ }^{76}$ Art Gallery of Nova Scotia, Tall Ships of Atlantic Canada website, retrieved from http://www.atlantictallships.ca/gallery.php?action=display\&ID=304\&OutputType=Ships\&lang=e, 22
    January, 2007; NSARM, Parrsboro Shipping Register.
    ${ }^{77}$ Ibid. See, also, Stanley Spicer, Saga of the Mary Celeste.
    ${ }^{78}$ NSARM, Charlotte Spicer, "History," 7.

[^46]:    ${ }^{79}$ Stanley T. Spicer, Masters of Sail, 94, 114; Stanley T. Spicer's personal card records of sailing vessels built around the Bay of Fundy 1820-1920.
    ${ }^{80}$ Spicer private collection, Deed between Daniel Mills of Advocate Harbour and William H. Bigelow and William H. Payzant merchants of Spencer's Island dated August 22 1873; NSARM, Shipping Register, Parrsboro, N. S.. (RG 12, A1, Vol. 70), on microfilm PANS 14569.
    ${ }^{81}$ Stanley T. Spicer, Sails of Fundy, 93, 101; NSARM, Windsor Shipping Register; NSARM, Parrsboro Shipping Register. The half-model Amasa Loomer crafted for this vessel survives in a private collection. ${ }^{82}$ Stanley T. Spicer, Sails of Fundy, 91, 111; NSARM, Windsor Shipping Register; NSARM, Parrsboro Shipping Register.
    ${ }^{83}$ Stanley T. Spicer, Saga of the Mary Celeste, 11.

[^47]:    ${ }^{84}$ Ibid., Payzant and Bigelow "lost" the Calcutta when they went bankrupt in 1879. The Bigelow Society website, retrieved from http://bigelowsociety.com/rod8/wil8c114.htm, 21 February 2008 , indicates that Henry's first wife who was also Robert's sister, died in 1869. Six years later Henry married Barbara H. Suthergreen.
    ${ }^{85}$ Art Gallery of Nova Scotia, Tall Ships Gallery website, retrieved from http://www.atlantictallships.ca/gallery.php?action=display\&OutputType=Ships\&ID=299\&lang=e, 22 January, 2007; Stanley T. Spicer, Saga of the Mary Celeste, 11. After twenty years under command by various Spicer brothers, the J. F. Whitney was sold to Norwegians in 1892, and a decade later to Russian interests. The Servia was sold to Norwegian interests in August 1897.
    ${ }^{86}$ Spicer private collection, "Deed issued under the Insolvancy Act of 1875 And Amending Acts by B. W. Baker, Assignee in the matter of William H. Payzant and William H. Bigelow," 20 February 1879; NSARM, Windsor Shipping Register.
    ${ }^{87}$ The Canada Year Book, 1886, 851, retrieved from http://www66.statcan.gc.ca/cdm4/document.php?CISOROOT=/eng\&CISOPTR=18040\&REC=15, 30 August 2008, provides the following estimates for business failures between 1877 and $1886: 1877, \$ 25.5 \mathrm{~m}$; $1878, \$ 23.9 \mathrm{~m} ; 1879, \$ 29.3 \mathrm{~m} ; 1880, \$ 8.0 \mathrm{~m} ; 1881, \$ 5.6 \mathrm{~m} ; 1882, \$ 8.6 \mathrm{~m} ; 1883, \$ 15.9 \mathrm{~m} ; 1884, \$ 18.9 \mathrm{~m} ; 1885$, \$8.7m; 1886, \$10.4m

[^48]:    ${ }^{88}$ The Bigelow Society website, retrieved from http://bigelowsociety.com/rod8/joh8c152.htm, 21 February 2008.
    ${ }^{89}$ Ibid.; Stanley T. Spicer, Maritimers Ashore \& Afloat, Volume 2, 77. A list of known vessels designed and/or built by the Bigelows compiled by Stanley Spicer appears to incorporate a combination of registry and family records; Private collection, Letter to Spencer's Island Company from John Emerson Bigelow dated March $27^{\text {th }} 1880$, indicates that John was running store operations by then. Ebernezer's religious conversion prompted him to divest himself of material goods in 1881. Dalhousie University Special Collections and Archives, Bigelow Family Collection, MS 492 I-4: Ebernezer divided his assets between his children "as best he could," and sons John Emerson and Gideon took over the family business, renaming it E. Bigelow Sons \& Co.
    ${ }_{90}$ Bigelow Society website, retrieved from http://bigelowsociety.com/rod8/joh8c152.htm, 21 February, 2008; Province of Nova Scotia, Nova Scotia Historical Vital Statistics, retrieved from https://www.novascotiagenealogy.com/ItemView.aspx?ImageFile=1951-1445\&Event=death\&ID=347496, 16 April, 2008. John and Hannah Anne's marriage may have followed a not uncommon process during the period whereby a ceremony and celebration with family and friends occurred prior to the marriage's official entry in the record books when the official registrar returned to the region.
    ${ }^{91}$ Stanley T. Spicer, Maritimers ashore \& Afloat, Volume 2, 77, 80.
    ${ }^{92}$ Province of Nova Scotia, Nova Scotia Historical Vital Statistics, retrieved from https://www.novascotiagenealogy.com/ItemView.aspx?ImageFile=1826-49\&Event=marriage\&ID=85736, 16 April, 2008.

[^49]:    ${ }^{93}$ Stanley T. Spicer, Maritimers Ashore \& Afloat, Volume 2, 80-81. Spicer also lists two vessels, launched in 1874 and 1876, as being built by E. Bigelow and Sons. See, also, NSARM, Windsor Shipping Register, and Parrsboro Shipping Register.
    ${ }^{94} 1881$ Canadian Census Household Record, retrieved from http://www.familysearch.org/Eng/search/frameset search.asp?PAGE=ancestorsearchresults.asp, 19 January 2008; https://www.novascotiagenealogy.com/ItemView.aspx?ImageFile=126785\& Event $=$ death\&ID $=212938$, 19 January 2008.
    ${ }^{95}$ The Nova Scotia Eatons website, maintained by Keith Barry, retrieved from http://www.nseaton.org/Eaton/getperson.php?personID=12721\&tree=nseaton, 23 April, 2008, records Nathan's father Levi as "a conveyance, a good businessman, and for many years a Magistrate." The entry for Nathan appears to intermingle the biographies of Nathan's father and father-in-law. It reports that Nathan's "father ... was a merchant and shipbuilder, and the son at the age of twenty-one went to Spencer's Island, Cumberland County, to manage his father's business there." The confusion probably arises because Levi entered into a business partnership with Ebenezer Bigelow and John Northup in 1845 which established "a store of Goods and [built] a Boston Packet which proved profitable in those days." The partnership was dissolved in 1848 due to irreconcilable business differences brought about by Ebenezer's religious conversion: Dalhousie University Special Collections and Archives, Bigelow Family, typed copy of Ebenezer Bigelow's "history of my life," MS 492 I-4.
    ${ }_{96}$ The Bigelow Society website, retrieved from http://bigelowsociety.com/rod9/min91521.htm, 15 April 2008. See, also, 1881 Canadian Census Household Record, retrieved from http://www.familysearch.org/Eng/search/frameset search.asp?PAGE=ancestorsearchresults.asp, 19 January 2008.

[^50]:    ${ }^{97}$ Ancestry.com, 1870 and 1880 United States Federal Census; Maritime History Archive, Ships and Seafarers of Atlantic Canada (St. John's, NL: Memorial University of Newfoundland, 1998); New York Times, "Mark Shaw Dies in Hotel Lobby," 26 August 1907. The 1870 Federal Census records a Mark Shaw, born about 1837, occupation "Ship Chandler," born in Nova Scotia, whose elder child Emma, aged 8, was born in Nova Scotia. The ACSP Ships and Seafarers database records a Mark Shaw as initial owner of twelve vessels built in Maritime Canada between 1860 and 1884. For the two constructed in 1860 and 1864, Mark Shaw is reported as a Mariner resident in Kings County, Nova Scotia. For all but one of the other ten constructed from 1869, Mark Shaw is reported as a Merchant in New York City. The exception is for one vessel registered at Saint John, New Brunswick in 1879, which includes a Mark Shaw, Merchant of Portland, New Brunswick amongst its owners. The New York Times obituary reports that "[u]p to the time of his retirement last year he had been engaged for fifty years in the shipping business with offices in Front Street, and his name was known all over the world."
    ${ }^{98}$ New York Times, "Business Troubles," 7 July 1897, reports that Mark Shaw and William Simpson established their business "thirty-three years ago."
    ${ }^{99}$ Ibid; 16 September 1905; 1 January 1864 to 31 December 1890, passim. The 16 September 1905 report records a petition in bankruptcy filed against the Shaw Company noting: "The company was engaged in sailmaking, ship chandlery, and exporting machinery, \&c., to Japan and the Orient. The business was established in March, 1886, as the New York Sailmaking Company, which had a capital stock of $\$ 50,000$, and the name was changed to the Shaw Company on Sept. $15^{\text {th }} 1902$, with Mark Shaw as President." A review of the papers from 1864 to 1894 shows 23 days on which "Simpson \& Shaw" are recorded as shipping agents for vessels entering or leaving the Port of New York.

[^51]:    ${ }^{100}$ Whitney Research Group, "Family, Nathaniel Ruggles (1782-1873)." Retrieved from http://wiki.whitneygen.org/wrg/index.php/Family:Whitney,_Nathaniel Ruggles (1782-1873), 6 June, 2008, last modified 4 February, 2008. Birthdate for Johnathan Stone Whitney incorrectly transcribed as 20 April 1822; Watertown Records, Comprising the Fourth Book of Town proceedings and the Second Book of Births, Marriages, and Deaths, from 1738 to 1822 (Watertown, MA: Historical Society, 1903), 203: as transcribed by Whitney Research Group, retrieved from http://wiki.whitneygen.org/wrg/index.php/Archive:Watertown\%2C_Massachusetts\%2C Vital Records, 7 June 2008, which records vital statistics sequentially including Jonathan Stone Whitney, "s. Nathaniel Ruggles Whitney, Junr., and wife Sally, b. 20 Apr 1811," and James Frothingham Whitney, "s. Nathaniel Ruggles Whitney, Junr., and wife Sally, b. 2 Mar 1813."
    ${ }^{101}$ For a broader discussion of the Whitney and Stone families, see, Dede L. Mousseau, "Anne Whitney: Her life, her art, and her relationship with Adeline Manning," (MA Thesis: California State University, 1992): 1-4, 9-18. The subject of this thesis, Anne Whitney, become a leading American sculptor, poet and supporter of social causes, and was the youngest of Nathaniel Ruggles and Sarah Whitney's children.
    ${ }^{102}$ Mousseau, "Anne Whitney," 1-2, 11, 14. Mousseau quotes from a letter written by Anne Whitney to her friend Maria Chapman, and contained in Payne's "Whitney Papers," 14: "[A]ll the earlier part of my life our family circumstances, I should say, were extremely middlin'- 5 boys and 2 girls to be fed and educated-but we were educated after a fashion. ... Never was anything wanting in the kind and wise intentions of our parents. My father always used the language and had the bearing of a man of education. My mother had a strong character and will, and was very bright-a lover of books and of good judgmentbut was not founded in the classics. They both valued education, but only one of my brothers was educated at Harvard, and even that, I imagine, it was not easy for my father to do, though I was never told so."

[^52]:    ${ }^{103}$ Mousseau, "Anne Whitney," 11; Whitney Research Group, "Whitney, Nathaniel Ruggles"; Whitney Research Group, Whitney Whistler, 5 (1) (1985), records that "[b]efore Anne was twelve [1835], the family moved to East Cambridge where her father was a 'Justice of the Peace' from 1839 to 1859. In [1860] they returned to the area of Watertown that became Belmont."
    ${ }^{104}$ Elizabeth Rogers Payne, "Unprocessed Papers of Anne Whitney," 3P, Archives (A84-5), (Wellesley College: Wellesley, Massachusetts, 1964): 14, as cited by Mousseau, "Anne Whitney," 4.
    ${ }^{105}$ Payne, "Unprocessed Papers of Anne Whitney," passim.
    ${ }^{106}$ Mousseau, "Anne Whitney," 13, 17, 32, 34; Whitney Research Group, "Whitney, Nathaniel Ruggles." Mousseau records that Alexander Whitney was educated at Harvard where he became involved in the New England Anti-Slavery Society and that Anne shared his passion. The Whitney Research Group records an entry in the Cambridge Vital records: "Alexander [Whitney died] May 13, 1842, a. 32y. Consumption. C.R.10."
    ${ }^{107}$ Robert Ward and the Whitney Research Group, Family: Whitney, James Frothingham (1813-1886), 2007. Retrieved from http://wiki.whitneygen.org/wrg/index.php/Family:Whitney, James Frothingham (1813-1886), 6 June, 2008. Records James' fourth child and first son, Charles Sumner Whitney, born 6 March 1858. Mousseau, "Anne Whitney," 63-65. Anne's sketch-model for a bronze submitted to the Sumner Memorial Competition in 1875 initially won the competition until it was discovered that the candidate was a woman when the commission was given to Thomas Bell instead. A quarter of a century later, Anne completed the bronze anyway and it was erected near Harvard Law School in 1902.

[^53]:    ${ }^{108}$ New York Times, 18 December, 1886, "Obituary." The Obituary states that James "came to New York when a lad, became a clerk in a shipping house, and worked his way up to be the head of one of the most prosperous firms in the city." See, also, Harcourt Gardiner, "J F Whitney and Company of New York: Shipping Agents and Ship Brokers Approximately 1810 to about 1980," an unpublished compilation of notes from undocumented sources, dated 2007, 3. Gardiner suggests that Jonathan was involved with a shipping business in Boston before relocating to New York City in 1840 and establishing the J. S. Whitney Company.
    ${ }^{109}$ Ancestry.com, United States Federal Census 1850, retrieved from http://search. ancestry.com, 26 April 2008. Jonathan's wife Margaret Manning was born in Canada but it is unclear whether there was a shipping-related connection in their union.
    ${ }^{110}$ New York Times, 18 December 1886, "Obituary"; Harcourt Gardiner, "JF Whitney and Company," 3; Ancestry.com, USA Census 1850; Whitney Research Group, "Whitney, James Frothingham." The Census for the $6^{\text {th }}$ Ward of Kings County, New York, records James's occupation as "merchant" suggesting that he may have been a partner in the business by then. If so, such a change in position may have occurred about the time of his 1846 marriage to New York born Mary Henderson Eskildson. See, also, Richard C. McKay, South Street: A Maritime History of New York (New York: G. P. Putnam's Sons, 1934), 432, "Complete List of Merchants and Commercial Houses, etc., Located on South Street in the Year 1852," records the occupation of J. S. Whitney and Company, and J. F. Whitney, located at 4 South Street, as "commission merchant."
    ${ }^{111}$ New York Times, 1852, passim. The New York Times was first published on 18 September 1851. Electronically searchable scans of the papers are available through Proquest Historical Newspapers The New York Times 1851 to 2004 and this database has been used for the thesis. The first entry for "J. S. Whitney \& Co." is on 26 September 1851.
    ${ }^{112}$ New York Times, 18 September 1851 to 17 September 1861, passim. There were 401 days during this period when "J. S. Whitney" was mentioned in the Marine Intelligence section of the newspaper.

[^54]:    ${ }^{113}$ Ibid. See for example, New York Times, 2 June 1852: Vessels clearing port the previous day included: "Brig Mexico (Br.) Morris, St John, N.B. J. S. Whitney \& Co", "Brig Savant, (Br.), Morris, St. John, NB. J. S. Whitney \& Co", "Schr. En Avant, (Br.) Dunbar, Unidion, J. S. Whitney \& Co."
    ${ }_{114}$ Ancestry.com, USA Census 1860, retrieved 6 June, 2008. The record for James Whitney appears inaccurate in a number of respects such as his age and occupation (listed as " 43 " and "Bur Stone Yard," respectively), but the entries for family members match. It is possible that the occupation entered reflects James's sense of humour. In the census, the value of James's real estate is recorded as being $\$ 6,000$, his personal estate as $\$ 800$ and the family had two servant girls.
    ${ }^{115}$ Whitney Research Group, "Whitney, Nathaniel Ruggles." The Whitney Research Group reports that Jonathan Stone Whitney's died on 29 March, 1861.
    ${ }^{116}$ New York Times, 1861 to 1881 , passim. New York Times reports Marine Intelligence about "J. S. Whitney \& Co" on eight days in 1861, and only three further times in later years (twice in 1863 and once in 1867). The first entry for "J. F. Whitney \& Co." was on 19 September 1861: "Arrived ... Brig Tyro, (Br.,) Holmes, Lingan, C. B. [Cape Breton] 10 ds., with coal to J. F. Whitney \& Co." Over the decade to 19 September 1871, the J. F. Whitney \& Company business is mentioned in the Marine Intelligence section on 241 days (thrice under its old name), and in the decade thereafter on 374 days.
    ${ }^{117}$ New York Times, 29 March 1861 to 29 March 1865, passim. The newspaper reports Marine Intelligence about J. F. Whitney and Company on 13 days in each of the years ended 29 March 1862 and 1863, on 30 days in the year to 29 March 1864 and on 33 days in the year to 29 March 1865. The American Civil War officially ended 11 days later.

[^55]:    ${ }^{118}$ Frederick William Wallace, Wooden Ships and Iron Men: The Story of the Square-Rigged Merchant Marine of British North America, the Ships, their Builders and Owners, and the Men who Sailed Them (London and Toronto: Hodder and Stoughton, 1924), 200: "The [barque] J. F. Whitney was named after the head of a New York shipping firm largely interested in 'up the Bay' vessels, and a great many of her eastward passages were made with barrel petroleum cargoes to British and continental ports."
    ${ }^{119}$ Wallace, Wooden Ships and Iron Men, 127. Wallace made this observation about ships registered at Yarmouth but it appears likely that it could also be applied to many vessels built around the Bay of Fundy and operating out of New York. For example, the cargoes carried by the barque $J$. F. Whitney between 1874 and 1880 while George Spicer was at the helm are consistent with this profile. See, Stanley Spicer, Captain from Fundy, 110-114.
    ${ }^{\frac{1}{120}}$ NSARM, Parrsboro Shipping Registry; Stanley T. Spicer, Sails of Fundy, 100-101. Construction of the 701 ton J. F. Whitney was completed by Thomas E. Bigelow at Spencer's Island in late 1872. The vessel's initial registered owners, led by William Henry Payzant and Henry Bigelow who jointly held 20 shares, included physician and politician Charles Tupper (8 shares), Isaac Spicer, Robert Wesley Spicer, Jacob Spicer and the vessel's master, George Spicer, (all with four shares each). The 229 ton schooner Henry Buschman was constructed by William Moore at Advocate.

[^56]:    ${ }^{121}$ It is unlikely that any significant relationship developed before George Spicer took command of his first vessel, a circumstance that occurred shortly after he gained his master mariner's certificate in Liverpool, England, in October 1868: Stanley T. Spicer, Captain From Fundy, 26.
    ${ }^{122}$ New York Times, 28 September, 1870, records that George Spicer departed New York the previous day at the helm of the Globe bound for Liverpool under orders from J. F. Whitney and Company.
    ${ }_{123}$ NSARM, Spencer's Island Company fonds, 1997-174/015, letter from Charles Dixon to Dewis Spicer 10 January 1887, suggests George Spicer and James Whitney developed a close relationship over their sixteen or more years' association. The Antwerp-based shipbroker wrote: "We were very sorry to learn of Mr Whitney's death. He went off very suddenly Your brother George will no doubt miss him very much."
    ${ }^{124}$ Wallace, Wooden Ships and Iron Men, 282. See also, Wallace, In the Wake of the Wind-Ships: Notes, Records and Biographies Pertaining to the Square-rigged Merchant Marine of British North America (Toronto: The Musson Book Company, 1927), 252: "The firm of J. F. Whitney \& Co., New York, was interested in most of the Spencer's Island craft and several of the ships were named after members of the firm."
    ${ }^{125}$ Ibid.

[^57]:    ${ }^{126}$ New York Times, 1 January to 31 December, 1880, passim.
    ${ }^{127}$ Ibid.
    ${ }^{128}$ Other New York shipping houses also arranged cargoes for Nova Scotian registered vessels but it appears unlikely that any other single United States firm had such a large orientation to Nova Scotian vessels. One such firm, Simpson and Shaw, of which Mark Shaw was a principal, arranged at least one cargo for the brig Charles A. Hoard of Yarmouth: New York Times 21 July 1880.
    ${ }^{129}$ Keith Matthews, "The Canadian Deep Sea Merchant Marine and the American Export Trade, 18501890," in David Alexander and Rosemary Ommer, eds., Volumes Not Values: Canadian Sailing Ships and World Trades (St. John's: Memorial University of Newfoundland, 1979), 216-217, 225.

[^58]:    ${ }^{130}$ ACSP's detailed port database includes Windsor, but the only published articles referring to it in any detail are, Rosemary E. Ommer, "'Composed of all Nationalities': The Crews of Windsor Vessels, 18621899," in Rosemary Ommer and Gerald Panting, eds., Working Men Who Got Wet (St. John's: Memorial University of Newfoundland, 1980), 191-227; "The decline of the eastem Canadian shipping industry, 1880-1895," in Journal of Transport History, 5 (1) (1984): 25-44. There is no published work on vessel ownership at the port. Beyond the latter article, which is discussed within this thesis, ACSP's general view about the Windsor's deviation from the norm is summarized by Eric W. Sager, Lewis R. Fischer and Rosemary Ommer, "Landward and Seaward Opportunities in Canada's Age of Sail," in Lewis R. Fischer and Eric W. Sager, eds., Merchant Shipping and Economic Development in Atlantic Canada (St. John's: Memorial University of Newfoundland, 1982): 27: "By the 1880s all shipowning centres were experiencing a rapid shift of capital and output away from the maritime sector. Only in Windsor did investment in shipping continue, and this phenomenon remains unexplained."
    ${ }^{131}$ British Merchant Shipping Act, 1894 which largely replicated the Merchant Shipping Act 1854.

