

# CANADA'S WAR<sup>AT</sup> SEA



---

CANADA AND THE SEA *by Stephen Leacock*

CANADA AND THE WAR AT SEA *by Lillian Roberts*

**\* A Distributed Proofreaders Canada eBook \***

This ebook is made available at no cost and with very few restrictions. These restrictions apply only if (1) you make a change in the ebook (other than alteration for different display devices), or (2) you are making commercial use of the ebook. If either of these conditions applies, please contact a FP administrator before proceeding.

This work is in the Canadian public domain, but may be under copyright in some countries. If you live outside Canada, check your country's copyright laws. IF THE BOOK IS UNDER COPYRIGHT IN YOUR COUNTRY, DO NOT DOWNLOAD OR REDISTRIBUTE THIS FILE.

*Title:* Canada's War at Sea: Volume 1: Canada and the Sea

*Date of first publication:* 1944

*Author:* Stephen Leacock (1869-1944)

*Date first posted:* Mar. 20, 2017

*Date last updated:* Mar. 20, 2017

Faded Page eBook #20170327

This ebook was produced by: Alex White & the online Distributed Proofreaders Canada team at <http://www.pgdpCanada.net>

# *Canada's War at Sea*

IN TWO VOLUMES



Volume I

## CANADA AND THE SEA

*by*

STEPHEN LEACOCK



Volume II

## CANADA AND THE WAR AT SEA

*by*

LESLIE ROBERTS



*“It is not in a spirit of adventure that they are pressing forward in such numbers. Rather are they enlisting in the spirit of the Crusaders of old, prepared, if need be, to give their lives for what, to them and to us, is holy and sacred—the birthright of liberty and happiness in a free land. This fortitude and devotion must be guarded and protected by every power we possess.”*

—RIGHT HONOURABLE WILLIAM LYON MACKENZIE  
KING

FIRST EDITION—DECEMBER, 1944

PHOTOGRAPHS BY THE  
COURTESY OF DEPARTMENT OF  
PUBLIC RELATIONS, ROYAL  
CANADIAN NAVY, DEPARTMENT  
OF MUNITIONS AND SUPPLY,  
NATIONAL FILM BOARD,  
DEPARTMENT OF TRANSPORT,  
WARTIME SHIPBUILDING, ETC.,  
ETC.

•

*Production by*  
ROSLYN WATKINS

•

Copyright 1944  
ALVAH M. BEATTY  
MONTREAL

•

*Printed in Canada*

Volume I

*Canada and the Sea*

*by*

STEPHEN LEACOCK



ALVAH M. BEATTY

*Publisher*

PUBLICATIONS (1943) LIMITED

1075 Beaver Hall Hill—Montreal

1944



*The Right Honourable William Lyon Mackenzie King,  
P.C., LL.D.*

has been at the helm of Canada's ship of state for eighteen years, his last term commencing in 1935. He has carried the burden of directing Canada's war effort as well as the internal economy of the Dominion. Grandson of William Lyon Mackenzie, Canada's Prime Minister was originally a student of social welfare, then a progressive exponent of Labor reform and Dominion Deputy Minister of Labor. This year Mr. King celebrated the 25th anniversary of his accession to leadership of the national Liberal party.

## *Foreword by*

### The Prime Minister

The story of Canada's War at Sea is a record of building ships; of manning the naval vessels of the Royal Canadian Navy and the cargo ships of the Canadian Merchant Navy; and of the valour and endurance of Canadian sailors and merchant seamen on all the oceans.

In 1940, after the Germans had overrun Western Europe, the nations of the British Commonwealth stood alone in arms with the exiled forces of the occupied lands against the might of Nazi Germany. Britain stood then, the beleaguered citadel of world freedom. Her resistance depended on the North Atlantic life-line. Canada's navy, Canada's merchant fleet and the builders of Canadian ships had a vital part in holding that life-line of freedom.

Canadian shipyards have worked with unremitting zeal to build the ships; the young men of Canada, from the inland provinces as well as from those by the sea, have joined the navy in their thousands; Canada's share of the convoy work in the North Atlantic has doubled and redoubled in the years of war. The anti-submarine war has been our navy's first task; but Canadian destroyers have repeatedly engaged enemy surface craft and have many gallant exploits to their credit.