[^59]:    ${ }^{132}$ For a more detailed discussion of merchant shipping legislation in various countries in the nineteenth century see: Edward Louis de Hart, "The Ownership of Merchant Vessels," Journal of the Society of Comparative Legislation, New Series, 4 (1) (1902): 34-44; Benjamin Constant, The Law Relating to the Mortgage of Ships (London: Syren \& Shipping, Limited, 1920).
    ${ }^{133}$ Edward Louis de Hart, "The Ownership of Merchant Vessels," Journal of the Society of Comparative Legislation, New Series, 4 (1) (1902): 38.
    ${ }^{134}$ Ibid.
    ${ }^{135}$ Eric W. Sager and Lewis R. Fischer, Shipping and Shipbuilding in Atlantic Canada. (Ottawa: Canadian Historical Association, 1986), 10-12.
    ${ }^{136}$ Constant, The Law Relating to the Mortgage of Ships, 25.
    ${ }^{137}$ Ibid., 25.

[^60]:    ${ }^{138}$ Ibid., 25-27.
    ${ }^{139}$ Ibid., 34-35. After payment of just claims by lien holders, registered mortgage holders ranked in order of mortgage registration date and before unsecured creditors and unregistered mortgage holders.
    ${ }^{140}$ The ports investigated were Halifax, Yarmouth, Windsor, Pictou and Cape Breton in Nova Scotia, Charlottetown in Prince Edward Island, Saint John and Miramichi, New Brunswick and St. John's, Newfoundland. Nova Scotia did not become part of Canada until confederation in 1867, with Prince Edward Island joining in 1873 and Newfoundland in 1949, but the term "Atlantic Canada" is retrospectively applied here as a convenient label.

[^61]:    ${ }^{141}$ The results can, however, guide investigation because British Empire citizens resident in foreign countries might act as conduits for foreign investment. For example, Windsor and Pictou show United States-resident registration rates over one percent, suggesting these ports may be worthy of further investigation.

[^62]:    ${ }^{142}$ Sager with Panting, Maritime Capital, 91, 122-126; NSARM, Windsor Shipping Registry. Sager with Panting, Graph 5.18 "New Investment in Shipping (Gross Tonnage Added to Registries in Eight Major Ports) by Tonnage Class, 1869-1914," on page 126 clearly shows the 1874 peak in new investment. The peak tonnage years at the main Maritime Canadian ports in the Atlantic Canada Shipping Project database were 1874 (Halifax), 1875 (Charlottetown), 1877 (Saint John, NB), 1878 (Yarmouth), and 1891 (Windsor). The first newly registered vessel to appear in Windsor Registry Volume 308 is on 3 November 1873. The sample data in this thesis is for the decade beginning on this date.
    ${ }^{143}$ Sager with Panting, Maritime Capital, 120-127. Other Bay of Fundy port registries not included in the Atlantic Canada Shipping Project database, with the year the registry opened are: Digby (1849), Windsor (1849), Parrsborough/Parrsboro (1850), Annapolis (1858), Amherst (1874), Maitland (1874), Weymouth (1874), Londonderry (1875), Truro (1875). In addition, Sager with Panting notes on page 245: "[V]essels were also registered in St. Martins [New Brunswick]."
    ${ }^{144}$ Maritime History Archive, "Ships and Seafarers of Atlantic Canada," (St. John's, NL: Memorial University of Newfoundland, 1998), CD Disk.
    ${ }^{145}$ Maritime History Archive, "Ships and Seafarers of Atlantic Canada," (St. John's: Memorial University of Newfoundland, 1998), CD Disk; NSARM, Windsor Shipping Registry; Ancestry.com, online database transcription of Brooklyn, Directory, 1889-1890 (Brooklyn, NY: Lain \& Co., 1890), retrieved 5 May 2008; Ancestry.com 1900 United States Federal Census, retrieved 15 May 2008; New York Times, 1 January to 31 December 1880, 14 March 1895. The Maritime History Archive based on the original Windsor Registry lists record the occupation of both Bertaux and Shaw as "Merchant." The 1900 Federal Census records that Charles Bertaux (incorrectly transcribed as "Bertamp"), was born in Nova Scotia, immigrated to the United

[^63]:    States with his family in 1870, and remained a Canadian citizen. The Brooklyn Directory and New York Times articles indicate that Bertaux was a shipbroker and commission merchant.
    ${ }^{146}$ Maritime History Archive, "Ships and Seafarers of Atlantic Canada"; NSARM, Parrsboro Shipping Registry.
    ${ }^{147}$ New York Times, 3 November 1873 to 1883, passim. "C. W. Bertaux \& Co." is listed in the Marine Intelligence section as agent for vessels on thirty-nine days.
    ${ }^{148}$ Maritime History Archive, "Ships and Seafarers of Atlantic Canada"; NSARM, Windsor Shipping Registry; NSARM, Parrsboro Shipping Registry. Mark Shaw held shares in ten vessels and part of his holdings in eight were subject to mortgages registered in favour of United States citizens. Charles Bertaux held shares in eight vessels, none of which were mortgaged to United States citizens.
    149 Ibid. Most of J. F. Whitney and Company and its associates' shareholdings in ships built at Spencer's Island took the form of non-interest bearing mortgages. Some of the mortgages American citizens held over interests Shaw held in at least four vessels were registered as non-interest bearing or no interest specified.

[^64]:    ${ }^{150}$ Sager with Panting, Maritime Capital, 91-92; Richard Rice, "Shipbuilding in British North America, 1787-1890: An Introductory Study," (Liverpool: University of Liverpool, 1977), 117-135. Rice shows that in the first half of the nineteenth-century, Nova Scotia-side Bay of Fundy shipbuilding was mostly smaller vessels to ferry timber cargoes to Saint John for the building of deep-water vessels there and the shipping of timber to Britain but later construction of larger square-rigged vessels was primarily intended for Nova Scotian owners' long term accounts. Julian Gwyn considers that the decline in the British markets for ships and timber through the middle decades of the nineteenth century were key reasons for retention and alternate trades at poor profits. See for example: Julian Gwynn, Excessive Expectations: Maritime Commerce and the Economic Development of Nova Scotia, 1740-1870 (Montreal and Kingston: McGillQueen's University Press, 1998), 99-101, 210-214.

[^65]:    ${ }^{1}$ Keith Matthews, "The Shipping Industry of Atlantic Canada: Themes and Problems," in Ships and Shipbuilding in the North Atlantic Region (St. John's: Maritime History Group, 1978), 9-11. For a discussion on shipbuilding in British North America, see Richard Rice, "Shipbuilding in British America, 1787-1890: An Introductory Study," (Phd thesis, University of Liverpool, 1977). For a discussion of the issues surrounding the decline of Atlantic Canada's merchant marine, see Eric W. Sager with Gerald Panting, Maritime Capital: The Shipping Industry in Atlantic Canada, 1820 to 1914 (Montreal and Kingston: McGill-Queen's University Press, 1990), 88-127. Sager with Panting's analysis does not extend to Quebec but registered tonnage in that province peaked in 1876.
    ${ }^{2}$ Sager with Panting, Maritime Capital, 127, 89. The total registered tonnage in ACSP's database declined more rapidly than for Maritime Canada as a whole. Sager with Panting attribute this to the greater proportion of large deep-water vessels within their sample. However, this does not explain Windsor's divergence from the norm. Gwendolyn Vaughan Shand, and others, note that the gypsum trade played a part in the region's more sustained performance, but this does not appear to be the primary driving factor. See, for example, Shand, Historic Hants County (Windsor: G. V. Shand, 1979).
    ${ }^{3}$ Ibid., 158.

[^66]:    ${ }^{4}$ Sager with Panting, Maritime Capital, 125; Stanley T. Spicer, Captain from Fundy: The Life and Times of George D. Spicer, Master of Square-Rigged Windjammers (Hantsport: Lancelot Press, 1988), 55-57.
    ${ }^{5}$ If the builders of Windsor-registered vessels took a similar approach to that of the Spencer's Island Company (SIC), share proceeds only covered the cost of the hull and spars; the outfit cost being financed separately through short-term operating loans from outfitters and commission agents. Spicer private collection, Letters to SIC, 1880 to 1885 (hereafter referred to as "SPC Letters"), passim., reveal that British and Canadian merchants sought to outfit SIC's vessels and were prepared to provide one hundred percent financing, at appropriate interest rates, which was to be repaid from the profits of early voyages. In SIC's case, New York-based J. F. Whitney and Company usually took over the financing responsibility after vessel launch.

[^67]:    ${ }^{6}$ Sager with Panting, Maritime Capital, 89-92. For example, total tonnage on the Halifax register peaked in 1873, and on the Saint John register in 1877. Saint John's maritime activities may also have been disrupted following a major fire in the city in 1877.
    ${ }^{7}$ Ibid. As Gwendolyn Vaughan Shand reports in Historic Hants County (Windsor: G. V. Shand, 1979), the gypsum trade also bolstered the demand for vessels, many of which were registered at Windsor and some other ports in the region.

[^68]:    ${ }^{8}$ Newfoundland's ports also performed differently. Rosemary Ommer, "The decline of the eastern Canadian shipping industry, 1880-1895," in Journal of Transport History 5 (1) (1984): 42, notes that Newfoundland "was not involved in the large bulk carrying trades of the late nineteenth century, and can be shown to be of a completely different nature from the other shipping industries."
    ${ }^{9}$ See, for example, Gerry Panting, "Cradle of Enterprise: Yarmouth, Nova Scotia, 1840-1889," in Lewis R. Fischer and Eric W. Sager, eds., The Enterprising Canadians: Entrepreneurs and Economic Development in Eastern Canada, 1820-1914 (St. John's: Memorial University of Newfoundland, 1979): 253-271; Gerry Panting, "Shipping Investment in the Urban Centres of Nova Scotia," 123-136, Lewis R. Fischer and Gerry Panting, "Harbour and metropolis: The Shipping Industry of Saint John and the Urban Economy, 18201914," 137-155, Lewis R. Fischer, Eric W. Sager and Rosemary E. Ommer, "The Shipping Industry and Regional Economic Development, 1871-1891: Saint John as a Case Study," 33-53, all in Lewis R. Fischer and Eric W. Sager, eds., Merchant Shipping and Economic Development in Atlantic Canada (St. John's: Memorial University of Newfoundland, 1982).
    ${ }^{10}$ Sager with Panting, Maritime Capital, 150.

[^69]:    ${ }^{11}$ Freight rates and returns on vessel ownership are discussed in Chapter Four.
    ${ }^{12}$ See for example, Sager with Panting, Maritime Capital, Chapter 6 and Appendix C, 128-146 and 216221, respectively; Fischer, Sager and Ommer, "Saint John as a Case Study," 33-53; Charles K. Harley, "Ocean Freight Rates and Productivity, 1740-1913: The Primacy of Mechanical Invention Reaffirmed," in The Journal of Economic History 48 (4) (1988): 851-876; Yrjö Kaukiainen, 'The Development of Gross Freights and Profitability in International Sailing Ship Trades, 1860-1914: A Finnish Sample," in Lewis R. Fischer and Helge W. Nordvik, eds. Shipping and Trade, 1750-1950: Essays in International Maritime Economic History (Pontefract: Lofthouse Publications, 1990): 119-145.
    ${ }^{13}$ Sager with Panting, Maritime Capital, 127; Helge W. Nordvik, "The Shipping Industries of the Scandinavian Countries, 1850-1914," in Change and Adaptation in Maritime History: The North Atlantic Fleets in the Nineteenth Century (St. Johns: Memorial University of Newfoundland), 1985.
    ${ }^{14}$ Michael D. Bordo and Angela Redish, "Is Deflation Depressing? Evidence from the Classical Gold Standard," NBER Working Paper Series, (Cambridge, MA: National Bureau of Economic Research, 2003), retrieved from http://www.nber.org/papers/w9250. After the depression of the 1930s became referred to as "the Great Depression," the earlier one was renamed "the Long Depression." The Long Depression extended from the early 1870s into the mid 1890s.

[^70]:    ${ }^{15}$ Ibid., 2-4. Real incomes fell "[i]n eleven of the 20 years from 1875 to 1895 ." The general price level fell about ten percent between 1871 and 1896.
    ${ }^{16}$ Gamblin private collection, The Parrsboro Leader, "Spencers Island, 25 April, 1901; Super Seniors, History of Advocate \& Area, (Hantsport: Lancelot Press, 1994), 46; "Nova Scotia Archives and Records Management (NSARM), Charlotte Kerr Spicer, "Spencer's Island and History of Our Spicer ancestors Who First Settled Here," March 1965, MG100, Vol. 231, \#15, 7-8: "The first store in Spencer's Island was in what we know as the old cook house. It was run by Daniel Cox and his brother-in-law, Payzant, both from Canning, King's county, Nova Scotia." Charlotte Spicer also reported that "The first teacher in Spencer's Island was Daniel Cox. He had school upstairs in his store. Then followed Miss Holmes and Mr. Roberts. Miss Laura Cox was the first teacher in the school house built on the bar [in] 1854."
    ${ }^{17}$ The Parrsboro Leader, "Spencers Island"; NSARM, Charlotte Spicer, "History," 7-8: "After some years Mr. Cox went back to Canning and W. H. Bigelow from Kingsport came over and joined Payzant in the store business." NSARM, Shipping Registry, Parrsboro. The records show Daniel Cox, merchant of Cornwallis, William Henry Payzant, merchant of Cornwallis, and William Henry Bigelow, merchant of Parrsboro as joint holders of twelve shares in the Amazon, constructed in 1861, suggesting that by this time their other business interests at Spencer's Island may have been shared.
    ${ }^{18}$ NSARM, Charlotte Spicer, "History," 8; The Parrsboro Leader, "Spencers Island."; NSARM, Shipping Register, Parrsboro, RG 12, A1, Vol. 70, on microfilm PANS 14569: Payzant and Bigelow jointly held

[^71]:    twenty shares and Cox none in the $J . F$. Whitney. Construction began in 1871, suggesting Cox no longer had any interest in business activities at Spencer's Island at this time.
    ${ }^{19}$ Stanley T. Spicer, Sails of Fundy: The Schooners and Square-riggers of the Parrsboro Shore (Hantsport: Lancelot Press, 1984), 90, 94, 101, 114; NSARM, Parrsboro Shipping Register; Stanley T. Spicer, Saga of the Mary Celeste and A Compilation of Sailing Vessels Built at Spencer's Island (Hantsport: Lancelot Press, 1989, reprinted 1991), 11.
    ${ }^{20}$ Stanley T. Spicer, Sails of Fundy, 90, 93, 111; NSARM, Shipping Register, Windsor, RG 12, A1, Vol. 308, on microfilm PANS 14596.
    ${ }^{21}$ Stanley T. Spicer, Sails of Fundy, 90, 93, 111; NSARM, Windsor Shipping Register.
    ${ }^{22}$ NSARM, Windsor Shipping Register.
    ${ }^{23}$ Ibid. This mortgage was registered against some of the shares Payzant and Bigelow held in existing vessels. When the two men were adjudged bankrupt, Troop and Dimock acted to protect their investment. However, for unknown reasons - perhaps the adjacency to bankruptcy - the Calcutta shares against which this mortgage was secured appear in the list of assets seized by Official Assignee Baker. They appear to be included in the later arrangement with David Dickie on behalf of general creditors.

[^72]:    ${ }^{24}$ Ibid. Mortgage over eighteen shares in Calcutta issued to "George J. Troop of Halifax, NS Merchant and William Dimock of Windsor in Hants County Merchant joint mortgagees ... Mortgage dated 16 Jany 1879 for securing $\$ 14,000+$ Int. At $7 / \%$." Payzant and Bigelow had previously sold two shares to Johnson Spicer and four shares to Samuel Williams, in October 1877 and May 1878 respectively. Spicer private collection and Amherst Land and Deeds Registry Office, Book 10. Writ Issued under Insolvent Act of 1875 and Amending Acts, at Amherst, dated February 20, 1879, "In the matter of William H. Payzant, and William H. Bigelow, traders under the style and form of Payzant and Bigelow Spencers Island County of Cumberland Insolvents."
    ${ }^{25}$ Amherst Land and Deeds Registry Office, Book 10. Writ Issued under Insolvent Act of 1875 and Amending Acts, at Amherst, dated February 20, 1879. The store at Spencer's Island and Henry Bigelow's house, which stood on the same land title, were included in the assets Baker seized.
    ${ }^{26}$ Spicer private collection; Amherst Land and Deeds Registry Office, Book 10. Writ Issued under Insolvent Act of 1875 and Amending Acts, at Amherst, dated February 20, 1879, Schedule of Creditors. Debts listed in the schedule of creditors totalled $\$ 42,159.18$ and included, J. F. Whitney \& Co., the fourth largest creditor, owed \$2,729.48; Sydney Blenkhorn, blacksmith, \$847.49; Amasa Loomer, master builder, \$814.64

[^73]:    ${ }^{27}$ Ibid; Michael D. Bordo and Angela Redish, "Is Deflation Depressing?" Bank of Canada, Inflation Calculator, retrieved from http://www.bankofcanada.ca/en/rates/inflation calc.html, 15 March 2008.
    ${ }^{28}$ Amherst Land and Deeds Registry Office, Parrsboro Book of Deeds, 1880, Book 10. The official assignees intent is inferred from his agreement with D. M. Dickie. For an overview of typical construction costs, see Grant private collection, "Construction costs of the Ship Stephen D. Horton - Spencer's Island April 1881 to April $4^{\text {th }} 1883$," photocopies of original accounting journals in Conrad Byers private collection. The cost of outfitting the 1,626 ton Stephen D. Horton made up $\$ 16,072$ of its $\$ 63,349$ total cost during a period when the general price level was about eight percent lower than in 1879 , and there would have been other expenses to meet in addition to those for outfitting. Michael D. Bordo and Angela Redish, "Is Deflation Depressing?" Figure 2a.

[^74]:    ${ }^{29}$ NSARM, Windsor Shipping Register. The Athlon, remained subject to a $\$ 5,000$ mortgage to Barry Baker, as official assignee, and another to George J. Troop for $\$ 4,000$ at seven per cent interest. ${ }^{30}$ Amherst Land and Deeds Registry Office, Parrsboro Book of Deeds, 1880, Book 10, Page 640, No. 532, 3 August, 1880. The assets sold to Dickie included all the assets of the store business and William Bigelow's house which was on the same piece of property, as well as livestock and shares in vessels. The total assets were valued at $\$ 30,545.31$, comprising: "Goods in Store, $\$ 2,000.00$; Store, $\$ 200.00$; Cook House, $\$ 100.00$; Munroe House, $\$ 300.00$; W. H. Bigelow House, $\$ 200.00$; 20 shares in J. F. Whitney, $\$ 3,375.00 ; 18$ shares in Calcutta, $\$ 10,000$; Remittances due from J. F. Whitney, $\$ 750.00$; Ship [Athlon] on the stocks, cashbook balance $\$ 10,182.99$ but valued by official assignee at $\$ 3,500.00$; Book debts considered good, $\$ 6947.82$; Notes on hand considered good, $\$ 411.95$; Notes on hand considered doubtful, $\$ 58.38$; Book debts considered doubtful, $\$ 2,142.16$; Stock in ship owners account, $\$ 100.00$; 990 acres of land, $\$ 300.00$; Horse and cow, $\$ 100.00$; Wagon and truck, $\$ 60.00$." Dickie agreed to pay creditors 15.5 cents in the dollar on 3 November 1880, 15.5 cents on 3 May 1881, 15.5 cents on 3 November 1881, and 15.5 cents on 3 May 1882.
    ${ }^{31}$ Amherst Land Records and Deeds Office, Parrsboro Book of Deeds, Book 8, Deeds 385, 589.
    ${ }^{32}$ Grant private collection, SIC Journal entry December 20 1881, showing the transfer of William Bigelow's and E. Bigelow Sons \& Co.'s interests in the store to the SIC.
    ${ }^{33}$ SPC Letters, passim. See, for example, letter from John Bigelow to "Spencers Island Comp," on 27 March 1880. This entity may have been involved in the construction of E. J. Spicer.
    ${ }^{34}$ The Parrsboro Leader, "Spencers Island," 25 April, 1901.

[^75]:    ${ }^{35}$ Ibid., The article notes: "We have to thank Capt. [Johnson] Spicer for the valuable information he kindly gave us about his two brothers at present at sea."
    ${ }^{36}$ NSARM, Parrsboro Shipping Register.
    ${ }^{37}$ Dalhousie University Library and Archives, Halifax. Bigelow family. MS-4-92.
    ${ }^{38}$ NSARM, Parrsboro Shipping Register shows that ten shares Captain George held in the E. J. Spicer were subject to interest-free mortgages in favour of American citizens from New York, namely James Stafford, sailmaker, Stephen Horton, pilot, and jointly Charles M. Holder and William H. Smith, shipwrights. This arrangement may have been similar to the front established for later Spencer's Island Company-built vessels whereby the actual ownership of the underlying shares in these British-registered foreign vessels vested with Americans. Similarly, Mark Shaw, a merchant from Nova Scotia who resided in New York was a large shareholder in most Spencer's Island Company vessels, and some of the shares he held in such vessels were on behalf of American citizens.
    ${ }^{39}$ SPC Letters, passim., indicate that John Bigelow was managing the E. J. Spicer and other vessels in the first quarter of 1880 . See, for example, letter to "Spencers Island Comp" from John Bigelow on 27 March 1880: "Dear Sirs, ... The Boxwood leaves in the morning for St John via Parrsboro and Spencers Island we send by her 2 Bar apples 1 Bar oatmeal 1 Bar oil the apples a[t] 1.50 ... Capt Williams acct "E J Spicer" was not correct tell him to send it back and have a corrected acct I think I will have Capt Geo to divide his inward freight [on his final voyage aboard the JF Whitney] before he leaves. has Doct Tupper answered you yet."
    ${ }^{40}$ SPC Letters, passim.