I am pleased the story of Canada's War at Sea is being told now while it is fresh in the minds of those who have watched it unfold. One of the authors of this volume, Leslie Roberts, went to sea and lived with the navy over an extended period. He has written the part of the story relating to the present war. He brings to its pages the tang of the sea and the loneliness of the long vigils on convoy duty.

The background of the story, the part which deals with the maritime history of Canada, is by one who is no longer in our midst. Stephen Leacock had a unique place in Canadian letters. His share in this volume was his last major work. Canadians who love the sea and all who have served at sea will welcome the thought that Stephen Leacock's last writing was associated with Canada's War at Sea. It will stand as a fitting farewell to his countrymen.

NOVEMBER 1ST, 1944.



*Minister*



# Table of Contents

## CHAPTER I

### THE SEA COAST OF CANADA

13

*Our Heritage of the Sea—A Coast Line of 14,820 Miles—The Harbours and Sheltered Seas of Canada—The Great Off-Shore Islands—The Lake and River Chain—A Country Open to the Sea*

## CHAPTER II

### THE TWILIGHT OF OUR EARLY SEA HISTORY

17

*The Coming of Man to America—Land Chain of the Alaskan Seas—Vast Lapse of Time Obliterates all Record—Pytheas the Greek in the Northern Seas—Coming and Going of the Vikings*

## CHAPTER III

### EXPLORATION AND DISCOVERY

21

*Early Navigation—The Dead Reckoning of Christopher Columbus—Ships and Rigging—Fore Castles and Square Yards—Astrolabes and Cross Staffs—The Santa Maria on Toronto Bay—Jacques Cartier's Ships—Sailing and Tacking—The Fisheries of the Banks—A Hundred Silent Years*

## CHAPTER IV

### IN THE DAYS OF NEW FRANCE

25

*New England Follows the Sea, New France the Forest—The Bateaux of the St. Lawrence—La Salle's Project of Ships on the Lakes—Success and Shipwreck of the Griffon—War Fleets of Canoes—Ships of War on Lake Ontario—The Oswego and the Ontario of 1755*

## CHAPTER V

### PEACE AND WAR ON HUDSON BAY

29

*The French and the Hudson's Bay Company—Radisson Changes Sides Again—Attacks from French Canada—The Crusade of the Chevalier de Troyes in 1686 by the Ottawa-Abitibi Route—Iberville's Naval Victory of 1697—Fort Prince of Wales—La Pérouse in the Bay 1782—Capture of Fort Prince of Wales*

## CHAPTER VI

### BRITANNIA RULES THE LAKES

33

*Lake Shipping after the Conquest—The Provincial Marine—First Vessels on Lake Superior—The New Lake Types of Sail—Fore and Aft Rig and Centre Boards—The Ships of War of 1812—The Naval Attack on York in 1813—Perry's Victory—The Rush-Bagot Convention of 1818 bans War Vessels from the Lakes*

## CHAPTER VII

### BY THE ST. LAWRENCE TO THE SEA

37

*Canada The Gift of the St. Lawrence—Ascent of the River in Old Days—The Coming of Steam—John Molson Accommodates the Public—Sailing Ships at Montreal—Will Leave On or About—The Lachine Canal of 1825—Mr. Dickens is Delighted—Ocean Liners and the Allan Line—Sail and Steam Together; Days When a Voyage was a Voyage—The Sarmatian, the First Last Word in Steamers—White Wings that Grow Weary—Beating out Nature—Channels, Lights, Marks, Icebreakers and Flood Walls—The Moving Panorama of the River*

## CHAPTER VIII

### THE ARCTIC VOYAGES

41

*The Lure of the North West Passage—The Amazing Mr. Dobbs Searches for India in Manitoba—The Hudson's Bay Company's Annual Voyages—Descriptive Narratives, Captain John Franklin (1819), R. M. Ballantyne (1841)—Revival of the North West Passage and the Search for the North Pole as a Form of National Adventure, Sport and Science—The Voyages of Ross*

*and Parry—Parry Originates the Dash for the Pole—Ross Lost for Four Years—The Tragedy of Sir John Franklin*