[^76]:    ${ }^{41}$ Stanley T. Spicer, Maritimers Ashore \& Afloat, Volume 2: Interesting People, Places and Events Related to the Bay of Fundy and its Rivers (Hantsport: Lancelot Press, 1994), 84. See also, SPC Letters. A letter John Emerson Bigelow wrote to the company on, 4 February 1882, suggests that E. Bigelow Sons \& Co. managed the accounts for the construction of the E. J. Spicer: John Bigelow wrote: "W H Eaton + Nathan Eaton can you please tell me the Amt of goods we had from D M Dickie or those that went into the 'E. J. Spicer' he has some 425.00 charged says WHB [Henry Bigelow] sent him the statement I cannot tell as Nathan took the Acct Book over with him please let me know have been most of two days trying to settle with him ... I am sending Capt Williams statement of a share E. J. Spicer he can pay you there [at the SIC company store at Spencer's Island]." On 22 February 1882, he wrote: "[I] ought to have $£ 1000$ to divide next voyage will send her accounts next week for benefit of owners at Spencer's Island." NSARM, Parrsboro Shipping Register shows John E. Bigelow was appointed managing owner for the vessel.
    ${ }^{42}$ Family Search.org, Canada 1881 Census Household Records, retrieved from http://www.familysearch.org/Eng/Search/frameset search.asp?page=census/search census.asp, 12 February 2008. Data collected for Spencer's Island household families in District 22, Sub-district K, Advocate Harbour, Cumberland County.
    ${ }^{43}$ SPC Letters, passim.

[^77]:    ${ }^{44}$ Family Search.org, Canada 1881 Census Household Records, retrieved from http://www.familysearch.org/Eng/Search/frameset search.asp?page=census/search census.asp, 12 February 2008. Data collected for Spencer's Island household families in District 22, Sub-district K, Advocate Harbour, Cumberland County.

[^78]:    ${ }^{45}$ This is consistent with The Parrsboro Leader article "Spencers Island," 25 April 1901 and SPC Letters. Johnson Spicer was a major source for the article, which states that SIC was formed in 1880 and the first vessel it built was E. J. Spicer while a letter from John Emerson Bigelow in Canning, dated 27 March 1880, is addressed to "Spencers Island Comp[an]y." Planning for the E. J. Spicer probably occurred in the second half of 1878 while the struggling merchants were fully engaged with the Athlon, and winter logging for the vessel's frame probably occurred during the winter when Payzant and Bigelow were declared bankrupt.
    ${ }^{46}$ Virtually all of the vessels the Spicer brothers and Captain Samuel Williams commanded were registered at either Windsor or Parrsboro in Nova Scotia, Canada. British Empire and United States Regulations treated such vessels as British.
    ${ }^{47}$ Stanley Spicer, Captain from Fundy, 26, 109; The Parrsboro Leader, "Spencers Island," 25 April, 1901. George D. Spicer gained his first command in 1868 and Johnson Spicer in 1872. Mystic Seaport, American Lloyds Register of American and Foreign Shipping 1864, retrieved from http://www.mysticseaport.org/library/initiative/SPSearch.cfm?ID=636517, 17 March, 2008, suggests Samuel Williams a captain by 1863 . Dewis Spicer, George and Johnson's brother, took command of his first vessel in late 1879 shortly after his marriage to Emma Baker Parsons: NSARM, Spicer family fonds, 1997-174/007 No. 1; Gamblin private collection, Dewis Spicer and Emma Parsons marriage certificate; NSARM, Spicer Family fonds, 1997-174/013 No. 67, Emma Spicer's Diary 1880. It appears likely that negotiations between various parties leading to the formation of the Spencer's Island Company simply did not include Dewis because he had an insufficient track record, or accumulated capital at the time.
    ${ }^{48}$ Eric W. Sager, Seafaring Labour: The Merchant Marine of Atlantic Canada, 1820-1914 (Montreal and Kingston: McGill-Queen's University Press, 1989), 79-84.
    ${ }^{49}$ NSARM, Spencer's Island Company records, 1997-174/015.
    ${ }^{50}$ NSARM, Windsor Shipping Register: James F. Whitney had mortgages over the 165 ton Windsorregistered Wild Horse prior to 1870; See, also, Frederick William Wallace, Wooden Ships and Iron Men:

[^79]:    The Story of the Square-rigged Merchant Marine of British North America. The Ships, Their Builders and Owners, and the Men who Sailed Them (London and Toronto: Hodder and Stoughton, 1924), 200. ${ }^{51}$ Wallace, Wooden Ships and Iron Men: "The discovery of oil in Pennsylvania gave a great impetus to the ocean going trade in the early 'seventies, and a host of B.N.A. vessels freighted petroleum across to Europe. Guano from the Chinchas afforded many a cargo to Bluenose ships in addition to the lumber, grain, and cotton eastward, and the coal and iron westward."
    ${ }_{52}$ Ancestry.com, 1870 United States Federal Census, retrieved from http://search.ancestry.com, 11 April, 2008.
    ${ }^{53}$ NSARM, Windsor Shipping Register. See for example, Mark Shaw's following stakes in vessels: 345 ton Canada, built 1867, Shaw's 32 shares security for 13 February 1874 mortgage of $\$ 6,000$ at $7 \%$ per annum to James Stafford and William B. Wood; 509 ton Rozella Smith, built 1873, 20 of Shaw's 44 shares security for 13 February 1874 mortgage of $\$ 8,000$ at $7 \%$ per annum to James Stafford; 480 ton Belle, built 1874,8 of Shaw's 16 shares security for 24 August 1874 mortgage of $\$ 3,200$ at $7 \%$ per annum to Charles Holder and William H. Smith, the other 8 shares security for 24 August 1874 mortgage of $\$ 3,200$ at $7 \%$ per annum to Henry Buschman and James Stafford; 567 ton Emma L. Shaw, built 1867, 16 of Shaw's 52 shares security for 4 November 1874 mortgage of $\$ 7,000$ at $7 \%$ per annum to James Stafford and other mortgages to various other New York businessmen.
    ${ }^{54}$ Mortgages without a specified interest rate appear most likely to be guises for actual direct investment, but correspondence to SIC personnel indicates that some interest-bearing mortgages also masked shareholdings by United States citizens.

[^80]:    ${ }^{55}$ Wallace, Wooden Ships and Iron Men, 282. See also, NSARM, Windsor Shipping Register. It is possible that J. F. Whitney and Company had more interests in Minas Basin vessels than revealed in the shipping registers. For example, Frederick William Wallace, Record of Canadian Shipping (Toronto: The Musson Book Company, 1929), 136, reports that J. F. Whitney and Company had an ownership interest in the 1,385 ton barque J. E. Graham (Official Number 83204) completed in 1881 at Newport, Hants County by J. A. Harvie, although the registry files do contain any mortgages registered in the company's favour. ${ }^{56}$ NSARM, Parrsboro Shipping Register. The J. F. Whitney was completed at Spencer's Island in 1872, and the Henry Buschman, built by William Moore, was launched from Advocate in 1873. The official registry does not show any registered mortgages in favour of Whitney or Bushman over shares in either vessel. In contrast, the E. J. Spicer records mortgages over ten of the twenty five shares held by George D. Spicer as follows: James Stafford, Sailmaker of New York for $\$ 2400$ and no interest secured over four shares; Stephen Horton, Pilot of New York for $\$ 1200$ and no interest secured over two shares; Charles Holder and William H. Smith both Shipwrights of New York jointly for $\$ 2400$ and no interest secured over four shares; In addition, there was a mortgage in favour of James F . Whitney for $\$ 8000$ with interest at $6 \%$ per annum secured over 12 of Mark Shaw's 16 shares. The non-interest bearing nature of the mortgages held over George's shares may indicate actual effective ownership of the underlying shares by the mortgagees, a situation that certainly occurred in the case of SIC-built vessels.
    ${ }^{57}$ NSARM, Parrsboro Shipping Register. The E. J. Spicer was completed in October 1880, suggesting that related work began in the early-1879 winter. The strong association between New York merchants and Spencer's Island mariners also appears in the contributions made to the fundraising effort for Spencer's Island's first church in July 1881: Spencer's Island United Church Women, Spencer's Island Union

[^81]:    ${ }^{60}$ SPC Letters. Nathan Eaton's handwritten copy of his letter to Messrs Chapman and Newcomb, dated August 25, 1885. Nathan reports: "The names of our firm are as follows: Capt George D Spicer, Capt Johnson Spicer, Messrs Robert W Spicer, Amasa Loomer, William H Bigelow, Nathan W Eaton, Mrs A. A. Williams At the time we endorsed this E.B.Son \& Co Note Messrs J. E. Bigelow + Gideon Bigelow were members of the S.I. Coy instead of N. W. Eaton as above. N. W. Eaton then acting for Coy under power of Attorney, on Nov $12^{\text {th }} 84$ N. W. Eaton bought out J.E. + G.Bs interest in the S.I. Coy."
    ${ }^{61}$ Addie E. Loomer-Shepard, The Descendants of Stephen Loomer of New London, Connecticut, comprising the first to and including the ninth generation (Allison, Iowa: Addie E. Loomer-Shepard, 1961), entry 1429121.

[^82]:    ${ }^{62}$ SPC Letters, photocopy of a typed transcript of a letter written from G. E. Bigelow and J. Bigelow to Captain J. S. Williams, December 3, 1881. Typed by Stanley T. Spicer from an original letter held by his mother I. T. Spicer prior to 1975.
    ${ }^{63}$ Grant private collection, Spencer's Island Company Ledger, page dated December 20, 1881.
    ${ }^{64}$ Ibid. E. Bigelow Sons and Co. was credited for $\$ 1,355$ and Henry Bigelow $\$ 1,161$. The page shows that Henry Bigelow was allocated $\$ 400$ for one year's wages and shop rental, and that the store's profit of $\$ 523$ was split equally between E. Bigelow Sons and Co. and William Henry Bigelow. The fact that Henry received a rent for the shop suggests he had regained ownership of it. Other communications suggest that the post-merger SIC owned the store, so this requires further investigation. See, also, SPC Letters. From 29 December 1881 on, there are frequent letters from J. E. Bigelow addressed to "Spencers Island Company."

[^83]:    ${ }^{65}$ SPC Letters. Letter from Johnson Spicer, in Norfolk, to Spencer's Island Company dated 8 March 1882. Johnson wrote: "George wrote me to day that you wanted our opinion about steam mill as labour was going to be high. I have no idea what it will cost to build a mill ... but if the company think it best to have a mill I am agreed. And will try and do my part. I am going to send you some cash before I leave here. How much will it cost each member of the company to build a mill ... I am writing George so he will give you his opinion about mill." On 19 July 1882, George wrote: I do not know much about the mill business but Capt Williams thought it should of been built. I expect there is to little room for it."
    ${ }^{66}$ Ibid. Letter from Johnson Spicer, in Norfolk, to Spencer's Island Company dated 8 March 1882. Johnson wrote: "I received the agreement of Spencer's Island Company which I signed and sent it to New York for George to sign and send it to you."
    ${ }^{67}$ See for example, Eric W. Sager and Lewis R. Fischer, Shipping and Shipbuilding in Atlantic Canada, 1820-1914 (Ottawa: Canadian Historical Association, 1986), 4-6. In a discussion of the beginnings of the industry in Maritime Canada, Sager and Fischer state that in the eighteenth and early nineteenth-centuries: "Shipbuilding in the Maritimes was a small-scale activity and, outside the naval dockyards, shipbuilding and ship repairs were scarcely an industry at all. By the end of the American War of Independence in 1783, there were only about three hundred vessels owned in the Maritimes. ... Shipbuilding began as a small preindustrial craft, employing a few men in each shipyard, and it evolved into a major industry in which a single shipyard might employ a hundred men."
    ${ }^{68}$ For a detailed discussion on shipbuilding methods, see Stanley T. Spicer, Masters of Sail: The Era of Square-rigged Vessels in the Maritime Provinces (Toronto: Ryerson Press, 1968), Chapter 6, "Building a Wooden Vessel," 115-159.

[^84]:    ${ }^{69}$ SPC Letters, passim. For example, some of the wood used in vessel construction was sourced from Virginia in the United States of America.
    ${ }^{70}$ Further research is required to determine whether this was a common approach around the Bay of Fundy. ${ }^{71}$ SPC Letters, Letter from T. \& E. Kenny, 23 May 1885. T. \& E. Kenny notes that: "No price is named for the shares, but we suppose she is being built on the bills as is your custom."

[^85]:    ${ }^{72}$ Graeme Wynn, Timber Colony: A Historical Geography of Early Nineteenth Century New Brunswick (Toronto: University of Toronto Press, 1981), 115, 119.
    ${ }^{73}$ NSARM, Windsor and Parrsboro Shipping Registries, passim. For example, John E. Bigelow's occupation was various listed as "Merchant," or "Shipbuilder,' and Nathan Eaton's was entered on different occasions as, "Clerk," "Accountant," "Merchant," and "Shipbuilder." The 173 ton schooner Evolution, built in 1889, and Glooscap, in 1891, represent two comparative points. For the former vessel, SIC is recorded as the builder, and amongst the shareholders is Amasa Loomer, "master builder", and Nathan Eaton, "shipbuilder." SIC and Amasa are similarly entered for Glooscap's initial registration, whereas Nathan is listed as "merchant" on the shareholder list.
    ${ }^{74}$ Library and Archives Canada, McAlpine's Nova Scotia Directory, 1868-69, 489. Retrieved from http://www.collectionscanada.gc.ca/canadiandirectories/index-e.html, 20 January 2007; Art Gallery of Nova Scotia, "Ships Gallery," retrieved from http://www.atlantictallships.ca, 12 February 2007. See record for 365 ton brig Albert Dewis, registered in 1865, and 701 ton barque J. F. Whitney, 1872.

[^86]:    ${ }^{71}$ See, for example, Steven Maynard, "Between Farm and Factory: The Productive Household and the Capitalist Transformation of the Maritime Countryside, Hopewell, Nova Scotia, 1869-1890," and Daniel Simpson, "Dependency and Rural Industry: Inverness, Nova Scotia, 1899-1910," both in Daniel Simpson, ed., Contested Countryside: Rural Workers and Modern Society in Atlantic Canada, 1880-1950 (Fredericton: Acadiensis Press, 1994): 70-104, 105-149, respectively; Leonore Davidoff and Catherine Hall, Family Fortunes: Men and Women of the English Middle Class, 1780-1850 (London and New York: Hutchinson Education, 1988, Revised Routledge, 2002), 245-260. Increasing occupational specialization came with urbanisation and industrialization, but business pluralism remained prevalent in rural Nova Scotia throughout the mid- to late-nineteenth-century.
    ${ }_{79}$ General Electric Company is one twenty-first-century example of this business structure.
    ${ }^{79}$ SPC Letters, Letters from T. \& E. Kenny and Company, passim.

[^87]:    ${ }^{80}$ See, for example, Ibid. Alternatively this could be viewed as a discount on purchase of shares in vessels rather than a profit on sale of goods. See, for example, T. \& E. Kenny's letter dated 23 May 1885: "We have no spare cash just now, but we will take the 2 shares provided you take dry goods from us in payment. In the prosecution of your business you have to buy large quantities of dry goods - we have a warehouse full of them + we can and we will sell them as cheap as anyone else - so the trade ought to be mutually advantageous. The outlook for shipping is not very tempting just now, but we have had pleasant business relations with your people + the Whitney + we are willing to join you in this venture on the terms just stated."
    ${ }^{81}$ Grant private collection, Construction Journals for Stephen D. Horton, Charles S. Whitney, George T. Hay and Glooscap, photocopies of which are in Conrad Byers private collection. In the case of the Stephen D. Horton, the outfit costs represented twenty-five per cent of total costs. The average for four deep-sea vessels SIC built was twenty-two percent.
    ${ }^{82}$ SPC Letters, passim.

[^88]:    ${ }^{83}$ Rice, "Shipbuilding in British North America"; Richard Rice, "Measuring British Dominance of Shipbuilding in the 'Maritimes,' 1787-1890, in Ships and Shipbuilding in the North Atlantic Region, eds. Keith Matthews and Gerald Panting.(St. John's: Maritime History Group, Memorial University of Newfoundland, 1978): 123-129
    ${ }^{84}$ Rice, "British Dominance of Shipbuilding," 127.
    ${ }^{85}$ Ibid., 127. Nova Scotia's sustained shipbuilding activity appears to belie any argument that the region's shipowners were forced to increase fleet size by a decline in British demand for new vessels.
    ${ }^{86}$ Sager with Panting, Maritime Capital. See, especially, Chapter Five: "Rise and Decline of the Ocean Fleets," 88-127.
    ${ }^{87}$ Ibid., 124-127.
    ${ }^{88}$ Rosemary Ommer discusses Windsor in her insightful article, "The decline of the eastern Canadian shipping industry," but Windsor and the upper Bay of Fundy are not the article's primary focus.

[^89]:    ${ }^{89}$ See, for example, Eric W. Sager, "The Port of St. John's, Newfoundland, 1840-1889: A Preliminary Analysis": 19-39, Lewis R. Fisher, "The Port of Prince Edward Island, 1840-1889: A Preliminary Analysis": 41-69, David Alexander, "The Port of Yarmouth, Nova Scotia, 1840-1889": 77-103, all in Ships and Shipbuilding in the North Atlantic Region, eds. Keith Matthews and Gerald Panting (St. John's: The Maritime History Group, 1978); Gerry Panting, "Cradle of Enterprise: Yarmouth, Nova Scotia, 18401889": 253-271, in The Enterprising Canadians: Entrepreneurs and Economic Development in Eastern Canada, 1820-1914 (St. John's: Maritime History Group, 1979); Fischer, Sager and Ommer, "Saint John as a Case Study," 33-53, Panting, "Shipping Investment in the Urban centres of Nova Scotia," 123-136, Fischer and Panting, "Harbour and Metropolis," 137-155. For an earlier period analysis of merchants and shipping as it related to Halifax, see Sutherland, David A, "Halifax Merchants and the Pursuit of Development, 1783-1850," Canadian Historical Review, LIX, No. 1 (March 1978): 1-17.
    ${ }^{90}$ Rosemary E. Ommer, "'Composed of All Nationalities': The Crews of Windsor Vessels, 1862-1899," in Working Men Who Got Wet, eds. Rosemary Ommer and Gerald Panting (St. John's: Maritime History Group, 1980): 191-227.
    ${ }^{91}$ See, for example, Stanley T. Spicer, Masters of Sail, 53.

[^90]:    ${ }^{92}$ Rice, "Shipbuilding in British America," 116, 129, Rice reports that nearly a quarter of all vessels of over 500 tons built in Nova Scotia in 1865 and together totalling 56,800 registered tons, were built in the upper Bay of Fundy. About 58 percent of New Brunswick's 59,400 tons of newly registered vessels the same year was built at Saint John or nearby shipyards. In comparison, 12,700 tons along Nova Scotia's South Shore, and 6,600 tons along its North Shore.
    ${ }^{93}$ Sager with Panting, Maritime Capital, 245, reports Nova Scotia-side Upper Bay of Fundy register opening dates as follows: Windsor (1849), Parrsboro (1850), Amherst (1874), Maitland (1874) and Newport at Truro (1875). In addition, some vessels were probably registered at Annapolis, after it opened in 1858.
    ${ }^{94}$ Ibid., 89-92. Sager with Panting reports that the peak tonnage for eight major ports occurred in 1879 and its estimated tonnage "usually represented over 80 per cent of all tonnage on registry in the [Atlantic Canadian] region ... [but] since our eight-port sample does not include several of the new registries that existed during the last half of the century, our sample if anything underestimates the growth of ocean-going tonnage up to the 1870 s."
    ${ }^{95}$ Ibid. Sager with Panting notes that "the pace of the decline" in registered tonnage for the sample set "is slightly faster" than the official numbers for Atlantic Canada as a whole, which they suggest was because the other registries comprised a higher proportion of small tonnage vessels "which did not disappear so rapidly, and perhaps also the official figures may overestimate tonnage on registry." In this thesis, I propose an alternative hypothesis for the Upper Bay of Fundy ports.

[^91]:    ${ }^{96}$ Gwendoyn Vaughan Shand, Historic Hants County (Windsor: Gwendoyln Vaughan Shand, 1979), 42. ${ }^{97}$ Ibid., 44.
    ${ }^{98}$ Ibid., 41, 45.
    ${ }^{99}$ Stanley Spicer, Masters of Sail, 59. Spicer records that Bennett Smith and a relative formed a partnership in about 1835 to build the " 300 ton brig, Matchless," which was launched in 1838. Although this foray was not a financial success, Bennett Smith went on to become "one of the wealthiest men in the province with a fortune estimated at nearly one and quarter million dollars." See, also, Shand, Historic Hants County, 41-58. Shand's detailed review of Windsor's growth as a shipbuilding centre reports on the inter-relationships between Windsor and the nearby settlements of Hantsport and Newport Landing where two other leading builders, Ezra Churchill and Nicholas, respectively, operated highly productive yards.
    ${ }^{100}$ Sager with Panting, Maritime Capital, 91; Keith Matthews, "The Shipping Industry of Atlantic Canada: Themes and Problems," in Ships and Shipbuilding in the North Atlantic Region, eds. Keith Matthews and Gerald Panting (St. John's: Maritime History Group, 1978). By 1874, the Windsor registry was the third largest registry in Nova Scotia, behind Yarmouth and Halifax, and it accounted for 16.7 percent of the registered tonnage in the province. However, it was still dwarfed by the largest port in Maritime Canada, Saint John, New Brunswick, at just under 280,000 tons.