## CHAPTER IX

### THE CALM PACIFIC

47

*Captain Cook Annexes the Pacific—Nootka Sound and Spain—Vancouver Reveals the Pacific Coast from the Sea, Mackenzie from the Land—The Fur Companies Reach the Pacific—Oregon the Unknown—The Rush for Gold—Fort Victoria at the End of the World—Hail Columbia, British*

## CHAPTER X

### THE GREAT SHIPPING DAYS OF QUEBEC AND THE MARITIMES

53

*Great Days of the Wooden Sailing Ship—British North America Leads the World—The New Clipper and the Old Indiaman—The Maritimes and the Sea—Whalers and World Voyages—Beat this Who Can, says Saint John—Quebec's Forest of Masts—Sillery Cove and the Timber Ships—Yarmouth and its Fleet*

## CHAPTER XI

### THE TWENTIETH CENTURY

59

*Isolation Impossible in the World of Today—Rapid Development of Canada in the Twentieth Century—The Royal Canadian Navy—Its Share in the Great War of 1914—The Period Between Wars—The St. Lawrence and the Port of Montreal—Vancouver and the Pacific—The Arctic Coast—Our Outlook Beyond the Wars*

## *Illustrations*

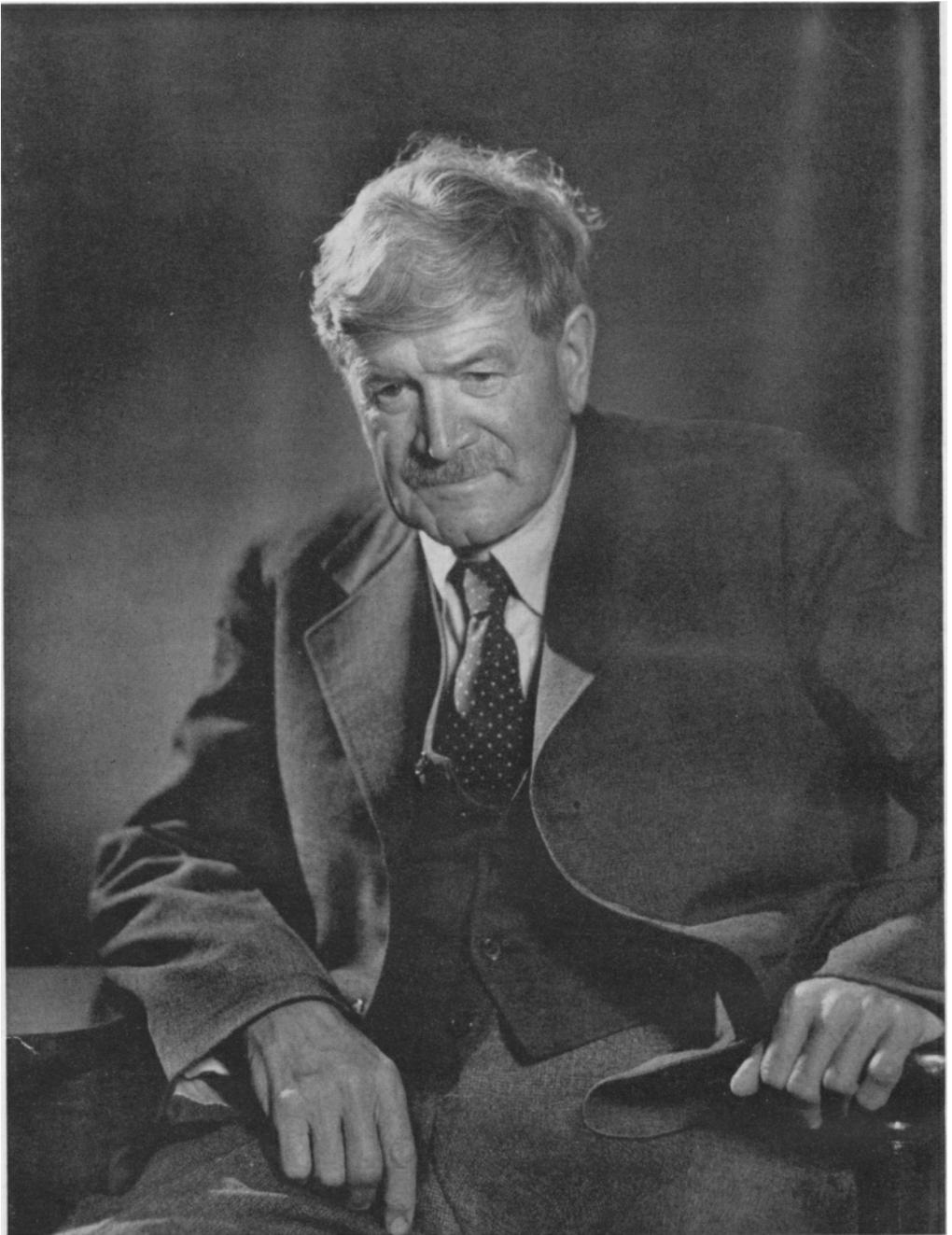
Reproductions of oil paintings by LIEUT. ERIC RIORDON, RCNVR:

<a href="#"><u>THE NORSE OR VIKING SHIP</u></a> .....	12
<a href="#"><u>THE GRAND HERMINE OF JACQUES CARTIER</u></a> .....	16
<a href="#"><u>THE GRIFFON OF CAVELIER DE LA SALLE</u></a> .....	20
<a href="#"><u>THE BATEAUX OF THE ST. LAWRENCE</u></a> .....	24
<a href="#"><u>THE TOPSAIL SCHOONER NANCY OF 1789</u></a> .....	28
<a href="#"><u>THE ATLANTIC PACKET</u></a> .....	32
<a href="#"><u>SAIL AND STEAM ON THE ST. LAWRENCE</u></a> .....	36
<a href="#"><u>THE LAKE SCHOONER</u></a> .....	40
<a href="#"><u>A NOVA SCOTIA SCHOONER</u></a> .....	45
<a href="#"><u>THE QUEEN OF INLAND NAVIGATION</u></a> .....	46
<a href="#"><u>THE GREAT LAKES FREIGHTER</u></a> .....	52
<a href="#"><u>OCEAN LINER OFF QUEBEC</u></a> .....	58

## *Historical Maps*

<a href="#"><u>DISCOVERY OF THE ATLANTIC COAST</u></a> .....	14
<a href="#"><u>GREAT CIRCLE DISTANCES</u></a> .....	22
<a href="#"><u>PEACE AND WAR ON HUDSON BAY, 1610-1783</u></a> .....	30
<a href="#"><u>ARCTIC DISCOVERY</u></a> .....	43
<a href="#"><u>PACIFIC COAST HISTORICAL</u></a> .....	48
<a href="#"><u>SEA ROUTES FROM BRITISH COLUMBIA</u></a> .....	50

The maps in the present volume are intended only as sketch-maps to elucidate the reading of the text. Names not relevant are omitted.



*Stephen Butler Leacock, 1869-1944,*

was born in the Isle of Wight and came to Canada in 1876 where he lived on an Ontario farm, on Lake Simcoe, for six years. After five years at

Upper Canada he graduated from the University of Toronto in 1891 and later from the University of Chicago. He was made head of the Department of Economics and Political Science at McGill in 1908 and held that position till his retirement in 1936. Professor Leacock published over forty volumes of essays, biography, history, economics, political science, satire, humour and nonsense. Many of his works were translated into French, Russian, Chinese and German. In addition to two degrees received in course (B.A., Toronto; Ph.D., Chicago) he received honorary degrees from Brown, Dartmouth, Queens, Toronto, Bishop's and McGill.

## *Author's Foreword*

I feel it an honour to be associated with the preparation of this work and it has been a great pleasure to me to write my contribution to it. The main emphasis of the work of course does not rest on the historical introduction which it has been my part to prepare but on the glowing and heroic pages which recount the deeds of Canadian men on Canadian ships under the dangers and stress of maritime war, and the fine and unremitting effort made by those who have worked for the sea on the land so that the courage of our fighting men should not fail for lack of support. Canada owes a full recognition to the gallantry of the Naval Service, to the unflinching endurance and tranquil bravery of the Merchant Service and to the wise guidance from those in authority at Ottawa which has co-ordinated their efforts towards victory. There is a funded debt of gratitude to be carried down the years.