[^92]:    ${ }^{101}$ Data compiled from Maritime History Archive, Ships and Seafarers of Atlantic Canada, cd disk (St. John's: Memorial University of Newfoundland, 1998).

[^93]:    ${ }^{102}$ Sager, Seafaring Labour, 81, points to the role of the shipmaster as "employer and employee, wageearner and business agent, working man and trustee of capital in his industry." Many managing owners probably encouraged masters to invest in the vessels they captained as a means to more closely align their mutual financial interests.

[^94]:    ${ }^{103}$ Data sourced from Grant private collection, Construction Journals for Stephen D. Horton, Charles S. Whitney, George T. Hay and Glooscap, photocopies held in Conrad Byers private collection.
    ${ }^{104}$ Ibid. For the Stephen D. Horton, the various percentages were as follows: Timber account, 17 percent; Iron bills 20 percent; Labour, including iron work, 38 percent; Outfit 25 percent.
    ${ }^{105}$ SPC Letters, $1880-1883$ passim. The figures in the schematic are rounded to the nearest few hundred dollars to aid clarity. The content of other SIC construction journals is consistent with the conclusions drawn herein for the Stephen D. Horton suggesting the specific conclusions may be extended to a broader arena. In addition, the analysis of ownership for Windsor-registered vessels between 1873 and 1883 indicates that further investigation may uncover a wider applicability to non-SIC vessels built around Minas Basin during the 1880s.
    ${ }^{106}$ Grant private collection, Shipbuilding Journals, photocopies in Conrad Byers private collection. The construction journal for the Stephen D. Horton records a net construction cost of $\$ 63,349$, which has been rounded to $\$ 63,500$ in Diagram 3.2.
    ${ }^{107}$ Ibid. The actual outfit costs in the case of the Stephen D. Horton amounted to $\$ 16,071$ but $\$ 17,773$ was posted to the outfit account, perhaps reflecting either the fact that the outfitter, in this case Black and Company, also provided other goods and materials which were simply bundled up together into the account, or else a desire by the shipbuilder to make the acquisition of shares in the vessel more palatable to the prospective owners. Either way, this was an accounting "sleight of hand," as the costs would be incurred by the owners in the form of lower dividends on early voyages. In Stephen D. Horton's case, J. F. Whitney and Company took responsibility for the Outfit account from Black and Company in exchange for a 1.5 percent discount for payment of Black's bill in cash.

[^95]:    J. F. Whitney and Company took responsibility for the Outfit Account from Black and Company in exchange for a discount for payment of Black and Company's bill in cash.
    ${ }^{108}$ NSARM, Parrsboro Shipping Register; SPC Letters, 1883, passim.

[^96]:    ${ }^{109}$ Amherst Land and Deeds Registry, Probate Records for George Spicer, Johnson Spicer, Samuel Williams and Antoinette Jenks. It is evident from SIC shareholders' investment portfolios that they did invest in other land-based enterprises including shares in manufacturing concerns elsewhere in Atlantic Canada but such investments only became significant after shipping returns declined markedly from those prevailing in the 1880s.

[^97]:    ${ }^{110}$ SPC Letters, letter from John Bigelow, dated 8 February 1882; from "I Matheson \& Co, Engineers \& Boiler Makers" of New Glasgow, dated $23^{\text {rd }}$ March, 1882; from John Bigelow, dated 28 January 1882. John Bigelow reported in his letter of 8 February, that he had "paid him [D. M. Dickie] 495.00 for Interest in shed, Blacksmith shop [and contents] ... as per statement ... presume the Company should own them and not charged to each vessel when building; Letter of 23 March: "The writer saw Mr. John Bigelow of Canning last week and at his request try to submit to you the following offer. I will give you an engine + boiler with all the fittings complete and deliver the same ... [for \$1600?]. These engines are made specially to suit the requirements of a mill." Letter from John Bigelow, 18 December, 1882: "don't leave anything undone to get grant on wharf."
    ${ }^{111}$ Grant private collection, Shipbuilding Journals, photocopies in Conrad Byers private collection. Following the launching of the E. J. Spicer on 17 November, 1880, the accounts show the construction of Stephen D. Horton from March 1882 to its launching on 4 August 1883; Charles S. Whitney from October 1883 to 14 July 1885; and George T. Hay from September 1885 to 20 August, 1887. There is, then, a nearly two year gap during which the Spencer's Island Company built two smaller vessels, the Germ between December 1887 and 8 August 1888 and the Evolution from April 1889 until its launch on 14 September that year. Glooscap's construction accounts span June 1889 to its launch on 7 August 1891. The 380 ton

[^98]:    Exception was built between March and October 1892. Stanley T. Spicer, Saga of the Mary Celeste also reports that SIC built the 509 ton schooner Perfection, launched on 24 October, 1893.
    ${ }^{112}$ SPC Letters, Letters to Spencer's Island Company 1882 to 1883, passim.

[^99]:    ${ }^{113}$ Ibid. For example, on 27 September 1882, T. and E. Kenny's London office submitted their bid: "Enclosed ... quotation for outfit for new ship ... glad if you decide to give an London house your order ... We will supply you on 6 mth terms wait till ship [earns] the money." The SIC eventually accepted the bid for outfitting from John Black and Company of Glasgow. For the blacksmithing job, which was worth well in excess of $\$ 1,000$, Canning's Sidney Blenkhorn sought the aid of his brother-in-law in an unsuccessful attempt to win the S. D. Horton job which J. A. P. Bordon won. In a letter to the SIC, John Emerson Bigelow wrote: "Sidney Blenkhorn wants job Ironing the ship will do it for $31 / 2$ cts per [?] 60 cts per cut for Bolting will trade one half probably a good deal more but wants two shares of ship if possibly can manage it I asked him what he would do it for by the ton says 1.10 have you closed with Borden yet will it not be risky to give him the job Amasa did not let me know about letting fastening by the job ..." Letter from John Bigelow, dated 4 February 1882: "W H Bigelow + Nathan Eaton can you please tell me the Amt of goods we had from D M Dickie or those that went into the "E. J. Spicer" he has some 425.00 charged ..."
    ${ }^{114}$ Ibid. Letter from John Bigelow, dated 28 January 1882, and from "Blenkhorn \& Sons, Manufacturers of Edge Tools," dated 3 April, 1882: "Relating to the ironwork of new ship you are to build I have been talking to J. E. Bigelow about for some time. In the first place he, JEB, came to me last summer and offered me two (2) shares in her and I to do her ironwork in payment of same. I told him that I wanted a share in her if I could possibly manage it." It appears unlikely that tradesmen would be so intent on gaining shares in the vessels they provided services to unless there was an expectation that these represented a profitable investment option.
    ${ }^{115}$ Grant private collection, Shipbuilding Journals, photocopies in Conrad Byers private collection, included the following payments: Windsor Foundry, $\$ 1,125.75$; J. A. and W. A. Chady were paid $\$ 1,395.68$ for "Iron Knees"; William Robinson was paid \$2,070.01 for the "joinering job"; J A P Bordon $\$ 1,400.00$ for "blacksmithing"; Dartmouth Ropework received $\$ 1,547.41$ for bills categorized as "Iron + other materials in ship," and a further \$1,826.65 for bills related to the ship's outfitting; John Black \& Co. was the primary supplier of iron items in the building of the vessel, $\$ 1090.13$, and was the lead outfitter, a contract worth a further $\$ 9,331.34$. The only other bill above $\$ 1,000$ was from master builder and SIC shareholder Amasa Loomer for $\$ 2,020.50$.

[^100]:    ${ }^{116}$ SPC Letters, 1881-1886. See, for example, letter from Walter Lawson, cashier at Commercial Bank of Windsor, dated 16 December 1882: "We shall be pleased to let you have whatever you may want between 1 Jan + July next, at $6 \%$, on 3 mos notes as usual, the notes to be drawn in favour of any one member of your firm that may be most convenient to you. We shall have to ask you to send us an authenticated copy of your Power of Attorney to place on file."
    ${ }^{117}$ Ibid. See, for example, letters from George Spicer, New York, dated 19 July 1882, and from John Bigelow, dated 22 February 1882. George wrote: "I expect to have about $\$ 5000$ to divide amongst the owners and a great part of that will go in to the [Spencer's Island] Company." John wrote: "... I am sending Capt Williams statement of a share E. J. Spicer he can pay you there for the 550.00 Whitney + Co sent us 275.00 to Dr of Geo D Spicer, 275.00 to Dr of Dewis Spicer ... ought to have $1000 £$ to divide next voyage will send her accounts next week for benefit of owners at Spencers." When J. F. Whitney and Co. acted as ship's agents for a particular voyage, it would receive payment from the cargo owner, deduct payments made to the captain to cover costs and divide the profit according to shareholdings. A cheque for the component relating to Nova Scotian owners was then sent to the managing owner, in this case John Bigelow, who then distributed it to the individuals concerned. A portion was often credited to their respective store accounts or deposited with a local bank, but the master mariners also ran accounts in their major port of call, New York, where these funds were held through J. F. Whitney and Company. See, for example, letter from J. F. Whitney and Company, New York, dated 17 June 1882: "Your draft on us ... for a/c Capt. Johnson Spicer for $\$ 400$ shall have our attention, and will be duly paid on presentation." ${ }^{118}$ Ibid. See, for example, letter from George Spicer, New York, 3 April 1882, from Johnson Spicer, Norfolk, 15 April 1882, and from Samuel Williams, 15 June 1882. George wrote: "Please find enclosed a check for $\$ 450 . \$ 200$ for Johnson Spicer account and $\$ 250$ for my own account. Which please give us credit for the same." Johnson wrote: "I am about starting to sea but though I should write a line or two if you should want any more money before I can get back to this side you can draw on J. F. Whitney + Co on my account for $\$ 400$. or write to them and they will send you their check." Samuel wrote: "Well I think it is time that I had written you a few lines and sent you some money. I will send you a Draft of $\$ 200.00$ hope you are getting along with the new ship and the store is doing good business."

[^101]:    ${ }^{119}$ Ibid. Letter from John Bigelow, dated 28 January 1882.
    ${ }^{120}$ Ibid.
    ${ }^{121} \frac{\text { Ibid. Letters from various New York based investors, } 1882 \text { to } 1883 .}{}$
    ${ }^{122}$ Ibid. For example, letters from George and Johnson Spicer while based in New York, in July and November 1882, respectively. On 19 July 1882, George wrote: "Yours of $13^{\text {th }}$ was to hand and pleased to hear from you that you are doing so good a business, and that you are able to pay the bills as they come due (so far). You say there will be some money wanted in August, and that there has been no money from people abroad taking in the ship I seen Mr J. F. Whitney and he said you could Draw on him for some and

[^102]:    Mr James Stafford for a small amount but not at sight as he is not always at home better make it at about 10 days. he only takes 2 shares he was to take 4 shares. And Draw on Simpson + Shaw for a small amount the same way. So there will be no trouble in making up the $\$ 2000$. I will send some money as soon as the ship is loaded. I expect to have about $\$ 5000$ to divide amongst the owners and a great part of that will go to the Company." George added a post script to the letter, preferring to confirm the position directly: "Do not [draw] on Simpson + Shaw until you hear from me." Five days later, he writes: "I have seen Simpson + Shaw they say to draw on them for $\$ 500$. I will find out from Holder + Smith soon. Mr Stafford wants [to] back out I think. he will only take 2 shares anyway if we could get along with out him it would be as well." Shareholdings still had not been finalized in December 1882, nine months after construction of the $S$. $D$. Horton began: John Emerson Bigelow, Canning, on 11 December 1882 wrote: "In conversation with Capt George Spicer he thought best to let T + E Kenny have the six shares in new ship also the shares that capt Johnson said Charley Whitney and Bushman would take it will make some less for others that would engage in [trade exchange]."
    ${ }^{123}$ Ibid. Letter from J. F. Whitney and Company, 5 January, 1883. As late as January 1883, J. F. Whitney and Company was not privy to a final shareholding structure. That month a company representative wrote: $\ldots$ [W]e are pleased to note that the new ship is making progress towards completion. Capt. Robt. Dewis has funds in our hands for which we shall be pleased to send you our check if he so orders on his arrival at Norfolk ... we take it he will have an interest in the new ship. Capt Johnson Spicer probably will know."
    ${ }^{124}$ Grant private collection, Shipbuilding Journals, photocopies in Conrad Byers private collection.
    ${ }^{125}$ Ibid. New vessel journal for Stephen D. Horton.
    ${ }^{126}$ SPC Letters. Letter from Johnson Spicer, New York, dated 1 December 1882; NSARM, Parrsboro Shipping Register. Johnson writes: I have got Mr. [James F.] Whitney to take 4 shares, his son [Charles Whitney] 4 shares and Mr [Henry] Bushman [sic] 4 shares making 12 shares all together. [Messrs] Simpson + Shaw 4 Holder + Smith 4 Stafford $2+$ [Stephen] Horton 2 which will make 24 shares taken in New York. I have not sayed any thing to them about money. I asked George if I had better get some from them and send down and he said he did not think you wanted any at present." The registry record shows Mark Shaw holding four shares, a non-interest-bearing mortgage to James F. Whitney over fourteen of the eighteen shares registered in George's name, and non-interest-bearing mortgages to James Stafford (two shares), Stephen Horton (two shares), Messrs Holder and Smith (four shares), George T. Hay (one share) and James F. Whitney ( 2 shares) for a total of eleven of the nineteen shares which remained registered in Johnson Spicer's name after he sold four shares to Thomas E Kenny, merchant, of Halifax just after the vessel's completion. Thus, by the time of the launch the New York interest in the vessel appears to have increased by one (George T. Hay's), although James F. Whitney also held a mortgage over Captain Vaughan

[^103]:    Dexter's four shares. J. F. Whitney \& Co. confirmed the nature of the arrangement by letter on 25 July

[^104]:    Mortgage." The fourteen shares referred to are those for James and Charles Whitney, Henry Buschman and James Stafford. Similarly, James Stafford wrote an undated letter which the SIC received on 19 June 1883, stating: "You will please have Capt Spicer or any of the company hold my interest as you are aware I can not do so and send me a mortgage any time after she is paid for and launched."
    ${ }^{127}$ NSARM, Parrsboro Shipping Register.
    ${ }^{128}$ SPC Letters. Letters from J. F. Whitney \& Co. offices, New York, dated March 1882 to September 1883, passim.
    ${ }^{129}$ Ibid. See, for example, letters from George Spicer, at J. F. Whitney \& Co. offices, New York, dated 27 July 1883; from John Bigelow, dated 31 July 1883; and from John Black \& Co., Glasgow, dated 19 April 1883. In April 1883, John Black \& Co. wrote: "...we beg to enclose statement of account showing amount to your debit $£ 2151: 4: 9$ for which we have drawn upon you at 7 mos ..." George wrote: "Messrs J. F. Whitney have decided to pay John Black + Co's bill, which I understand is at $£ 2100$. You will please send a statement of Blacks bill here and notify John Black /c to draw on Messrs J.F Whitney + Co at three days sight they should take $21 / 2 \%$ off the bill the same as I payed in the first place, then their profit will be large. I think you will agree with me that this is much better than leaving the vessel to pay Black as every thing will be done here then. They will pay all bills and Draw all the Freight ..." John Bigelow wrote: "Capt Geo writes that J. F. Whitney + Co will pay Black \& Co bill if we can get a good Discount for cash had better do it as they only charge same interest as Black \& Co."
    ${ }^{130}$ Grant private collection, SIC Shipbuilding Accounts, copies held in Conrad Byers private collection. The $£ 2151: 4: 9$ bill equated to $\mathrm{Cn} \$ 10,469$. Based on a UK pound to Canadian dollar exchange rate of 4.86 which Nathan Eaton used to convert John Black and Co.'s May 1883 bill.
    ${ }^{131}$ Stanley T. Spicer, Captain From Fundy, 87. Stanley Spicer writes: "Captain George Spicer received $\$ 600$ per year as a master when he took command of the Globe in 1868. Ten years later his wages increased

[^105]:    to $\$ 1,000$ annually. Still later they rose to $\$ 1,200$, the most he would ever receive during his years at sea. A major portion of the income of these men came from their investments, largely in shares in the vessels they sailed as well as in other vessels. In the earlier years of his career, dividends received by Captain Spicer from the shares he owned in the J. F. Whitney and E. J. Spicer are summarized by the following examples: 18766 shares $\$ 677.97[;] 18798$ shares [\$]842.01[;] 188128 shares [\$]1,441.60 [;] 188328 shares [\$]2,290.33."

[^106]:    ${ }^{132}$ SPC Letters. See, for example, letters from John Emerson Bigelow, dated $7^{\text {th }}$ and 4th April 1883 respectively: "We send you this small dividend earnings E.J.S. [\$]180.21 [for the 20 of 64 shares held by Spencer's Island shareholders, excluding George Spicer's six shares paid separately] please divide as per acct"; "Capt George says Whitney + Co will forward for Spencers Island owners whatever they divide it will not be large this time small freight have not got the accts yet."
    ${ }^{133}$ SPC Letters. Letters from Johnson Spicer, 6 December 1882, J. F. Whitney \& Co. 5 January 1883, 16 January 1883, 5 February 1883, and from Simpson and Shaw, 5 February 1883: On 6 December 1882, Johnson Spicer wrote from New York: "I wrote you the other day that 12 shares would be taken in J. F. Whitney + Co. office"; On 5 January 1883, J. F. Whitney and Co. wrote: "We now have the pleasure of handing you enclosed our check for $\$ 1000$ for a/c the new ship."; On 5 February 1883, J. F. Whitney and Co. wrote: "Your letter of Feb $1^{\text {st }}$ is received and in accordance with your request we now hand you our check on Bank of America for Seventeen Hundred + Fifty Dollars for account as follows. Jas Stafford \$250 [;] Holder + Smith [\$]500[;] Ourselves [\$]1000; [Totalling \$]1750."; On 5 February 1883, Simpson \& Shaw wrote: "Herewith please find our check Amount \$500.00," in response to SIC's request of 31 January. Holder and Smith, and Simpson and Shaw, were both jointly interested in four shares in the new vessel and Stafford had an interest in two shares.
    ${ }^{134}$ Ibid. John Bigelow, 3 March 1883, wrote: "If you are in a hurry for funds get one of the Comp[an]y to endorse a note also send Lawson [of the Commercial Bank of Windsor] a copy of the Power of Attorney you have [to enable borrowings from the bank.] if I understand you right you could do it without asking the H B Comp[an]y for Original If that will not answer we better have one made out general by one of the [Spencer's Island] Comp[an]y endorsing note makes P of Attorney valid. I would endorse note for you if we can save one per cent better do so. Does Wm Dimock [have an outstanding balance with the SIC] if so make a new note in his favor pay a portion only if short of funds same to Daniel + Boyd. of course the drafts will have to be paid T L De Wolfe \&/co."
    ${ }^{135}$ Ibid. Letters from George Spicer, New York, 22 March 1883, Walter Lawson, Windsor, 7 March 1883; Memorial to Samuel Williams erected on the Spicer family plot at Advocate Harbour graveyard. George wrote: "You spoke about some money being needed this month I will not be in a position to send any untill next month. there will be a great falling off in the amount from last voyage I do not think half as much." Walter Lawson wrote: "In reply I am instructed to say that in our opinion the Company was dissolved by the death of Capt Williams it would therefore be [advisable] for you to form a new co[mpany] if you desired to carry on business ... you would request to give a new power of attorney to Mr Eaton had for you. when this is done we shall be very happy to do business with you ..."

[^107]:    ${ }^{136}$ Ibid. Letters from George Spicer, New York, 22 March 1883, Walter Lawson, Windsor, 7 March 1883. George wrote: "It seems to be a dreadfull thing about Capt. Williams. we have all lost a sincere friend and looking at his death in a business way he will be a great loss. It is only a short time since I seen them off from Liverpool ... I am in hopes Mrs Williams will get over her sad affliction." Walter Lawson's response is included in the preceding footnote.
    ${ }^{137}$ Ibid. Letters from J. F. Whitney and Company, New York, 21 March 1883, George Spicer, New York, 22 March 1883, Johnson Spicer, Windsor, 23 May 1883 and copy of letter by Nathan Eaton to Messrs Chapman and Newcomb, lawyers of Kentville, Nova Scotia on 25 August, 1885; NSARM. Windsor and Parrsboro Shipping Registers.. J. F. Whitney and Co. wrote: "Your draft on us for $\$ 600$ - for a/c new ship has appeared and is duly honoured"; George Spicer wrote: "I see you have Drawn on Messrs J. F. Whitney + Co for $\$ 600$ which I think is all right I heard nothing against it [whilst in their offices.]; The Windsor Shipping Register records that: "Jacob S. Williams dies on $5^{\text {th }}$ February 1883 intestate and Letters of Administration of his Estate and effects were on 3 May 1883 duly granted to Antoinette A Williams and Johnson Spicer by the Court of Probate in the County of Cumberland"; The Parrsboro Registry records Antoinette Williams as an original shareholder in Stephen D. Horton when it was first registered in September 1883 although Johnson Spicer's letter indicates that Antoinette sold two shares in Stephen D. Horton to J. F. Whitney \& Company prior to its completion so it appears that Samuel Williams initially committed to four shares, the same as George and Johnson. Nathan Eaton's letter to Messrs Chapmen and Newcomb of Kentville on 25 August, 1885 records "Mrs A. A. Williams" as a member of the firm. ${ }^{138}$ SPC Letters. Letter from John Bigelow, Canning, to SIC, dated 23 July 1883. John wrote: "[P]lease send me list of owners Capt Geo. S. made up a list here with myself but I think there is some mistake in it. dont T \& E Kenny have more than four shares we talked six and he suggested he was to get that amt when Capt Johnson was here he asked me if Dixon could have two shares from Gideon [Bigelow] and I told him yes all right get Dixon in if possible which would leave us 4 instead of 6 we are not particular only we shall want to insure very shortly and should know how its arranged ... I have written Messrs Whitney + Co and told Capt George to remit all the E. J. S. [E. J. Spicer's] earnings to Spencer's Island that is all coming to Spencers Island Owners and ourselves [in Canning]."