Yet even for such heroic pages it is fitting that the present scene should draw a fuller meaning by standing out against the background of the past. For every great nation the past is a part of the present. We can appreciate better the achievements of the hour when we realize that they spring from no sudden chance, no fortuitous gathering of elements but rest upon more than three centuries of previous achievement, shared by both our two great nations, in the fine exploits of maritime discovery and combat which are interwoven in the tapestry of our national history. To present these as a preface to the still more glorious achievements of to-day has been my aim in this undertaking.

McGILL UNIVERSITY

MONTREAL

JANUARY, 1944

*Stellen Leaven*



## THE NORSE OR VIKING SHIP—EARLIEST VESSELS IN OUR OCEAN WATERS

The ships of the Norsemen, often called Viking ships, were the first ocean vessels definitely known to have entered our Canadian seas. In these vessels the Norsemen, already established in Iceland, made their way to Greenland in 980 A.D. where they planted a colony which lasted for over three centuries. From Greenland they reached the American mainland, discovering first a barren land of slate and stone (Labrador) and south of it a land of forests (Nova Scotia) and a land of corn and wild grapes (Massachusetts). Attempts at settlement led to attacks of the savages. The Norsemen preferred their empty Greenland.

## CHAPTER ONE

### THE SEA COAST OF CANADA

Our Heritage of the Sea—A Coast Line of 14,820 Miles—The Harbours and Sheltered Seas of Canada—The Great Off-Shore Islands—The Lake and River Chain—A Country Open to the Sea

The present vast naval establishment of Canada, the merchant marine which floats beside it and the huge ship building industry on which both are based, bespeak the immediate interest of our Dominion in the sea. But indeed our interest, our use and custom of the sea and the abiding attraction which it has for us, go much further back in time than our Dominion itself, or even our national history. It is a part of our inheritance, a part of the origin and the life story of the two races from whom our people are chiefly descended.

It is true that a large part, by far the larger part, of the people of Canada live out of the sight and the sound of the sea. Two of our provinces are entirely landlocked with no harbour on the sea, and even the sea coast of Ontario (on James and Hudson Bay) which few of its people have ever seen, sounds as out of place as Shakespeare's mistaken "sea coast of Bohemia." But that does not lessen the importance of what the sea has meant to us in the development of race, of what it has meant in the evolution of our history, and of all that it means for our future. Canada with a sea coast on three great oceans is a maritime nation, and this outlook, this contact with the sea reaches to the quietest corners of inland Ontario and sends a breeze from the salt water across the grain fields of Saskatchewan. The sea is part of our destiny.

The sea coast of Canada fronts on all three oceans of the Northern Hemisphere—the Atlantic, the Arctic and the Pacific. It has a total length, as estimated by our Hydrographic Survey, of 14,820 statute miles. This means the coast line of the mainland measured as a more or less direct line. If we include the contour of the great islands which lie off the Canadian shores we get a total length of 34,659 miles of coast. Soviet Russia lying on the salt water of the Baltic and Black Seas and on the Arctic Ocean, its shores not yet accurately surveyed, has presumably a longer coast than ours. But coastline after all is a peculiar and varying index. Compare Chili, running towards a maximum of length with a minimum of breadth, and Australia, shaped like a circle, running towards a minimum of coast for its area. The case of our neighbour Alaska<sup>[1]</sup> is peculiar. Its outline is to a great extent made up of islands; it reaches eastward with its "Panhandle";

[1] *H. W. Clark,*

westward it extends so far with its Aleutian chain that the end of it reaches past the international date-line of 180 degrees beyond which is always tomorrow—or would be but that the United States forbids it. Alaska indeed is so peculiarly shaped that if it were superimposed on the United States the top centre of it would be at Duluth, the Panhandle would be at Savannah, Georgia, and the outlying Aleutians (very profitably) at Hollywood, California. Its coast is longer than all the rest of the continental coast of the United States.

There is no such "freakishness" about the coast of Canada. The wandering curves of its coasts only enhance the facility of communication and guarantee harbours and shelter. At its southern terminus are the Bay of Fundy and the great circle of the Gulf of St. Lawrence from Cape Breton Island to the Straits of Belle Isle. Hudson Strait and Hudson Bay open up a vast inland sea, and on the Pacific side the coast of British Columbia is one continuous stretch of bay and fiord, inlet and sea way. This indented coast is, and has been throughout history, one of the salient advantages of Canada and indeed of North America. The "stern and rock-bound coast" sounds grim in poetry but in reality it means a coast offering at every turn shelter and safety and points of embarkation. To its earliest explorers, to Champlain and those who followed, the Bay of Fundy must have offered a marvellous prospect—with each successive harbour, each wooded inlet, each sheltering island lovelier than the last.