[^108]:    ${ }^{139}$ Ibid. Letter from George Spicer, New York, to SIC dated 22 March 1883: "I see some of Mr Dickie's vessels are to be sold by Auction but I suppose if there is any way to stop the sale he will."
    ${ }^{140}$ Ibid. Letter from J. F. Whitney \& Company, New York, to SIC dated 14 August 1883: "The accounts we have of the ship are all favourable and we have no doubt she is a first class vessel. we shall be pleased to receive accounts of her cost as soon as you can give them to us; Letter from Simpson \& Shaw, New York, to SIC dated 20 October 1883: "We are pleased with the price of the ship + we hope she will prove a good investment"; Letter from Johnson Spicer, Liverpool, to SIC dated 8 November 1883: "I wrote to C. E. Dixon [regarding the shares he held in the Stephen D. Horton in his wife's name] ... he wanted to buy some more of S. D. Horton."
    ${ }^{141}$ Stanley T. Spicer, Captain from Fundy, Schedule of Voyages, 116, indicates that George Spicer was in New York from 26 June to 6 August 1883; The S. D. Horton was launched on 4 August: J. F. Whitney \& Co., New York, wrote to SIC on 7 August 1883: "We are glad to learn by your telegram of the safe launching of the ship on the $4^{\text {th }}$ inst." and T \& E Kenny wrote similarly about the same date.
    ${ }^{142}$ SPC Letters. Letter from George Spicer, New York, to SIC, dated 27 July 1883, in private collection.
    ${ }^{143}$ Grant private collection, Shipbuilding Journals, photocopies in Conrad Byers collection. Construction of the Charles S. Whitney began in October 1883. SPC Letters, letter from John Bigelow to SIC dated 22

[^109]:    October 1883: "... Bordens offer for Ironwork next ship namely 3cts per lb including Blockstraps I dont think its out of the way but I will run the last job. Notice you are getting the keel along better get stern + sternpost also. May have a chance to [get] timber out [for] ship before spring opens and if we get the mill going may put the ship off [launch it] next fall." The final accounts for the Stephen D. Horton were settled in the second half of October 1883. See, for example, letter from J. F. Whitney and Company to SIC dated 16 October 1883, enclosing a cheque for $\$ 1,696.02$ being the balance owing on fourteen shares for J. F. Whitney and Company, one share for George T. Hay and one share for Captain William M. Lockhart. Prior progress payments amounted to $\$ 9,700.00$ making the total cost $\$ 11,396.01$. Simpson and Shaw sent their cheque on 20 October. In addition, J. F. Whitney and Company noted: "[The] balance standing to debit of the ship for outfits +c is $\$ 17,773$."
    ${ }^{144}$ Two months' prior to completion, Nathan Eaton noted the ownership split for the new vessel on the back of a letter dated 14 March 1885, as follows: "J. F. Whitney \& Co., 12; James Stafford, 4; Simpson \& Shaw, 4; Holder \& Smith, 4; S. D. Horton, 2; John \& Gideon Bigelow, 6; Robert Dewis, 4; Mrs A. A. Williams, 5; George D. Spicer, 6, and Johnson Spicer, 4, together making 10; Jacob Spicer, 2; Robert and John N Spicer, 2; Annie Spicer [Daniel's widow], 2; Andrew Spicer, 1; Amasa Loomer, 2; A. McLellan, 2; Sidney Blenkhorn, 2." However, E. Bigelow, Sons \& Co. collapsed a month earlier so alternative investors were sought to take up that company's allocation.
    ${ }^{145}$ NSARM, Spencer's Island Company fonds, passim.
    ${ }^{146}$ SPC Letters. Letter from Office of the Peoples Mills, Guelph, Ontario, dated 10 April 1885: "Markets are now in a wild state of excitement occasioned by the war news ..."
    ${ }^{147}$ Ibid. Letter from J. F. Whitney and Company, to SIC dated 1 April 1885 and enclosing a $\$ 1,000$ progress payment for the partners' interest in the new vessel: "We have plenty of ships and nothing for them to do, but as we are so deeply in the new ship better, perhaps, that she should be finished and put in her element." See also, letter from T \& E Kenny, Halifax, dated 23 May 1885: "You say you expect to launch your new ship of 1700 tons on July $1^{\text {st }}$, that probably 2 shares will be for sale + you ask us if we will take them. No price is named for the shares, but we suppose she is being built on the bills as is your custom - at all events, that can be satisfactorily arranged. We have no spare cash just now, but we will take the 2 shares provided you take dry goods from us in payment... The outlook for shipping is not very tempting just now, but we have had pleasant business relations with your people + the Whitneys + we are willing to join you in this venture on the terms just stated."

[^110]:    ${ }^{148}$ Letter from J. F. Whitney and Company, dated 21 September 1885, discussing instances on the vessels, current and prospective profits on vessel voyages, and the outfit account; Letter from T. \& E. Kenny, Halifax, to SIC, dated 3 September 1885: "We note you have paid off $\$ 2,316.82$ of the outfit account [for the Charles S. Whitney] we are glad to see this \& hope the ship will have some fair freights, so that the rest of it may be soon wiped off."
    ${ }^{149}$ See also, NSARM, Parrsboro Shipping Registry, notes regarding managing owners for Stephen D Horton and Charles S. Whitney; SPC Letters, from T. \& E. Kenny dated 15, 20,26 June 1885, letter and schedule from J. F. Whitney and Company, dated 21 September 1885.
    ${ }^{150}$ See, for example, SPC Letters, from T. \& E. Kenny dated 15, 20, 26 June 1885 , letter and schedule from J. F. Whitney and Company, dated 21 September 1885, and various letters from insurance companies around this time, bidding for the insurance business. Shipping agents usually sent the managing owner the net proceeds of voyage profits after deduction of all disbursements, and their fees. In SIC's case, J.F. Whitney and Company sent only the proportion of profits attributable to Minas Basin shareholders, retaining the balance for direct distribution to New York-based, and other, shareholders such as C. E. Dixon, in Belgium, and T. \& E. Kenny, in Halifax.
    ${ }^{151}$ NSARM, Parrsboro Shipping Registry.

[^111]:    ${ }^{152}$ Ibid. John Bigelow's letter to the Registrar, dated 17 September 1883 states: "Dear sir, The Spencers Island Comp[an]y are asking who is to be Managing owner of the ship "Stephen D. Horton" I supposed it was understood that she would be managed same as "E. J. Spicer" you can put me down till further notice." ${ }^{153}$ Ibid.
    ${ }^{154}$ For a discussion of the relative importance of timber exports in the first half of the century, see, for example, Rice, "Shipbuilding in British North America"; Wynn, Timber Colony; Gwyn, Excessive Expectations; Sager with Panting, Merchant Capital . There may have been both local interest and financing angles in this arrangement. Local timberlot owners wished to export timber while outfitters such as Britain-based Black Brothers outfitted several vessels and agreed to finance the outfit cost in anticipation of an inward voyage.

[^112]:    ${ }^{155}$ SPC Letters. Letter from T. E. DeWolfe \& Co., Halifax, to SIC dated 8 May 1883, and letter from John Bigelow, Canning, 10 May, 1883. DeWolfe \& Co. wrote: "[W]e note you expect to launch your new ship at Spencers Island about the $20^{\text {th }}$ June. We can load her at Spencers Island but dont care to come @ $60 /$-we will give you whatever rates are current at St John when she is ready to load or will give you 35/- to load her at Spencers Island direct to Liverpool"; John Emerson Bigelow wrote: "[W]e had better give them [DeWolfe \& Co.] the refusal of ship I saw B. Young [who owned a major lumber business] at Parrsboro he says that he would load her part at the Island and part West Bay [in Parrsboro port] would't name any rate." ${ }_{156} \mathrm{Ibid}$. Postcard from B. Young \& Co., Parrsboro, to SIC, dated 8 June 1883.
    ${ }^{157}$ Ibid. Compare the communications of 1 June 1883 and 8 June 1883: On 1 June 1883, B. Young \& Son wrote: "We will load here at West Bay or at Spencer Island as may be agreed, and will give you St John rates of Freight Will commence to load a Maitland Barque next week. and when have her finished will want another to commence on." On 8 June 1883, the firm wrote: "[W]e could not say as to ship for August as the market is so dull we think of pulling up out ... would make you an offer when we decide what we are going to do."
    I58 Ibid. Letter from John Bigelow, Canning, 13 June 1883: "I enclose you charter party sent us and copy of TL De Wolfe \& Co letter in reference to charter (we will accept your offer of the new ship at Spencer's Island $60 /$ - enclose charter party which please sign + return ...). Its true I offered them the ship about four weeks ago for $60 /$ - to close her then they would not accept ... please write what I had better do whether to hold on or close at the best I can. Vessels are scarce but the price of Deals are low on the other side."
    ${ }^{159}$ Grant private collection, Shipbuilding Journals, photocopies in Conrad Byers private collection, construction accounts for Stephen D. Horton.
    ${ }^{160}$ Ibid. Letter from William Thomson \& Co., Ship Brokers and Ship Owners, Agents for Allan Line Steamships and Consulate for the German Empire, Saint John, New Brunswick, dated 19 May 1885. Saint

[^113]:    John shipbrokers William Thomson \& Co., offered that it "could place your new ship at 50s [£2.5], Liverpool, and perhaps 51s. 3d. [£2.563]" whereas from Parrsboro's West Bay the best rate was thought to be 47 shillings and sixpence [ $£ 2.375$ ] or about twenty-four percent less than in 1883. Eight days later, William Thompson \& Co replied to SIC's request to have the ship loaded at Spencer's Island stating: "There are four different merchants here who have deals to ship from West Bay and they are writing their people asking if they would deliver cargo at Spencer's Island + what the extra cost would be."
    ${ }^{161}$ Ibid. Letters from William Thomson \& Co., Saint John, dated 6 June and 13 June 1885. The best price the broker could negotiate was 45 shillings [£2.25] from West Bay
    ${ }^{162}$ Ibid. William Thompson \& Co. also noted that the vessel's size, and therefore volume of timber required to fill it, contributed to the difficulty in eliciting bids from loaders in its letter of 17 June 1885: "We wired this morning firm offer for the new ship of 45 s. Liverpool to load at West Bay. Sending our message via Parrsboro. This is the only offer that we have been able to get for the vessel, as she is so large, and there are several other new vessels in the market ... We do not think it is possible to obtain any higher rate, the ship being so large."
    ${ }^{163}$ Ibid. Note referring to telegraph sent by return on back of Western Union Telegraph Company telegraph from William Thomson \& Co. dated 17 June, 1885. William Thomson \& Co.'s reply on 20 June 1885, also included the snippet that: "Our freight market here is very dull, we fixed a new 1850 ton ship for Liverpool, Cardiff or Newport at 45 s., and a steamer at same rate"; Letter from B. Young \& Son, Parrsboro, 6 July 1885: "Will you please inform us what day and hour you expect to launch ship 'Chas. S. Whitney'" on the back of which Nathan Eaton notes a copy of his reply: "We expect to launch CSW on Tuesday $14^{\text {th }}$ July about 2 pm all going well. Will be ready for deals in say two days from that date."
    ${ }^{164}$ Ibid. Letter from George Spicer, Liverpool, to SIC, dated 17 September 1885: "The ship behave splendid ... Deals are not worth anything and I expect the merchant will keep us as long as he can he told me he wished I had of left the Deck load at sea. They think the deal on deck very bad."

[^114]:    ${ }^{165}$ Ibid.
    ${ }^{166}$ See, for example, SPC Letters. Letter from George Spicer, New York, to SIC dated 27 July 1883. George wrote: "I have made some Inquiries about the rate of Insurance on a Deal Freight from home to Liverpool it would be about $2 \frac{1}{2} \%$ the Deck load separate would be about $8 \%$ it can be done better with offices about home."
    ${ }^{167}$ NSARM, Spicer family fonds, Letters from J. F. Whitney and Company, and from George Spicer, to Dewis Spicer passim.
    ${ }^{168}$ See, for example, Fischer and Nordvik, "From Broager to Bergen"; Kaukiainen, "Gross Freight and Profitability."
    ${ }^{169}$ Towards the end of the nineteenth-century some owners transferred ships into single-vessel limited liability companies. This had the advantage of insulating owners' personal assets from the ravages of business failure in an increasingly difficult ocean-going transportation market but the SIC never sought to utilize corporate structures for any of its vessels.

[^115]:    ${ }^{170}$ Dalhousie University Archives, Bigelow Family, MS-4-92. Copy of pages from E. Bigelow Sons \& Co. account book, "E. Bigelow Sons \& Co. In account with E. Bigelow," 1 March 1885. The entry reads: "This company had to make an assignment of all belonging to the company on account of the falling of vessel property down to so low rates that they could not stand the pressure."
    ${ }^{171}$ Ibid. There is no mention of which private party provided temporary aid. Only a detailed analysis can determine whether this business failed because of declining freight rates, too great an exposure to the maritime market's highly variable returns, or some combination of factors. John and his family recovered from this financial set-back, both as merchants and shipbuilders. Family companies built further vessels at their yard through to 1920, and entered into the wharf-building business. See Dalhousie University Archives, Bigelow Family, MS-4-92, and Stanley Spicer, Maritimers Ashore and Afloat, Volume 2, 71-86.
    ${ }^{172}$ SPC Letters, Nathan Eaton's handwritten copy of a letter he sent to Messrs Chapman + Newcomb, Kentville dated 25 August 1885, in which Nathan recorded the date on which he acquired shares from John Emerson and Gideon Bigelow and which indicates that as at August 1885 the shareholders in SIC were George Spicer, Johnson Spicer, Robert W. Spicer, Amasa Loomer, William H. Bigelow, Antoinette Williams and himself. Nathan's capability to buy out the Canning-based Bigelows may have been enhanced by an inheritance following his father's death.

[^116]:    ${ }^{173}$ NSARM, Spencer's Island Company fonds, Letter from Nathan W. Eaton to Dewis Spicer, dated 12 September 1885.
    ${ }^{174}$ SPC Letters. Letter from Dewis Spicer, New York, to Nathan Eaton, dated 17 September 1885. In response to Nathan's news, Dewis wrote: "R W Spicers place will be much handier + nicer for you. what is Mr Bigelow going to do now I expect he will be lamenting over his lost position or does he look into it in a business like way and keep cool."
    ${ }^{175}$ This may have been a family farm as Robert's wife was from Diligent River.
    ${ }^{176}$ NSARM, Letter from Nathan Eaton to Dewis Spicer, December 1894.

[^117]:    ${ }^{177}$ Grant private collection. The SIC ledger records the final shareholding structure, with residual interests in various activities after the company's sale to Percy Spicer. See, also, NSARM, Spencer's Island Company fonds, Nathan Eaton's letter dated 25 August 1885.
    ${ }^{178}$ NSARM, Spencer's Island Company fonds, 1997-174 \#18; Ancestry.com, United States Federal Census, 1900. Nathan Eaton returned to the Valley in 1894 and the following year Amasa Loomer emigrated to Massachusetts effectively ending SIC's role as a combined ship builder, manager and storekeeper.
    ${ }^{179}$ NSARM, Spencer's Island Company fonds, 1997-174 \#18. Nathan Eaton reported in his letter to Dewis Spicer, dated 1 January 1894, that he had purchased Henry Bigelow's share in SIC.
    ${ }^{180}$ Conrad Byers private collection, Parrsboro Record, "Telephone in Parrsboro: Twenty-five years ago," 25 May 1937.
    ${ }^{181}$ SPC Letters. See, for example, message from Peoples Mills, Guelph, Ontario, to SIC, dated 19 August 1885, utilizing "The Parrsboro Shore Telephone Co. (Limited). Head Office: Parrsboro, N.S. Offices at Diligent River, Pt. Greville, Spencer's Island, Advocate Harbor."; and Conrad Byers private collection, Parrsboro Record, Tuesday 25 May 1937, "Telephone in Parrsboro: Twenty-five years ago," which reports that " $[t]$ he builders of the [Parrsboro Shore Telephone Company] line were the A.C. \& C.W. Elderkin Co. of Advocate; D.F. \& C.B. Eaton of Eatonville; C.T. White, Apple River; E.J. White, Sand River; N. W. Eaton of the Spencer's Island Lumber Co, at Spencer's Island; H Elderkin \& Co, at Port Greville, lumbermen or shipping men all, they found the telephone an absolute necessity." Amherst Deeds and Land Registrations Office, Probate documents for George Spicer, Johnson Spicer and Antoinette Jenks (formerly Sayre, previously Williams, nee Spicer).

[^118]:    ${ }^{182}$ Spicer private collection, typed reproduction of a local poem. One verse is about Nathan Eaton: "From old Spencer's Island came sly Nathan Eaton, The man that buys cheap and sells very dear, He took up cudgel in favour of [local politician] Casey, And went back on the Tories that built him the pier." The situation with respect to the pier referred to in the poem is relatively complex. For an alternative perspective on Nathan, see, NSARM, Spicer family fonds, 1997-174/013, letter from George Spicer to Dewis Spicer, dated 23 April 1894. George writes: "I think [his son] Percy will be in the store home soon Mr Eaton thinks of leaving and I am very sorry. for we will miss him very much ... I dont suppose he would want to leave if there was shipbuilding going on. he is a [very] able man in a business and in a social way also but he has had to put up with a lot from some few at the Island. + I do not know as we can blame him for wanting to leave. still he has done well at the Island."
    ${ }^{183}$ NSARM, Spencer's Island company fonds, passim.; Parrsboro Shipping Registry; Dalhousie University Library and Archives, Bigelow family records, show that Gideon Bigelow, who had relocated to California, also died in a horrible worksite accident the same year.
    ${ }^{184}$ Incorporation is presented by some historians as a critical factor for capital-raising, although this was not so in SIC's case. See, for example, Sager with Panting, Maritime Capital, Chapter Six.

[^119]:    ${ }^{185}$ See, for example, Sager with Panting, Maritime Capital, Chapter Five; Keith Matthews, "The Shipping Industry of Atlantic Canada: Themes and Problems," in Ships and Shipbuilding in the North Atlantic Region (St. John's: Maritime History Group, 1978), 18. Data compiled by Keith Matthews shows that the total tonnage registered at ports in Nova Scotia, Prince Edward Island, New Brunswick and Quebec, fell forty percent from 1885 to 1895.

[^120]:    ${ }^{1}$ Eric W. Sager with Gerald E. Panting, Maritime Capital: The Shipping Industry in Atlantic Canada, 18201914 (McGill-Queen's University Press, 1990), 127; Rosemary E. Ommer, "The decline of the eastern Canadian shipping industry, 1880-1895," in Journal of Transport History, 40; Keith Matthews, "The Shipping Industry of Atlantic Canada: Themes and Problems," in Keith Matthews and Gerald Panting eds., Ships and Shipbuilding in the North Atlantic Region (St. John's: Memorial University of Newfoundland, 1978), 10.
    ${ }^{2}$ One of the few published articles discussing the issue is Rosemary E. Ommer's "The decline of the eastern Canadian shipping industry," 25-44.

[^121]:    ${ }^{3}$ Ibid. 25, 31-32.
    ${ }^{4}$ The role of American capital in land-based industries is better documented. See, for example, T. W. Acheson, "The National Policy and the Industrialization of the Maritimes, 1880-1910," in P. A. Buckner and David Frank, eds., Atlantic Canada After Confederation. The Acadiensis Reader: Volume Two (Fredericton: Acadiensis Press, Second Edition, 1988): 183-185.
    ${ }^{5}$ Eric W. Sager, Lewis R. Fischer, Rosemary E. Ommer, "Landward and Seaward Opportunities in Canada's Age of Sail," in Lewis R. Fischer and Eric W. Sager, Merchant Shipping and Economic Development in Atlantic Canada (St. John's: Memorial University of Newfoundland, 1982), 23-25. Data Sager, Fischer and Ommer derived from the 1871, 1881 and 1891 Canada Censuses suggests that "shipowning usually declined most rapidly where the growth of landward industries was fastest."

[^122]:    ${ }^{6}$ Charles Knickerbocker Harley introduces the concept of partial equilibrium periods during the transition from sail to steam in Shipbuilding and Shipping in the Late Nineteenth Century. A study of Technological Change: Its Nature, Diffusion and Impact (Phd. thesis.: Harvard University, 1972).
    ${ }^{7}$ Yrjö Kaukiainen, "The Development of Gross Freights and Profitability in International Sailing Ship Trades, 1860-1914: A Finnish Sample," in Lewis R. Fischer and Helge W. Nordvik, eds., Shipping and Trade, 1750-1950: Essays in international Maritime Economic History," (Pontefract: Lofthouse Publications, 1990): 119-145; Eric W. Sager with Gerald E. Panting, Maritime Capital: The Shipping Industry in Atlantic Canada, 1820-1914 (McGill-Queen's University Press, 1990), Chapter Six: "Capital, Labour, and Profits," and Appendix C: "Returns on Six Nova Scotia Vessels, 1867-1892."

[^123]:    ${ }^{8}$ See for example: David Alexander and Rosemary Ommer, eds., Volumes not Values: Canadian Sailing Ships and World Trades (St. John's: Memorial University of Newfoundland, 1979); Lewis R. Fischer and Eric W. Sager, eds., Merchant Shipping and Economic Development in Atlantic Canada (St. John's: Memorial University of Newfoundland, 1982); Lewis R. Fischer and Gerald E. Panting, eds., Change and Adaption in Maritime History: The North Atlantic Fleets in the Nineteenth Century (St. John's: Memorial University of Newfoundland, 1984); Sager with Panting, Maritime Capital; Fischer and Nordvik, eds., Shipping and Trade, 1750-1950: Essays in International Maritime Economic History; Lewis R. Fischer and Helge W. Nordvik, "From Broager to Bergen: The Risks and Rewards of Peter Jebsen, Shipowner, 18641892," in Sjoefartshistorisk Aabok, 37 (1985): 37-67. For a discussion of opportunities and developments in the broader economy, see, for example, Acheson, "The National Policy and the Industrialization of the Maritimes," 164-189; David Alexander, "Economic Growth in the Atlantic Region, 1880-1940": 134-163, both in Buckner and Frank, eds., Atlantic Canada After Confederation.; James D. Frost, "The 'Nationalization' of the Bank of Nova Scotia, 1880-1910," in T. W. Acheson, David Frank, James D. Frost, eds., Industrialization and Underdevelopment in the Maritimes, 1880-1930 (Toronto: Garamond Press, 1985): 27-54.
    ${ }^{9}$ See, for example, discussions on these issues in Sager with Panting, Maritime Capital, Chapter Seven, "Merchant Shipowners in the Industrial Era", and Chapter Nine: "Maritime Capital and Economic Development"; Lewis R. Fischer and Eric W. Sager, eds., Merchant Shipping and Economic Development in Atlantic Canada, (St. John's: Memorial University of Newfoundland, 1982). See also, Helge W. Nordvik, "The Shipping Industries of the Scandinavian Countries, 1850-1914," in Lewis R. Fischer and Gerald E. Panting, Change and Adaptation in Maritime History: The North Atlantic Fleets in the Nineteenth Century (St. John's: Memorial University of Newfoundland, 1985), 121-125, 130-135.
    ${ }^{10}$ See, for example, discussions on these issues Sager with Panting, Maritime Capital, Chapter Seven, and Chapter Nine: "Maritime Capital and Economic Development"; Fischer and Sager, eds., Merchant Shipping and Economic Development; Acheson, "The National Policy and the Industrialization of the Maritimes"; Nordvik, "The Shipping Industries of the Scandinavian Countries, 1850-1914," 121-125, 130135.
    ${ }^{11}$ Rosemary E. Ommer introduces Windsor and investment opportunities in the region in "The decline of the eastern Canadian shipping industry, 1880-1895," $31,34-35,37-38$.
    ${ }^{12}$ Nordvik, "The Shipping Industries of the Scandinavian Countries," 137-142.

[^124]:    ${ }^{13}$ Few shipowners in the Bay of Fundy's Minas Basin acquired steam-powered or iron-hulled vessels. Still, Nova Scotia's wooden shipbuilding and owning industries continued well into the twentieth-century concentrating on schooners for niche coastal trades. For a review of the province's maritime industry during this period, see, John B. Parker, Sails of the Maritimes: The story of the three- and four-masted cargo schooners of Atlantic Canada, 1859-1929 (Aylesbury and Slough: Hazell Watson \& Vinney, sponsored by The Maritime Museum of the Atlantic, Halifax, Nova Scotia, 1960): 64-123; Stanley T. Spicer, Sails of Fundy: The Schooners and Square-riggers of the Parrsboro Shore (Hantsport: Lancelot Press, 1984): 17-65.

[^125]:    ${ }^{14}$ New York and Halifax based merchants were the other principal capital providers together contributing about 55 percent of the cash for the vessel's hull and spars. A significant, but unknown, portion of these funds also came from voyage profits. The balance of the Stephen D. Horton's total construction cost was in the form of a financing account for outfit and imported metal costs, and shares offered local tradesmen and suppliers in lieu of cash payment.
    ${ }^{15}$ The actual flow of cash was more complicated than indicated in this schematic and required greater involvement of financial intermediaries such as London-based bank Baring Brothers and Company. The freight proceeds for trans-Atlantic voyages were usually paid after delivery, whereas costs generally had to be paid as incurred. In addition, if the initial vessel outfit was separately financed, as appears to be the case for most Spencer's Island Company vessels, the profits from early voyages would be credited to the Outfit Account until it was paid off.

[^126]:    ${ }^{16}$ Valerie Burton, "The Myth of Bachelor Jack: Masculinity, Patriarchy and Seafaring Labour," in Colin Howell and Richard J. Twomey, eds., Jack Tar in History: Essays in the History of Maritime Life and Labour (Fredericton: Acadiensis Press, 1991): 179-198, investigates seafarers' households. Burton reveals that although seafarers' wages were relatively low by the latter part of the nineteenth-century, seafarers' ability to provide for their families ashore was a "touchstone of masculinity," 181.

[^127]:    ${ }^{17}$ Acheson, "The National Policy and the Industrialization of the Maritimes," 168 , records that Thomas Kenny inherited one of Nova Scotia's largest shipping businesses. He went on to invest "heavily in shipyards scattered throughout the five counties of Nova Scotia, and ... even expanded into England with the establishment of a London branch for his firm." See also, Sager with Panting, Maritime Capital, 150, 159. Thomas Kenny was also at the forefront of new manufacturing investment in the region. This thesis also shows that Sager with Panting's suggestion Kenny "rarely if ever" invested in iron ships is incorrect.

[^128]:    ${ }^{18}$ Spicer private collection, Letters to Spencer's Island Company (SIC), 1881 to 1886 , hereafter referred to as "SPC Letters." The remaining construction costs were allocated to the vessel outfit account to be paid off through voyage profits, together with associated finance charges. British outfitters such as John Black and Company typically offered SIC finance for its outfits but J. F. Whitney and Company usually took over this responsibility soon after the vessel was launched. See also, Nova Scotia Archives (NSARM), Spicer family fonds, 1997-174, passim.
    ${ }^{19}$ New York Times, 1 January to 31 December 1880, retrieved from Proquest Historical Newspapers Database, http://proquest.umi.com.ezproxy.library.dal.ca/, April to June 2008; Mystic Seaport Digital Initiative, Ship and Yacht Register, retrieved from http://www.mysticseaport.org/library/initiative/VMSearch.cfm, April to June 2008. For example, of the seventy-three vessels for which J. F. Whitney and Company is identified as commission agent in 1880, virtually all were engaged in international trade across the Atlantic and to more distant ports. Ship chandlers and sailmakers, Simpson and Shaw, were in a similar position to J. F. Whitney and Company, but their interests were closely tied to the sailing industry's well-being. Vessel outfit financiers also expected the ships to make sufficient profits to both cover financing costs and pay down the principal within a reasonable period.

[^129]:    ${ }^{20}$ For further discussion on this see, for example, Yrjo Kaukiainen, "The Development of Gross Freight and Profitability in international Sailing Ship Trades, 1860-1914: A Finnish Sample": 119-145; C. Knick Harley, "North Atlantic Shipping in the Late Nineteenth Century. Freight Rates and the Interrelationship of Cargoes": 147-17, both in Fischer and Nordvik, eds., Essays in International Maritime Economic History. See, also, C. Knick Harley, "Issues on the Demand for Shipping Services, 1870-1913: Derived demand and problems of Joint Production," in Fischer and sager, eds., Merchant Shipping and Economic Development, 67-86.
    ${ }^{21}$ Other operators who were less flexible would typically have suffered below industry average returns.
    ${ }^{22}$ Eric W. Sager, Seafaring Labour: The Merchant Marine of Atlantic Canada, 1820-1914 (Montreal \& Kingston: McGill-Queen's University Press, 1989), 234-238; Maritime Museum of the Atlantic, "Nova Scotian Families at Sea," Exhibit panels, August 1997; Stanley T. Spicer, Captain From Fundy: The Life and Times of George D. Spicer, Master of Square-rigged Windjammers (Hantsport: Lancelot Press, 1988). Sager, Seafaring Labour, 234, reports that: "Canadian shipowners were more willing than British owners to allow masters to take their wives and children to sea."
    ${ }^{23}$ While at sea, captains might rent out their homes in whole or part. See NSARM, Spicer family fonds, 1997-174, passim., and SPC Letters, passim., for Spencer's Island examples of this practice including Samuel Williams and George D. Spicer.

[^130]:    ${ }^{24}$ Ibid. Spencer's Island master mariners diversified risk by taking a small number of shares in several vessels. This may have been a relatively common practice. Other investors in shipping such as commission agents may have considered investment in shipping afforded them greater influence over available capacity although this aspect probably became immaterial by the latter part of the 1880s by which time the supply of wooden sail vessels at least matched demand.
    ${ }^{25}$ J. F. Whitney and Company partners and key employees lent their names to several vessels constructed at Spencer's Island and Advocate near the tip of Cumberland County suggesting there may also have been a reputational advantage.
    ${ }^{26}$ Stanley Spicer, Captain from Fundy, 26; The Parrsboro Leader, "Spencers Island," 25 April, 1901; NSARM, Spicer Family Fonds, 1997-174/007 \#1. Edmund's first command of a Spencer's Island vessel was in 1890 when he took charge of the E. J. Spicer.
    ${ }^{27}$ SPC Letters, passim.; NSARM, Shipping Register, Parrsboro, on microfilm PANS 14569. The Spencer's Island Company was an unincorporated entity and so technically it could not act as managing partner for vessels. Only individuals or incorporated companies could act in this capacity but when George Spicer was managing owner, the SIC undertook financial management components on behalf of the owners. George took over management of the E. J. Spicer from John Bigelow of Bigelow Sons \& Co. after the Canningbased merchant declared bankruptcy in 1885. SIC also received and distributed dividends to Spencer's Island-based shareholders in vessels managed elsewhere. For simplicity, all management-related activities undertaken at Spencer's Island are referred to hereafter in this thesis as being by SIC. Samuel Williams' participation in the venture was cut short by his drowning death in February 1883. Other captains from

[^131]:    Cumberland County to command Spencer's Island-built vessels during this period included Charles Morris (J. F. Whitney) and Levi Atkins (Charles S. Whitney) who married into the Spicer family. ${ }_{28}^{28}$ Stanley T. Spicer, Captain from Fundy, 114.
    ${ }^{29}$ Mystic Seaport Digital Initiative, "Ship and Yacht Register List," retrieved from http://library.mysticseaport.org/initiative/SPSearch.cfm?ID=327435, April 2008; NSARM, Spicer family fonds, Spencer's Island Company fonds, passim. At the time of SIC's formation, Samuel Williams was commander of the Windsor-registered Hannah Blanchard, a 991 ton barque built at Avondale for a group of investors led by G. P. Payzant. Whether it was intended that Samuel take command of the Stephen D. Horton or some late SIC-built ship is unknown. Three years after Samuel's 1883 drowning, the Hannah Blanchard was under the command of another Guysborough County-born seafarer, Levi Atkins. Levi married Blanche Spicer and settled at Spencer's Island. Levi took on the captaincy of the Charles S. Whitney when Dewis Spicer retired from seafaring in about 1896.

[^132]:    ${ }^{30}$ Stanley T. Spicer, Captain from Fundy, 109-128, compiled a list of George Spicer's known voyages from 1871 to 1910 and those between 1880 and 1896 are included in the Appendices. ${ }^{30}$ The list details ports of entry and departure, transit times and cargoes, but no financial details. NSARM, Spencer's Island Company fonds, includes copies of shipping-related papers which were retrieved from Dewis Spicer's house in 1996. The appendices include a partial list of Dewis's voyages between 1880 and 1896 including details of ports of entry and departure, cargoes and freights paid, but only approximate transit times. There is no detailed publicly available information on Johnson Spicer's voyages.
    ${ }^{31}$ NSARM, Spicer family fonds and Spencer's Island Company fonds, passim. Dewis acquired two shares in each of the Stephen D. Horton, Charles S. Whitney, and Glooscap.
    ${ }^{32}$ NSARM, Spencer's Island Company fonds, 1997-174; Stanley T. Spicer, Captain from Fundy, 117. Dewis took over the E. J. Spicer in August 1884 when George returned to Spencer's Island in preparation for taking command of the Charles S. Whitney which was launched at Spencer's Island the previous month. Financial records for Dewis's final months aboard the J. F. Whitney were too partial for inclusion in the thesis.
    ${ }^{33}$ NSARM, Spencer's Island Company fonds, 1997-174; Stanley T. Spicer, Captain from Fundy, 109-128; SPC Letters, passim. During this period, both J. F. Whitney and E. J. Spicer made eleven return trips between North America and Europe. Only one did not depart west-side from New York. E. J. Spicer departed from a port other than New York was in December 1880 when it cleared Norfolk, Virginia, with a cargo of cotton and mixed goods bound for Liverpool, England. For the other twenty-one voyages eastwards, the two vessels loaded refined petroleum or related products such as naptha. See also, NSARM, Parrsboro Registry Records. The J. F. Whitney was built by Thomas E. Bigelow, not SIC, but many of its share and mortgage-holders later took shares in SIC-built vessels.
    ${ }^{34}$ Stanley T. Spicer, Captain from Fundy, 110-117; NSARM, Spencer's Island Company fonds, 1997-174, passim. For example, J. F. Whitney frequently carried a variety of smaller low-value cargoes on the return voyages including empty barrels, iron bars, chalk, salt, soda ash and bleaching powder. On one occasion in

[^133]:    ${ }^{39}$ This "EJS Equivalent," is utilized to compare freight returns between 1880 to 1883 with those during Dewis's tenure at the helm of the E. J. Spicer between 1884 and 1890 . It represents the revenues that might have been achievable by the E. J. Spicer had it been carrying the same cargoes as the J. F. Whitney to a similar proportion of its actual capacity. NSARM, Spencer's Island Company fonds, 1997-174, Seamen's Wages Account Books and Customs Clearing documents indicate that the average manning levels for the $J$. F. Whitney, and E. J. Spicer were 12.5 and 18, respectively.
    ${ }^{40}$ NSARM, Spicer family fonds, 1997-174-013 \#13-\#16, 1997-174/015 \#39, \#83-85. Archival materials include the following correspondence written between 1880 and 1885: fifteen letters and two memos from J. F. Whitney and Company, nine letters from T. \& E. Kenny and seven from George Spicer. See, for example, J. F. Whitney and Company's letters to Dewis Spicer, 26 October 1880: "[We have] drawn on Messr. Baring Bros and Co. London $£ 900$ on a/c your freights which please provide for at Amsterdam, with their commission of one per cent. Any balance of freight money you may have after paying draft and disbursements at Amsterdam, please remit to Messrs Baring Bros \& Co to be placed to our credit ... We advise you putting your ship in the hands of Messr Meyer \& Co to transact your business in Amsterdam." Also 18 March 1881: "We drew $£ 800$ on your freight, which please remit to Baring Bros \& Co together with their charges $1 \%$. Capt George arrived $12^{\text {th }}$ all well we have not chartered the vessel yet. Johnson arrived at Waterford $15^{\text {th }}$ inst. ... freights remain very dull $3 / 3$ has been taken to Liverpool for Residuum. Enclose letters."
    ${ }^{41}$ NSARM, Spicer family fonds, passim. See, for example, J. F. Whitney \& Company letter to Dewis Spicer, who was in London at the time, 10 January 1883: "Ships are beginning to arrive more freely and freights are off a little $4 /$ - is paid to U.K. + cont[inent] for vessels on the spot, ready. To arrive 3d to 6 d less. The "Hanna B." We see has sailed for N.Y. and the "E.J.S" will be after her soon. Capt [Morris?] has not yet arrived at New York."
    ${ }^{42}$ Ibid. See, for example, George Spicer letters to Dewis Spicer, 15 July 1880 and 24 July 1880: "You may have to lighten some at Bro[u]wershaven if the tides are long. I forgot to tell you not to give the Pilot more than about $10 \%$ Gratuity they are such beggars, try and get empty Bbls back ... and get all you can have the vessel consigned to J. F. Whitney ... I think about 200 tons or 210 tons of Ballast will be plenty 210 was what we had the last time we had all empty Bbls ... dont let the [?] Ship Chandlers get ahead of you. And dont get anything but what is necessary."
    "[For the disbursement account] from Rotterdam you will have to do a little different give the ship Cr for the whole freight Debit her with all you buy and the port charges and every thing else there is. I think you

[^134]:    have some of my old a/cs with you which will give you an idea. Keeping the accounts is not so very much taking care of the money. Is more."
    ${ }^{43}$ Ibid. See, for example, letter from George Spicer, at Spencer's Island, to Dewis, aboard the E. J. Spicer, 2 September 1884: "I had a letter from Mr [C. E.] Dixon, [one of SIC's shipbrokers in Antwerp and a shareholder in some vessels]. Saying the metal [for refurbishing the outer hull] could be put in for [Belgian Francs] 1.75 per sheet including every thing but metal and nails moving to Dry Dock included which I think is quite cheap if they do good work which I hope they will. Mr Dixon says they will furnish metal at 6 1/4..."
    George Spicer, at Spencer's Island, to Dewis, aboard the E. J. Spicer, 26 August 1884: "[Y]ou better get the "E.J." metalled [at Antwerp] by what Capt Lockhart said it was cheaper than London. You need not wate for any orders from anybody else. If you do not have money enough you will have to get some from Baring Brothers or Mr Dixon."
    ${ }^{44}$ Ibid. George Spicer, in New York, letter to Dewis Spicer, 28 November 1882: "I am sorry they have not got the "J.F.W." chartered there was a freight of Naptha for Antwerp @ $4 / 3$ but I was afraid of the ice as the vessel would have to lay in the river, there dont appear to be any freights for a vessel of her size but for a large ship there is quite a demand @ 3/6."
    George Spicer, at Spencer's Island, to Dewis, aboard the E. J. Spicer, 26 August 1884 noted that another Minas Basin vessel owner had decided to divest his seven year old 658 ton, Parrsboro-registered barque into a buyers' market: [T]he "Gladovia" is to be sold they have come down to $\$ 10,000$."
    J. F. Whitney \& Co. letter to Dewis Spicer, at Spencer's Island, 12 April 1884. Captain Morris had just arrived in New York from London after a long sixty-four day passage with a cargo of chalk during which the J. F. Whitney sustained some minor damage: "Freights keep very dull, and what we shall do with the Whitney we cannot say at present. Oil freights are so low that the chance of giving her a freight, that will pay anything is not now at all encouraging - We may have improvement next week, but we can see no prospect of it now."
    ${ }^{45}$ Ibid. J. F. Whitney \& Company letter to Dewis Spicer, at Spencer's Island, 18 April 1884: "Capt [Johnson] Spicer is looking very well [upon his arrival in New York aboard Stephen D. Horton two days earlier] - but disappointed that he will have to take $2 /$ - for oil if he can get it - It is not yet certain that this high rate can be got. We have telegraphed to Halifax + Parrsboro to know what can be done on Deals [of timber] at Spencer's Island + West Bay - no answer yet."

[^135]:    ${ }^{46}$ Ibid.
    ${ }^{47}$ Ibid. J. F. Whitney and Company memo to Dewis Spicer, aboard the E. J. Spicer, 9 May 1885: "We have sold for acct of the "E. J. Spicer \& Ow" an invoice of about one thousand tons first quality Northfleet chalk the same to be bought by you in London. Before sailing from London, mail us a certificate of weight +a U.S. consular invoice. The chalk is to be discharged in Brooklyn, above the Bridge." See also, letter from T. \& E. Kenny to Dewis Spicer, 18 July 1885.
    ${ }^{48}$ NSARM, Spicer family fonds, 1997-174/015 \#39, \#86-88. Correspondence in the archives includes thirty seven letters and one memo from T. \& E. Kenny and twenty one letters from J. F. Whitney and Company to Dewis Spicer between 1886 and 1891. There are no surviving letters from George Spicer to Dewis between 1886 and 1891 but it is unlikely that he did not write any. See for example the letters from T. \& E. Kenny, London to Dewis on 20 August 1887 and 26 October 1888: "We can do better here for freight than you are doing, say $7 / 0$ for cement $\ldots 7 / 6$ to $8 / 0$ in chalk but we cannot do so well in empty barrels as you are doing'; 23 December 1889: We expect you did about right to accept $281 / 4 \notin$ on case oil to Colombo, and the business should show a fair return. We think we could today close the vessel back to New York from there and Cochin [India] @ 35/0 and we have written Messrs J. F. Whitney + Co about it and are awaiting their reply."
    "Do you propose returning to New York [from Europe] or can we tempt you with a cargo of coals from Cardiff to Monte Video at 27/-[?] ... [o]utward freights from here are strong. We can probably do $11 / 6$ on chalk to New York, and about $13 /$ - to Philadelphia."
    ${ }^{49}$ NSARM, Spencer's Island Company fonds, 1997-174, passim. After ranging between $3 / 9$ and $3 / 1$ for most of the preceding three years, rates dropped decisively. Between 1885 and 1889 Dewis received between $2 / 7.5$ and 1/6.7 for his petroleum-based freights.

[^136]:    ${ }^{50}$ Grant private collection, Shipbuilding Journals, photocopies in Conrad Byers private collection. The Glooscap, completed in September 1891, was about 100 tons larger than the preceding two square-riggers. New York Times, "Capt. Morris's Pocketbook," 23 December 1889, reported that Captain Charles M. Morris, skipper of the J. F. Whitney, turned the vessel over to "a party who had purchased her," at Pensacola, Florida, a few days earlier. Morris lost his pocketbook containing the $\$ 11,725$ proceeds from the sale on the train back to New York but that they were retrieved by Conductor McGonnigal who forwarded it on to J. F. Whitney and Company in New York.
    ${ }^{51}$ Ibid. The 94 ton schooner Germ was completed in August 1888 for a third party, and the 173 ton Evolution, in September 1889, was retained. A third schooner, carrying three masts and referred to as a "tern," was built in 1892 for some SIC shareholders and associates.