To appreciate the beauty of our Canadian coast in this respect one has but to compare it with the hundreds, the thousands, of miles of the western coast of Africa. Here to the innocent eye of a child, or a painter, nature seems to blend and harmonize land and sea to one consenting contour—low, green shores, the sanded desert stretching to the sanded beach, together with an approach of sea to land, so soft, so slow, wooing the land—this, in reality, in the geological sense, is territory that the unending breaking of the sea has conquered. This is land of which the sea has made what it would fain make of the Channel Coast of England or the stubborn rock of Nova Scotia—this unending shore of Africa, all pounded and broken into sand where the sea meets it day and night, in calm and storm, with a long roll of breaking surf that forbids all access. Our Sable Island, 110 miles off Cape Canso, Nova Scotia, the "graveyard of the Atlantic" with over two hundred recorded wrecks, is, as it were, a little piece of Africa, broken off to warn us what the sea could do.

Our coast is rendered more varied, more majestic and more sheltered still by the great number of islands, some of colossal size, which girdle it from end to end. One thinks at once of Grand Manan in the Bay of Fundy, of Cape Breton Island (3,120 square miles) split off from Nova Scotia by the mile-wide Strait of Canso and riven

in twain by the Bras d'Or Lakes; of Prince Edward Island (2,184 square miles), itself a province, with a coast line as broken as that of the parent continent; of the Island of Anticosti, a hundred and thirty miles long, an area of 4,000 square miles (half the area of Wales); and as the greatest of all in size, significance and history, Newfoundland (42,734 square miles), our lost sister, or is it our truant mother?, bound to us in spite of itself by geology and geography.



But the islands most imposing in size are those of the great Arctic Archipelago in

what used to be called, until it became unfashionable, the “frozen seas.” Of the economic value of these Arctic islands, in summer at best a fishing coast and a treeless pasture of grass and flowers and flies, in winter a desolation, we may none the less in this age of minerals entertain certain hopes. England’s acquaintance with them began when Martin Frobisher brought home to Queen Elizabeth a ship-load of gold (fool’s gold, iron pyrites) from Baffin Island<sup>[2]</sup>. But the shipment may yet prove as momentous as when John Hawkins brought to the same Queen “niggers” from Guinea and Raleigh tobacco from America. But in size, as just said, the islands are truly imposing. Baffin Island, the largest, contains 200,000 square miles and is almost ten times the size of Nova Scotia; second to it are Victoria (80,000) and Ellesmere (75,000) and half a dozen others each larger than the Province of Prince Edward Island.

[2] *Richard Hakluyt, “Principall Navigations of the English Nation,” 1598-1600*

On the Pacific coast Vancouver Island (12,400 square miles) is world famous for its history, its beauty and its outlook on a new world in the making. Above it extends an innumerable chain of Pacific Coast Islands and notably the spacious and fertile group of the Queen Charlotte, temperate in climate, rich in resources, sleeping still, hardly known, scarcely used a century after their discovery (1787).

But the word “innumerable” quite rightly designates the islands, as also the lakes, of our fortunate country. Thus—to quote examples only from territory now accurately surveyed<sup>[3]</sup>—in an area of 6,094 square miles south and east of Lake Winnipeg there are 3,000 lakes; in an area of 5,294 square miles, accurately mapped, southwest of Reindeer Lake in Saskatchewan there are 7,500 lakes; in the area of the Georgian Bay there are, as commonly and currently estimated, some thirty thousand islands; and much of the Mistassini country in northern Quebec appears indistinguishable as to whether made of lakes surrounded by land, or islands surrounded by water.

[3] *“Year Book of Canada,” 1941*

The vast inland reservoirs of fresh water represented by the chain of lakes of the Mackenzie River system (Athabasca, Great Slave, Great Bear) and by the Great Lakes of the St. Lawrence basin, stand in a peculiar connection with the sea. They bring it as it were inland to the very heart of our country. We commonly think of rivers as running to the sea, as they undoubtedly do. But seafaring people think of the sea as running into the land, as, from their off shore viewpoint, it does. If we reverse the gear of our common thought to the opposite direction, and think of the St. Lawrence and the Mackenzie as *running inland* we find a sea way that penetrates into Canada from the Strait of Belle Isle and Cabot Strait inland 1,168 miles past Montreal to Fort William; and one that passes from Aklavik, the Arctic

harbour of the North West Territories, for an unimpeded voyage to Fort Smith on the Slave River, beside the Alberta boundary, 1,292 miles away. Already ports far inland, such as Fort William and Port Arthur, are sea ports in so much that ships, actually from the distant seas, lie at their docks. The completion of the St. Lawrence Seaway, now an international certainty, will carry seafaring to the heart of the continent. Our Canadian transport began with the canoe and the portage. The cycle of innovation has turned a full circle. The ocean steamer and the canal have brought it back to where it started.



THE GRANDE HERMINE OF JACQUES CARTIER—FIRST VESSEL TO  
ASCEND THE ST. LAWRENCE

The Grande Hermine was the largest of the three vessels with which Jacques Cartier in his second voyage (1535) successfully passed the tides and currents of Anticosti, ascended the St. Lawrence and discovered Canada. She was of the type called a carvel, the principal ocean ship of the days of Mediterranean, Spanish and Portuguese commerce. Clumsy under sail these carvels carried more people and heavier armament than the type of long open vessels which they displaced.

## CHAPTER TWO

### THE TWILIGHT OF OUR EARLY SEA HISTORY

The Coming of Man to America—Land Chain of the Alaskan Seas—Vast Lapse of Time Obliterates all Record—Pytheas the Greek in the Northern Seas—Coming and Going of the Vikings

The original “Canadian”—indeed the original American—arrived by sea. His “people” came from Asia after a migration that had covered so many thousand miles of distance and so many thousand years of time that he did not know that he had migrated or even that he was on the move. Presumably he was of the Mongolian type represented still so directly by the Eskimos, by the vanishing Aleuts of the Aleutian Islands, by the Thlingit Indians of Alaska and indirectly by all the Indians of America from Point Barrow to Tierra del Fuego. Anthropologists do not doubt that the animal man, originated as one stock, a first cousin but not a direct descendant, of the baboon and the larger apes. It is out of the question that different forms of men originated separately in different parts of the earth and then intermingled, and still further out of the question that one and the same kind of man (the one we know) originated in the same form in separate places. All archaeological evidence—buried bones and skulls, remains of implements and immemorial refuse heaps buried for uncounted centuries—point to Asia as the first home of mankind, and within this capacious birthplace the original cradle may well have been somewhere in the uplands of Persia and the Bible Lands of Mesopotamia. From this central point man migrated in all directions, responsive to the roving instinct that seeks food and avoids danger. Some portion of the human race thus moved gradually across Central Asia and beyond it to the inhospitable regions of the far north east of what is now Siberia, the coldest, bleakest place in all the world where Verkhoyansk holds the world’s record for cold, marking down to 94 below zero. Thus wandered primitive men from one bleak region to another, and finally to the sea where he made his fortunate transit across the Bering Strait, or along the Aleutian Islands and thus reached America. From this first Alaskan lodgement mankind wandered, or rather filtered, on down the continent, moving towards sunshine and warmth, all the way till their furthest advance reached the cold again over nine thousand miles below in Patagonia. But certain groups migrated from their first Alaskan landings along the Polar Seas. These were the Eskimos—acquiring as they went, in the course of centuries a culture of their own, following the coast to Hudson Bay and down and round it to Ungava and finally to Greenland.

We cannot doubt, all scientists accept, this origin of man and his sea-transit to America. Given plenty of time and it is easy enough. There may have been still easier island bridges above water in those days. But even without them the islands in Bering Strait are within sight of one another, and people with any kind of primitive boats might make the longer but warmer Aleutian transit.

Man in America is therefore a new comer, unable to rival the aristocratic descent of the baboon men of the Old World—the ape-man of Java (of whom it is hard to say which he is), or the Piltdown man of Sussex (intelligence just dawning) or the Neanderthal man of Germany—more jaw than brain.