[^137]:    ${ }^{52}$ For a comprehensive investigation into Baring Brothers and Company, and the Latin American markets, see, Philip Ziegler, The Sixth Power: A history of one of the greatest of all banking families, the House of Barings, 1762-1929 (New York: Alfred A. Knoff, 1988). For a discussion of Uruguay, see for example, Peter Winn, "British Informal Empire in Uruguay in the Nineteenth Century," in Past and Present 73 (1976): 100-126. For a discussion of Argentina, see for example, Geraldo Della Paolera and Alan M. Taylor, eds., A New Economic History of Argentina (Cambridge and New York: Cambridge University Press, 2003). Argentina, Brazil and Uruguay were involved in the 'War of the Triple Alliance' against Paraguay between 1865 and 1870. It took another decade before the region was sufficiently stable to enable a resurgence in economic growth and trade opportunities. Baring Brothers and Company, the major counter-party for J. F. Whitney and Company in the financing of Spencer's Island ship voyages, was a leading participant in South America during the second half of the nineteenth century. Baring's involvement in Argentina and Uruguay was so extensive that it would have gone bankrupt after the economies of both collapsed around 1890 but for the support of the Bank of England.
    ${ }^{53}$ NSARM, Spicer family fonds, 1997-174, passim. Comments in letters from George and Johnson Spicer to Dewis suggest that Johnson-captained vessels called at South American ports more frequently than did his brothers.
    ${ }^{54}$ Sarah Palmer, "The British Coal Export Trade, 1850-1913," in David Alexander and Rosemary Ommer, Volumes not Values: Canadian Ships and World Trades (St. John's: Memorial University of
    Newfoundland, 1979): 354. Five year total coals exports to Argentina (000 tons): 1871-75: 321; 1876-80: 306; 1881-85: 985; 1886-1890: 2,518; 1891-95: 3,350; 1896-1900: 4,334.
    ${ }^{55}$ Sarah Palmer, "British Coal Export Trade," 334, notes that "coal enjoyed almost a monopoly as a source of fuel and power," as industrialization spread globally. Palmer reports the proportion of coal exported to meet the requirements of the shipping industry remains unknown.
    ${ }^{56}$ Robert G. Greenhill, "Latin America's Export Trades and British Shipping, 1850-1914," in Alexander and Ommer, Volumes not Values, 252-255. Greenhill notes that imports from Argentina into the United Kingdom for selected five year periods were as follows ( $£$ Million, Quinquennial Averages): 1875-79: 1.3;

[^138]:    1880-84: 1.0; 1885-89: $2.1 ; 1890-94: 4.6 ; 1895-9: 8.5 ; 1900-4: 16.3$. SIC vessels reviewed in the thesis most frequently took their South American exports to non-British ports, but this data provides evidence of growing trade opportunities. For a more detailed discussion on the Latin American commodities trade, see Greenhill's article.
    ${ }^{57}$ NSARM, Spicer family fonds, Letters from George and Johnson Spicer to Dewis Spicer, 1997-174, $\frac{\text { passim. }}{58}$.
    ${ }^{38}$ NSARM, Spencer's Island Company fonds, passim. Dewis carried 2,072 tons of coal at a rate of $30 / 6$ per ton.
    ${ }^{59}$ Gerald S. Graham, "The Ascendancy of the Sailing Ship 1850-85," The Economic History Review, New Series, 9. (1) (1956), 84; NSARM, Spicer family fonds, 1997-174, passim.; NSARM, Parrsboro Shipping Registry, SPC Letters, passim. Graham notes that: With the contraction of markets of north-west Europe, both Cardiff and Newcastle found compensation in the export of coal to the Pacific ports of South America; within the next few years Brazil and Uruguay were to be tied to the 'tramp' sailing ship, as were also, in gradually diminishing degrees until the end of the 1880's, south Australia and the Pacific Islands. SIC's decision to begin construction of the largest square-rigger at Spencer's Island, the Glooscap, occurred in 1888. This was after the successful development of the high pressure, triple-expansion screw, but probably before steamships equipped with the new technology deployed widely on SIC's most profitable trade routes. In the meantime, general market conditions improved to the extent that New York investors in Spencer's Island built vessels were probably heartened about future prospects for the sail ship industry. See, also, The Cumberland Leader, "J. F. Whitney and Company Circular," 4 January 1889, transcribed in Appendix XVII. After 1890, New York investors became increasingly disinterested in further investments in large ocean-going square-rigged sail vessels.

[^139]:    ${ }^{60}$ Stanley T. Spicer, Captain from Fundy, 119. George transported 66,117 cases of refined oil to Shanghai and returned with 1,651 tons of sugar from Ilo Ilo, Philippines, and 6,500 bales of hemp from Manila; Letter from J. F. Whitney and Company to Dewis Spicer, London, 2 April 1889: Capt Geo... makes good freight $\$ 24,575$., and writes he is willing to go again. "Geo T. Hay" has not arrived yet - We have her fixed for Calcutta $26 \phi$ pr. Case."
    ${ }^{61}$ NSARM, Spencer's Island Company fonds. Letter from T. \& E. Kenny and Company, 30 September 1890: "[We] note thereby the charter of the "E. J. Spicer" for case oil to 3 ports in Java at 24ф, 25d and 26ф and are sorry the market did not permit of better business. We also note you expect your brother [Edmund] to join [take over command] of the ship shortly, so that you can get home for the winter. Coal freights on this side are not lively, too many vessels altogether engaged in the trade, and merchants enforcing their own terms all the time."
    ${ }^{62}$ Ibid. Letter from Kenny, Mahon and Company, London, to Dewis Spicer, 25 January 1894: "Geo T. Hay, we note, has not yet commenced to load. We shall be glad to know if she has been chartered Home yet. The La Plata Grain charterers have fallen off. So many steamers were offered them, and fixed, that the rate has gone down. Possibly it may come up again, but the supply of steamers make this uncertain."
    ${ }^{53}$ See, for example, Ibid., 1997-174/017 \#14, Charter Party contract on 25 April 1894 between George Spicer, who was then in New York, on behalf of the owners, and John Paxton \& Co, Sydney, Australia George was in New York. The contract was signed under a cablegram from W. R. Grace \& Co, New York: For "the good ship or vessel called the "Charles S. Whitney," ... now at Capetown, South Africa and whereof [Dewis] Spicer is Master ... proceed to [port of loading] Sydney, New South Wales ... proceed to [port of discharge] London. Freight being payable at and after the rate of Three Thousand pounds ( $£ 3000$ ). Advances: Money for the Ship's ordinary disbursements at the Loading Port (if required) but not exceeding ( $£ 1000$ ) One Thousand Pounds Sterling is to be advanced by the Charterers at a commission of five pounds

[^140]:    per cent., and subject to Stamp Duty, Bank Exchange, and insurance at current rates ..." This type of contract contrasts with arrangements for North Atlantic trade where freights were paid for on delivery. However, it appears that J. F. Whitney and Company could still get better rates through a banking house such as Baring Brothers and Company into the 1890s. See, for example, NSARM, Spicer family fonds, letter from J. F. Whitney and Company to Dewis Spicer, 24 May 1894.
    ${ }^{64}$ See, for example, NSARM, Spicer family fonds, 1997-174/015 \#89, Letters from J. F. Whitney and Company to Dewis Spicer, aboard the Charles S. Whitney in Sydney, Australia, 24 May 1894: "Since writing March $23^{\text {rd }}$, and after consulting Capt Geo., we chartered your good vessel to load at Sydney, N.S.W. for London, $£ 3000$, free of dumping and stowage, and cabled you on the $26^{\text {th }}$ April to proceed in ballast to load at Sydney, which we trust you duly received and understood. ... You can ascertain about what the expense will be loading at Sydney and cable us for a credit for the amount you need. We can send cable credit through Baring Bros \& Co. which will cost considerably less than obtaining money from the charterer - we will attend to the insurance of the freights..."
    ${ }^{65}$ NSARM, Spicer family fonds, and Spencer's Island Company fonds, 1997/174, passim; Stanley T. Spicer, Captain from Fundy, 123-124.
    ${ }^{66}$ The Parrsboro Leader, "Spencers Island," 25 April, 1901; NSARM, Spicer family fonds, 1997-174, passim. See, for example, NSARM, 1997-174/015 \#89, Letter from J. F. Whitney and Company to Dewis Spicer, aboard the Charles S. Whitney in Sydney, Australia, 24 May 1894: "The "Geo T. Hay" [possibly captained by Edmund Spicer] will load Grain at La Plata for Europe @ 18/-. Capt Johnson [presumably aboard Perfection] arrived a few days ago at Falmouth making a good passage. He has been ordered to Antwerp'; and 25 May 1894: The "Hay" is still at the River [between Uruguay and Argentina], but we expect she will sail soon. Capt. Johnson sailed from Antwerp for Sydney [Nova Scotia] in ballast yesterday. He will probably go to the River with Lumber from some Eastern port." In later years Edmund -captained vessels frequented South East Asian ports.

[^141]:    ${ }^{67}$ NSARM, 1997-174/015 \#89, Letters from J. F. Whitney and Company to Dewis Spicer, care of Kenny, Mahon and Company, London, 10 October 1894.
    ${ }^{68}$ Ibid., 7 December 1894.
    ${ }^{69}$ Sager with Panting, Maritime Capital, 139.

[^142]:    ${ }^{70}$ See, for example, Sager with Panting, Maritime Capital, 139; Sager, Maritime Labour, 221; Stanley Spicer, 227.
    ${ }^{71}$ For a more detailed discussion of passage duration and port turn-around times, see Sager with Panting, Maritime Capital, 139-143.
    ${ }^{72}$ See, for example, Frederick William Wallace, Wooden Ships and Iron Men: The Story of the SquareRigged Merchant Marine of British North America, the Ships, their Builders and Owners, and the Men who Sailed Them (London and Toronto: Hodder and Stoughton, 1924), 153; Sager, Seafaring Labour, 167, 212214.
    ${ }^{73}$ The Parrsboro Leader, "Spencers Island," 25 April, 1901.

[^143]:    ${ }^{74}$ See, for example, C. Knick Harley, "North Atlantic Shipping in the Late Nineteenth Century Freight rates and the interrelationship of cargoes," in Fischer and Nodvik, Essays in International Maritime Economic History, 147-171, for an investigation into the inter-relatedness of cargoes.
    ${ }^{75}$ Sager with Panting, Maritime Capital, 142. Averages calculated for four major Atlantic Canadian fleets. ${ }^{76}$ NSARM, George Spicer Diaries, 1871-1910, MG 1, 11 017-11 024, passim; NSARM, Spicer family fonds, passim. Sager, Seafaring Labour, 256, 177, finds that most sailors on Atlantic Canadian ships left their vessels at the end of a voyage but that some engaged in discharging and loading in port.
    ${ }^{77}$ For example, George's vessels spent four percent more time in port than at sea.

[^144]:    ${ }^{78}$ Sager with Panting, Maritime Capital, 141. Using crew agreements, the authors also found that average port durations in the $1860 \mathrm{~s}, 1870 \mathrm{~s}$, and 1890 s were $32.3,31.1$ and 37.2 days respectively.
    ${ }^{79}$ NSARM, Parrsboro Shipping Records; Stanley T. Spicer, Saga of the Mary Celeste, 12. The two SICbuilt vessels lost at sea, Stephen D. Horton and Perfection were consumed by fire. However, George T. Hay was lost at sea in 1906, after two decades' service. The circumstances of its demise suggest some maintenance inadequacies but may also merely represent the durability limitations for wooden vessels. Furthermore, the George T. Hay sank more than a decade after SIC ceased operations.
    ${ }^{80}$ This figure is derived from Table 4, Cost Shares, Sail, and Steam Ships, Nineteenth Century, in C. Knick Harley, "Ocean Freight rates and productivity, 1740-1913: The Primacy of Mechanical Invention Reaffirmed," in The Journal of Economic History, 48 (4) (1988): 861
    ${ }^{81}$ Sager, Seafaring Labour, 212-214.

[^145]:    ${ }^{82}$ Sager records that average monthly wages for crew remained little changed across the twenty five years from 1880 but there was considerable volatility from year to year: Sager, Seafaring Labour, 215-217; A review of Sager, and Sager with Panting's graphs for monthly wages of able-bodied seamen (ABs) in the Saint John and Windsor fleets between 1863 and 1903 reveals that rates were relatively high around 1889 and relatively low in 1894: Sager, Seafaring Labour, 216; Sager with Panting Maritime Capital, 145

[^146]:    ${ }^{83}$ Sager, Seafaring Labour, 216.
    ${ }^{84}$ Ibid., 217.
    ${ }^{85}$ NSARM, Spencer's Island Company fonds, Dewis Spicer's notebooks and journals, passim.
    ${ }^{86}$ Sager, Seafaring Labour, 214-221; Sager with Panting Maritime Capital, 145.
    ${ }^{87}$ SPC Letters. Dewis Spicer may have kept a tight rein on wages prior to 1889 as well judging by the correspondence from T. \& E. Kenny and Company in April 1887 when the captain was seeking a carpenter and again in January 1888 when he asked the commission agents to help him secure a crew for his next voyage as he "anticipate[d] a difficulty in procuring" men on his own. With respect to the carpenter, Kenny reported on 25 April 1887: " $[\mathrm{H}]$ e has shipped on board the 'Arabella' ... and is therefore no longer available. We believe him to be a good man but the wages you offered were not sufficient to clear him out of London." NSARM, Spencer's Island Company fonds, 1997-174/015 \#39.

[^147]:    ${ }^{88}$ Sager, Seafaring Labour, 215. For a more detailed discussion of labour and wages, see Chapter Seven. ${ }^{89}$ Ibid., 211-213.
    ${ }^{90}$ See, for example, NSARM, Spicer family fonds, 1997-174, Dewis Spicer's diary, 24 April 1890
    ${ }^{91}$ Sager, Seafaring Labour, 173.
    ${ }^{92}$ See Chapter Two for a discussion on British and American shipping regulations.

[^148]:    ${ }^{93}$ For social issues relating to low wages paid, see, for example, Sager, Seafaring Labour, Chapters Six and Seven.
    ${ }^{94}$ NSARM, Spicer family fonds, 1997-174, passim; Spencer's Island Company fonds, 1997-174, passim. ${ }^{95}$ See, for example: NSARM, Spicer family fonds, 1997-174 passim; Spencer's Island Company fonds, 1997-174, passim; 2007-013, passim.
    ${ }^{96}$ Harcourt Gardiner, "J. F. Whitney and Company of New York: Shipping Agents and Ship Brokers, Approximately 1810 to about 1980," unpublished compilation, December 2007, 9-10, includes a photocopy of J. F. Whitney \& Company's, "The Weekly Freight Circular," for 5 September 1885.

[^149]:    ${ }^{97}$ See, for example, Cumberland Leader, "Shipping Intelligence Report," including "Weekly Freight Circular, J. F. Whitney \& Co," 4 January 1889.
    ${ }^{98}$ SPC Letters, passim.; NSARM, Spencer's Island Company fonds, telegraphs and letters containing codes to Dewis Spicer.
    ${ }^{99}$ Conrad Byers private collection, Parrsboro Record, "Telephone in Parrsboro: Twenty-five years ago," 25 May 1937. The Parrsboro Shore Telephone Company commenced operation in 1885 and was the first telephone company in Nova Scotia outside Halifax.
    ${ }^{100}$ NSARM, Spencer's Island Company fonds, 1997-174/015 \#42, Letter from Sam J. King to Dewis Spicer, 14 November 1889: "I thank you for mentioning the new ship + we shall be please to take a small share with you if there are any left... [W]e have undertaken the work on the steam navigation 60 boats of

[^150]:    this port. this makes us more work. Nova Scotia ship have been very scarce here - but last week we had 5 working 2 with oil + 3 lumber ..."
    ${ }^{101}$ NSARM, Spencer's Island Company fonds. Letter from Sam King to Dewis Spicer, 14 June 1889: "I am afraid the oil trade to this point will be most all tanks - we have [had] three steamers here + another is due with about 20,000 bbls and large tanks for storage are being built at Avonmouth."
    ${ }^{102}$ NSARM, Spencer's Island Company fonds, 1997-174/015 \#83-88, passim. See for example letters from J. F. Whitney and Company, New York, to Dewis Spicer, 18 March 1881, 19 April 1881, 14 December 1881, 12 April 1884, 15 March 1887 and 19 April 1887.
    ${ }^{103}$ NSARM, Parrsboro Shipping Registry; NSARM, Spencer's Island Company fonds, 1997-174/015 \#86, letter from J. F. Whitney and Company to Dewis Spicer, 16 July 1887: "Johnson [Spicer] writes that the new ship will probably be launched 20 Aug[ust] he says she is the finest vessel ever built at the Island."
    ${ }^{104}$ NSARM, Parrsboro Shipping Registry. United States citizens held registered mortgages over fifteen shares officially held by George and Johnson Spicer, while William Simpson appears to have had an interest in the shares held by Mark Shaw. Canada's Finance Minister, Charles Tupper, also owned four shares in this ship.
    ${ }^{105}$ NSARM, Spencer's Island Company fonds, 1997-174/015 \#39; Mystic Seaport Digital Initiative, "Ship and Yacht Register List," retrieved from http://library.mysticseaport.org/initiative/VMSearch.cfm, 29 August 2008. Letters from T. \& E. Kenny and Company to Dewis Spicer, 26 October 1888, 22 May 1889 and 18 October 1889. The Eskasoni was near new, having been built in 1886 while the other two vessels were built in 1874. When describing the Castle Roy to Dewis in May 1889, T. \& E. Kenny and Company wrote: Since you left England we have purchased the Iron Ship "Castle Roy" of Dundee. 1664 Tons Register and Captain A. Telfer (late of "cashier") has taken command. She is a very fine vessel and is now loading Coals at Cardiff for Monte Video at 27/9. We hope you will see her down there before you leave. We should like to know what you think of her. She is 14 years old but has always been well looked after and is in first rate order. We are turning her into a company, as is the case of the "Eskasoni" and hope we may soon see back the money we paid for her. although it is a large sum."

[^151]:    ${ }^{106}$ NSARM, Spencer's Island Company fonds, 1997-014. See, for example, T. \& E. Kenny and Company letters to Dewis Spicer, 26 October 1888: "The 'Eskasoni" is now in London, and will be on the Pontoon until Wednesday morning next. Better run over, and have a look at her!"; 22 May 1889: as shown in the preceding footnote; 23 December 1889: "We are glad you had a look at the "Raven's Hall" while at Monte Video, and that you were pleased with what you could see of her."
    ${ }^{107}$ Ibid. Dewis was worried about the risk of Dengue fever breaking out amongst the crew whilst in port, or suffering the affliction himself. NSARM, Spencer's Island Company fonds, 1997-174/015 \#39, Letter from T. \& E. Kenny and Company, London, to Dewis Spicer, aboard E. J. Spicer at Penarth Dock, Cardiff, 3 April 1889 and telegram 4 April 1889: "[A]s we understand your reason to be objection to the peril of Rio, we cannot take the responsibility of urging you. The season your ship will be there, will be the most healthy of the year + you should not hesitate to send [the vessel there] but even so we would never urge any man to go where he thought he was risking his life ..." J. F. Whitney and Company responded by authorizing T. \& E. Kenny and Company to change the destination port to Montevideo, although it cost sixpence per ton on the freight rate. The disbursement account shows that Dewis went to Montevideo with coals at 30/6.
    ${ }^{108}$ Gerald S. Graham, "The Ascendancy of the Sailing Ship 1850-85," The Economic History Review, New Series, 9. (1) (1956), 86.

[^152]:    ${ }^{109}$ These vessels are: the 1,688 ton Stephen D. Horton, launched in August 1883, the 1,754 ton Charles S. Whitney, launched in July 1885 and the 1,860 ton Glooscap, launched in September 1891. Insufficient publicly available records preclude meaningful analysis of the George T. Hay.
    ${ }^{110}$ NSARM, Parrsboro Shipping Registry; Stanley T. Spicer, Saga of the Mary Celeste, 12. Fire at sea claimed Stephen. D. Horton in December 1888, five years after its maiden voyage and Glooscap was not launched until September 1891.
    ${ }^{111}$ Detailed data on the Charles $S$. Whitney is contained in Appendix XV, and on the other vessels in Appendices XIII, XIV and XVI.
    ${ }_{112}$ NSARM, Spencer's Island Company fonds, 1997-174. The Charles S. Whitney cost Cn\$64,586 to build, of which $\$ 18,105$ was charged to the outfit account and was separately financed. The balance of $\$ 46,481$, for hull and spars, equated to a cost per one sixty-fourth share of $\$ 726.27$.

[^153]:    Sources: NSARM, Spicer Family Fonds and Spencer's Island Company fonds.

[^154]:    ${ }^{113}$ Mystic Seaport Digital Initiative, "Ship and Yacht Register List," retrieved from http://library.mysticseaport.org/initiative/VSearchIndex.cfm, 30 August 2008, shows that by 1897, Levi was master of Charles S. Whitney. By the late 1890 s it became extremely difficult for captains of sailing vessels to secure a position with some vessel owners requiring them to put up considerable capital to do so. ${ }^{114}$ Charles Knickerbocker Harley, "Shipbuilding and Shipping in the Late Nineteenth Century. A study of Technological Change: Its Nature, Diffusion and Impact," (Phd. Thesis: Harvard University, 1972), 6.

[^155]:    ${ }^{115}$ Ibid., 5.
    ${ }^{116}$ Ibid.
    ${ }^{117}$ Ibid. Harley points to the work of J. R. Hicks, Capital and Growth (Oxford: Clarendon Press, 1965), Chapter VI, which introduced him to the concept of "temporary equilibrium," which "greatly aided the development and clarification of the ideas presented [in his thesis] concerning the theory underlying the analysis of [his] study."
    ${ }^{118}$ Ibid., 27-28: "Entry into the industry was open to anyone with the capital to purchase a ship. Ships traditionally were owned in shares of 64ths and in practice enjoyed limited liability; no individual had to provide the entire capital. After the coming of limited liability many small, frequently single ship, shipping companies took advantage of incorporation. Shares in ships could be, and were, mortgaged, further easing the entry into the industry."

[^156]:    ${ }^{119}$ The largest cliometric exercise during this period was the Atlantic Canada Shipping Project undertaken by the Maritime History Group at Memorial University of Newfoundland to investigate the factors leading the rise and decline of Atlantic Canada's merchant marine. One important early initiative for understanding the North Atlantic trades is Douglass C. North's investigation into freight rates and the construction of a series of freight and operating cost indices. See for example: North, "Ocean Freight Rates and Economic Development 1750-1913," The Journal of Economic History 18 (4) (1958): 535-555, and "Sources of Productivity Change in Ocean Shipping, 1600-1850," Journal of Political Economy 76 (5) (1968): 953-970.

[^157]:    ${ }^{120}$ Kaukiainen, "Development of Gross Freight and Profitability," 119-120; C. Knick Harley and Kaukiainen outline some of the issues with the use of proxies in their review of the body of work produced by the Atlantic Canada Shipping Project (ACSP): C. Knick Harley and Yrjö Kaukiainen, "Panel Review: The Atlantic Canada Shipping Project," in Newfoundland Studies 4, 1 (1988), 89-93. Index-based procedures are useful in studies of the effects of transportation on trans-Atlantic product prices and relative revenues and costs for the carriage of specific commodities on the principal North Atlantic trade routes. Furthermore, freight proxies are useful for determining the relative competitive conditions on particular trade routes and for investigating the impact of globalizing trade and improving technologies on the cost of transport to customers. Unfortunately, profitability proxies are of limited utility because of the sizable and compounding margins of estimating error. See for example the body of work by C. Knick Harley and others. The two historians urged "a careful reconsideration of the profit calculations" such as those which estimated the profitability of vessels from Saint John, New Brunswick. Kaukiainen also includes a useful discussion on the difficulties involved in relating proxy based data to actual business profit and loss accounts and vice versa in "Development of Gross Freight and Profitability": 126-140.
    ${ }^{121}$ Kaukiainen, "Development of Gross Freight and Profitability," 19-120.
    ${ }^{122}$ See for example discussion in Kaukiainen, "Development of Gross Freight and Profitability," 19-120; Helge W. Norvik noted in 1985: "There are unfortunately very few studies that have tried to look directly at changing levels of profitability. Although there are several studies of local shipping industries or individual shipowners that give useful information on the profitability of shipping investments, no studies of the national fleets have tried to measure this over time," "The Shipping Industries of the Scandinavian Countries, 1850-1914," in Lewis R. Fischer and Gerald E. Panting, eds., Change and Adaptation in Maritime History: The North Atlantic Fleets in the Nineteenth Century (St. John's: Memorial University of Newfoundland, 1985): 144. The studies that Kuakiainen and Nordivk refer to are almost all investigations into profitability prior to 1880 , other than Ole Gjolberg's, "The Substitution of Steam for Sail in Norwegian Ocean Shipping," in Scandinavian Economic History Review 1980.
    ${ }^{123}$ Lewis R. Fischer, "The Enterprising Canadians: An Assessment of Canadian Maritime History since 1975," in Maritime History at the Crossroads: A Critical Review of Recent Historiography, ed. Frank Broeze (St. John's: International Maritime Economic History Association, 1995), 35.

[^158]:    ${ }^{124}$ Kaukiainen, "Development of Gross Freight and Profitability," 119-145. The core set of his sources comprise the archives of nine "trading houses or shipowners, all of which are both extensive and very wellpreserved." Together with other material housed at the ÅAkademi "Maritime Archives" Kaukiainen derived data for 119 sailing vessels of which eighty six engaged in international trade year round although less than a quarter of the accounts relate to vessels operating between 1880 and 1899: 123-125.
    ${ }^{125}$ Kaukiainen, "Development of Gross Freight and Profitability," 132-133.
    ${ }^{126}$ Ibid.
    ${ }^{127}$ See for example: Lewis R. Fischer, Eric W. Sager and Rosemary E. Ommer, "The Shipping Industry and Regional Economic Development in Atlantic Canada, 1871-1891: Saint John as a Case Study," in Lewis R. Fischer and Eric W. Sager, eds., Merchant Shipping and Economic Development in Atlantic Canada (St. John's: Memorial University of Newfoundland, 1982): 33-53; Eric W. Sager with Gerald E. Panting, Maritime Capital: The Shipping Industry in Atlantic Canada, 1820-1914 (Montreal \& Kingston: McGill-Queen's University Press, 1990), Chapter 6: "Capital, Labour and Profits," 128-146; Kaukiainen, "Development of Gross Freight and Profitability," 139-141. Kaukiainen concludes that the results for his sample of Finnish vessels "show that at the beginning of the period [circa. 1865], shipping undoubtedly gave a very reasonable return on capital. By the middle of the next decade, however, it was no longer anything spectacular; it was possible to achieve similar returns by lending money. During the "long depression," returns sunk still further; by the mid=1880s, net result was no longer enough to allow decent depreciation. Although interest rates were also quite low at that time, sailing ships were obviously not a good investment": 139.
    ${ }^{128}$ Harley and Kaukiainen, for example, consider: [t]he assertion that shipping was highly profitable is central to the [Atlantic Canada Shipping P]roject's interpretation of the relationship between the maritime industries and the greater Atlantic Canadian economy," "Atlantic Canada Shipping Project," 92. Sager with Panting, in Maritime Capital, provide details of the actual returns on six Nova Scotian vessels between the mid 1870s and 1890, with one starting in 1867, and another going through to 1892 in Appendix C, 216221. These show average annual returns (after depreciation) on initial capital of 5.2 percent to 13.5 percent.

[^159]:    ${ }^{129}$ See Sager with Panting, Maritime Capital, Appendix C.
    ${ }^{130}$ Data compiled from Sager with Panting, Merchant Capital, Appendix C, 216-221. The data for specific vessels only covers segments of the period. The overlapping process Kaukiainen used for his sample has been applied in the table above. Information on a seventh Nova Scotian vessel, the 1325 ton N. B. Lewis of Yarmouth is contained in Appendix E of Clement W. Crowell, Novascotiaman, (Halifax: Nova Scotia Museum, 1979), 379-385. The Appendix includes a summary of N. B. Lewis's voyages and earnings from 1 January 1886 to March 1893 and an estimate of total earnings from its construction in 1880 to sale in 1893, but the information appears insufficient for inclusion in this analysis.

[^160]:    ${ }^{131}$ Kaukiainen, "Development of Gross Freight and Profitability," 139, 141; Fischer, Sager and Ommer's proxy-based estimates indicate that New Brunswick Saint John's ocean-going fleet was capable of generating double digit returns in both 1881 and 1891. They estimate mid-range net profit capabilities for the New Brunswick Saint John-registered fleet as a percentage of diminishing value as follows (year, before depreciation, after depreciation): 1871, 40.2, 31.1; 1881, 25.5, 14.2; 1891, 33.0, 21.9. Lewis R. Fischer, Eric W. Sager and Rosemary E. Ommer, "The Shipping Industry and Regional Economic Development in Atlantic Canada, 1871-1891: Saint John as a Case Study," in Lewis R. Fischer and Eric W. Sager, eds., Merchant Shipping and Economic Development in Atlantic Canada (St. John's: Memorial University of Newfoundland, 1982): 33-53. These estimates are similar to the returns on the averages for six Nova Scotian vessels between 1867 and 1892 shown in Table 4.6.
    ${ }^{132}$ The results may be biased in favour of Nova Scotian vessels due to economies of scale associated with larger ships and probability that some engaged in more distant trades. However Kaukiainen notes that his sample set showed "relative inflexibility of the real value of shipping income per ton ... given the general belief that sea transport became cheaper and more efficient during the period." He found not material to suggest "that the average maritime performance [ of Finnish vessels] improved during the period," either as a result of increased size or other productivity improvements: Kaukiainen, "Gross Freight and Profitability," 135. This contrasts with C. Knick Harley's findings in "Ocean Freight Rates and Productivity, 1740-1913: The Primacy of Mechanical Invention Reaffirmed," The Journal of Economic History, 48 (4) (1988): 851-876. This article includes evidence on "costs from a large number of nineteenth-century manuscript voyage accounts," although the figures he derives are heavily influence by one set of accounts at the National Maritime Museum in Greenwich.
    ${ }^{133}$ Sager with Panting, Maritime Capital, 138.
    ${ }^{134}$ NSARM, Spencer's Island Company fonds. Built in July 1885, the 1,754 ton Charles S. Whitney returned an estimated average 13.9 percent per annum after depreciation and insurance on diminishing value for the period from August 1885 to the end of 1889 , and an average of 6.9 percent from 1890 to 1896. Details of dividend distributions, outfit payments, insurance premiums and imputed earnings are contained in the Appendices. Dewis Spicer sold his two shares in Charles S. Whitney for $\$ 600$ on 13 August 1896, from which a value of $\$ 19,200$ for the entire vessel can be imputed. The proceeds from Charles $S$. Whitney's early voyages were directed first to repay outfit costs and thereafter distributed to owners. Overall, Dewis Spicer derived a 7.9 percent per annum internal rate of return (IRR) on his two share investment. The returns calculated and noted above assume that insurance premiums between 1889 and 1896 were paid prior to distributions to owners as Dewis does not record making any such payments himself in his detailed notebooks. It is unclear whether the data compiled by Kaukiainen, the ACSP, and Sager with Panting, fully accounted for insurance premiums on hull and spars. Tabulated returns for some other Spencer's Island-built vessels are contained in the Appendices.

[^161]:    ${ }^{135}$ NSARM, Parrsboro Shipping Registry, Spicer family fonds and Spencer's Island Company fonds, passim. Most of Charles S. Whitney's locally based shareholders agreed to take shares in the Glooscap about the time it was commenced in June 1889. In addition, J. F. Whitney and Company partners and associates once again registered mortgages over shares held in the vessel. Shareholders in Stephen D. Horton also received a $\$ 35,234$ insurance payout in February 1889, so accumulated dividends were a smaller component of local investors' capital reserves than for any other SIC-built ship. See NSARM, Spencer's Island Company fonds, 1997-174/017, \#13, 15.
    ${ }^{136}$ Sager with Panting, Maritime Capital, 127, 138-139.
    ${ }^{137}$ This is discussed in Chapter Two.

[^162]:    ${ }^{138}$ Robert Craig Brown, "National Policy," in The Canadian Encyclopaedia, retrieved from http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE\&Params=A1ARTA0005632, 12 September 2008.
    ${ }^{139}$ T. W. Acheson, "The National Policy and the industrialization of the Maritimes, 1880-1910," in Atlantic Canada After Confederation. The Acadiensis Reader: Volume Two (Fredericton: Acadiensis Press, Second edition, 1988): 164-165.
    ${ }^{140}$ Acheson, "The National Policy," 165,188 . Acheson notes that " $[t]$ he Maritime business community in the 1870's was dominated by three groups: wholesale shippers, lumber and ship manufacturers, and the small scale manufacturers of a variety of commodities for purely local consumption."
    ${ }^{141}$ Sager with Panting, Maritime Capital, 120-127, details Maritime Canada's retreat from shipping from the late 1870 s. Chapter Seven, "Merchant Shipowners in the Industrial Era," also investigates major port merchants' diversification into landward industries. However, neither section contains much assessment of overall capital constraints.

[^163]:    ${ }^{142}$ Acheson, "The National Policy," 165.
    ${ }^{143}$ Rosemary E. Ommer, "The decline of the eastern Canadian shipping industry, 1880-1895," in Journal of Transport History, 5 (1) (1984): 37. A significant portion of the insurance business probably related to shipping. See, for example, Paula Chegwidden Felt and Lawrence F. Felt, "Capital Accumulation and industrial Development in Nineteenth Century New Brunswick: Some Preliminary Comments," in Lewis R. Fischer and Eric W. Sager, eds., The Enterprising Canadians: Entrepreneurs and Economic Development in Eastern Canada, 1820-1914 (St. John's: Memorial University of Newfoundland, 1979), 68. The Felts note that Atlantic Canadian banks "were nearly always small, community-oriented ones" in the mid-nineteenth century: Even if banks were able to provide large quantities of finance, shipbuilders such as SIC preferred investors with their own capital resources given the variable returns finished vessels achieved.
    ${ }^{144}$ Sager, Fischer and Ommer, "Landward and seaward Opportunities in Canada's Age of Sail," in Fischer and Sager, Merchant Shipping and Economic Development in Atlantic Canada. As a result, the authors suggest that "Canadians never perceived the costs of opportunities foregone in their own carrying trades": 28.

[^164]:    ${ }^{145}$ Sager with Panting, Maritime Capital, 127.
    ${ }^{146}$ NSARM, Spencer's Island Company fonds, 2007-013/01. Letters from Federic Barnes \& Co., London care of Kenny Mahon and Company, 23 January 1894, 26 January 1894 and 26 February 1894.

[^165]:    ${ }^{147}$ Stanley Spicer, A Compilation of Sailing Vessels Built at Spencer's Island, 12.
    ${ }^{148}$ NSARM, Parrsboro Shipping Registry; NSARM, Spencer's Island Company fonds, 1997-174/015 \#18. In addition to members of the SIC and other local investors, initial shareholders in Perfection included New York-based Mark Shaw who took twelve shares and Henry Lewis, a shipowner from Sydney, Australia who took two. Shaw's business partner took a mortgage over one third of his shares, another third was mortgaged to New York Sailmaking Company and Charles Sumner Whitney held a mortgage over two shares. A letter from Nathan Eaton to Dewis Spicer, 12 June 1894 also suggests that Perfection was a very good earner: ""Perfection" cleared from Antwerp from Sydney C.B. [Cape Breton] May $24^{\text {th }}$ she has done very well paid her copper bill and disbts to date and divided $\$ 1600$ with some funds still on hand hope she will get coal to the St Lawrence and Lumber south Lumber freights of all kind are some better than last year." Based on the 380 ton tern Exception the SIC built in 1892, the Perfection probably had a total cost of about $\$ 22,500$, with $\$ 17,500$ allocated to the hull and spars account and $\$ 5,000$ to the outfit account: John Grant private collection.
    ${ }^{149}$ For example, Charles Sumner Whitney became involved with the New York Shipbuilding company. ${ }^{150}$ See, for example, New York Times, "Finland Rebuilds Merchant Marine," 20 April 1951; "2 New Freighters Welcomed By City," 29 November 1949; "Events of Interest to the Shipping World," 22 November 1953; 'To Start new cargo Service," 31 May 1952.

[^166]:    ${ }^{151}$ Stanley Spicer, Captain from Fundy, 61, 74-75. Stanley Spicer records that Emily Jane Spicer made husband George promise "not to ship either of their two younger sons as sailors."
    ${ }^{152}$ NSARM, Spicer family fonds, Letter from Nathan Eaton to Dewis Spicer, 3 November 1894: "Well Capt the R W Spicer house is vacant once more. I took my family across the bay a week ago and will plan to spend the winter there myself. Fred is boarding at Mrs Tuppers and I am staying at Mr Loomers. It was quite a solemn thing for me to do, but I thought it best with the present outlook for [ship] building."

[^167]:    ${ }^{153}$ Ibid., Letter from Nathan Eaton to Dewis Spicer, 25 April 1894: "Percy went to Boston but did not get a job think he will be home next week and try store keeping with us"; The Parrsboro Leader, 25 April 1901, "Spencers Island."
    ${ }^{154}$ NSARM, Spicer family fonds. Letter from George Spicer to Dewis Spicer, 23 April 1894; Grant private collection, Spencer's Island Company ledger, 28 October 1895, records that Percy Spicer acquired the stock and cash on hand for $\$ 3,629.71$.
    ${ }^{155}$ Grant private collection, Spencer's Island Company ledger, passim. Letterhead held by John Grant indicates that Percy Spicer operated as "The Spencer Island Company," but it was effectively a different business.
    ${ }^{156}$ NSARM, Spicer family fonds, Letter from Nathan Eaton to Dewis Spicer, 5 December 1894: "I am still on this side, boarding at Mr Loomers, have been travelling back and forth and expect to go over before Xmas." The next letter NSARM holds from Nathan to Dewis is dated 16 February 1895, by which time he was back in Canning.
    ${ }^{157}$ Ancestry.com, 1900 United States Federal Census, retrieved from http://search.ancestry.com, 10 April 2008. Viola R. Loomer was born to Lottie and Guy Loomer in September 1894.
    ${ }^{158}$ Ibid. It is unclear whether Guy's first wife died or otherwise departed, but by the 1900 United States Census, he had remarried and was living in Belmont, Massachusetts with his wife Adelina, while Viola resided with Amasa and Amanda Loomer, The census also records that Amasa and Amanda emigrated to Belmont, Massachusetts in 1895. Stanley Spicer, Compilation of Sailing Vessels, 13-14; Sails of Fundy: The Schooners and Square-riggers of the Parrsboro Shore (Hantsport: Lancelot Press, 1984), 89-116; NSARM, Parrsboro Shipping Registry, report Johnson Spicer as Spencer's Island's principal shipbuilder between 1900 and 1903.
    ${ }^{159}$ Stanley Spicer, A Compilation of Sailing Vessels, 12; Captain from Fundy, 122; Parrsboro Leader, "Spencers Island," 25 April 1901. Johnson told the Parrsboro Leader reporter that the Glooscap was his last command, but he was evidently pleased with the speed of his passages: "The last three trips he made in her

[^168]:    were from Monte Video to Sydney, Aus., in 38 days; Newcastle to Manila, 84 days; Manila to New York 142 days."
    ${ }^{160}$ Stanley Spicer, A Compilation of Sailing Vessels, 12.
    ${ }^{161}$ Parrsboro Leader, "Spencers Island," 25 April 1901
    ${ }^{162}$ Ibid
    ${ }^{163}$ George took command of the Glooscap, the largest square-rigger built at Spencer's Island, in August 1891 and was still waxing lyrically about its performance at sea and its income earning ability two years later. See, for example, NSARM, Uncollated Spencer's Island Company material, 2007-013/01, letter from from George Spicer in Melbourne, to Dewis Spicer, 10 July 1893: "They [the surveyors] think the Glooscap a fine ship. the old inspector told me I need never be afraid to bring her here for a cargo. we will gross $£ 5150$ (about $\$ 25,000$ ). $£ 2500$ outward $£ 2650$ back and if I remember right you grossed to same $£ 2300$ and $£ 2850$ including Demurage at Falmouth and my Expenses here should not be any more than yours"; Stanley Spicer, Captain from Fundy, 104, 105: George officially retired from seafaring in 1910 apart from one voyage he undertook to spell youngest brother Edmund in 1911.
    ${ }^{164}$ Ancestry.com, 1900 United States Census. Amasa Loomer was sixty years old when he emigrated. George's youngest brother Edmund and brother-in-law Levi Atkins also continued as mariners of sail vessels into the twentieth century.
    ${ }^{165}$ NSARM, Spencer's Island Company fonds, 1997-174/015 \#18. Note from Nathan Eaton to Dewis Spicer congratulating him on the birth of a son, 23 December 1895. The note was on Cornwallis Creamery Co. (Limited) stationary.
    ${ }^{166}$ Arthur Wentworth Hamilton Eaton, The Eaton Family of Nova Scotia (Cambridge, Mass.: Privately printed by The Murray Printing Company, 1929), 119.

[^169]:    ${ }^{167}$ Recollections by descendants and Charlie Davison of Parrsboro, whose family worked at Newville Lumber Company and currently own the land the company was situated on.
    ${ }^{168}$ Nova Scotia Historical Vital Statistics, retrieved from http://novascotiageneology.com, 16 April 2008, records Antoinette Sayer's marriage to H. C. Jenks in 1898.

[^170]:    ${ }^{1}$ See, for example, Eric W. Sager with Gerald E. Panting, Maritime Capital: Ther Atlantic Shipping industry in Atlantic Canada, 1820-1914 (Montreal and Kingston: McGill-Queen's University Press, 1990); Charles Knickerbocker Harley, "Shipbuilding and Shipping in the late Nineteenth Century. A Study of Technological Change: Its Nature, Diffusion and Impact," (Phd. Thesis: Harvard University, 1972); C. K. Harley, "on the Persistence of Old Techniques: The case of North American Wooden Shipbuilding," in Journal of Economic History XXXIII (1) (1973): 372-398; C. Knick Harley, "North Atlantic Shipping in the Late Nineteenth Century Freight rates and the Interrelationship of cargoes," in Lewis R. Fischer and Helge W. Nordvik, eds., Shipping and Trade, 1750-1950: Essays in International Maritime Economic History (Pontefract: Lofthouse Publications, 1990): 147-171; Gerald S. Graham, "The Ascendancy of the Sailing Ship 1850-85," in The Economic History Review, New Series 9 (1) (1956): 74-88; Richard Rice, Shipbuilding in British America, 1787-1890: an Introductory Study (Phd. Thesis: University of Liverpool, 1977).

[^171]:    ${ }^{2}$ T. W. Acheson, "The National Policy and the Industrialization of the Maritimes, 1880-1910," in P. A. Buckner, Gail G. Campbell, David Frank, eds., Atlantic Canada before Confederation: The Acadiensis Reader Volume Two, $3^{\text {rd }}$ Edition (Fredericton: Acadiensis Press, 1999), 164-165.
    ${ }^{3}$ Daniel Vickers with Vince Walsh, Young Men and the Sea: Yankee Seafarers in the Age of Sail (New Haven and London: Yale University Press, 2005).
    ${ }^{4}$ Acheson, "The National Policy and the Industrialization of the Maritimes."

[^172]:    ${ }^{5}$ Eric W. Sager, Seafaring Labour: The Merchant Marine of Atlantic Canada, 1820-1914 (Montreal and Kingston: McGill-Queen's University Press, 1989), 173.

[^173]:    Source: Amherst Deeds and Land Registry Office, Probate Record 4734.

[^174]:    Wooden Ships and Iron Men: The Story of the Square-Rigged Merchant Marine of British North America, the Ships, their Builders and Owners, and the Men who Sailed Them. London and Toronto: Hodder and Stoughton, 1924.

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