But this accepted theory of the expansion of mankind into America is not needed to account for the spread of other forms of life plant and even animal. It is now widely believed that the American continent was originally broken away entire from Europe and Africa—into which its facial outline still fits marvellously—and was slowly rafted westward, or its loose foundations, across the Atlantic. It is still rocking on gently in the same direction a few yards every year. The original separation may well have carried out to sea a vast collection of animate life, as passengers on the raft. But man could not have been among them. He is not old enough.

---

But his use of the sea ended with the original transit. There was no coming and going, nor the faintest survival of transmitted memory of what had been left behind. The 1,000 languages of America, North, Central and South, connect throughout among themselves, but bear no trace of Asiatic kinship. Only for the tribal Indians of the Pacific coast and for the Eskimos did the sea remain a part of their life. The dug-out, after all only a floating tree, must be older than Noah's Ark: the Eskimos worked out the contrivance of the Kayak—their unsinkable boat of skin, the mainstay of their life—along with their snow house, the igloo, their mainstay against death from the cold. They thus were able to occupy all the northern sea shores of Canada including that of Manitoba and Ontario, later indeed abandoned, but occupied by them till almost within touch of history. In the narrative of the young French Baron Lahontan<sup>[1]</sup> recounting his marvellous journey (1687) into the present Minnesota, too marvellous for general belief, we read that he was told that beyond the sources of the rivers he ascended, other streams ran down to a great salt sea, and that on this sea lived men who paddled in boats of skin. But the Eskimos' use of the sea was merely that of fishermen along shore. There was practically no "sea faring" in the true sense.

[1] "*Lahontan's Narrative*," 1703

Still less was there for the generality of the "red" Indians who slowly spread

inland from the Pacific coast across the continent. Their life was turned away from the sea. They evolved a navigation for streams and sheltered waters, calm lakes and portages. Having evolved the bark canoe and the tobacco pipe they rested, like travellers after a long day's paddle, and were resting still when found. Nor did the Indians take to the sea even when they reached the Atlantic Ocean. Among the most miserable, in means of support, of all the half-starved Indians of the North were the Beothuks, the "Red Indians" (red grease, not skin) of Newfoundland who gave their name later to all the others. Miserable also appear the shivering Micmacs of the Gulf of St. Lawrence whose wretched condition evoked the pity of Jacques Cartier.

---

The real sea story for Canada begins with the arrival of the ships of the Vikings, driving over the waves from Greenland with the wind on the quarter, all life and colour, a great swelling sail of gold and blue, and a glitter of painted shields along the gunwale, and the foam smashing under the dragon-beak of the bow. These, if one may dare drop into the vernacular, were "the real boys."

---

But before paying the proper tribute to these great seamen of the north, never in their own range surpassed, one may turn a moment to the twilight memory of a great southern navigator, a Greek of more than a thousand years before them, who almost discovered America, and who if he had done so, would have made a better use of it than did the Norsemen who despised it.

---

Sailors' tales, even when quite true, often prove too wonderful for the belief of their friends ashore. When a ship load of Greeks came back from a three years' voyage and said they had been all round Africa and up the other side, they might have got away with the story except for their adding to it that when they went round the bottom of Africa the sun was in the north part of the sky, instead of the south. That proved them liars. So it was when Pytheas<sup>[2]</sup> came home from a long voyage and said that he had been away across the Ocean, clean past an island Ultima Thule, the last land, till he came to a place where the sea and sky came together, with a great crashing and hissing sound, and that there he had turned back. And it was probably all true. He was apparently right close to the coast of Greenland, could have seen it if the sky had cleared but the mist was rising, as it often does, so thick from the grinding and crushing of the ice pack—breaking into fragments, lumps and splinters, that land and sea all seemed one. As for the sound he heard, you may hear it any spring when the breaking ice of the St. Lawrence is

[2] *Sir Clements Markham, "Pytheas Geog. Journal," 1893*

carried past Lachine. The sight of the sea and sky meeting in mist may be seen, we are told, by anyone off Greenland at the season, and close by the coast.

---

Pytheas was not afraid of the open sea. The Romans were. The timid poet Horace writing verses in his vineyard, tells us that the man who first put out on to the dark sea must have had a heart of oak and been wrapped three times round in brass. No oak and brass for Horace! A book of verses underneath a vine was better. But the snug crowd under the forepeak of a viking ship, reading the verses of Horace—for some of them could read Latin—may well have chuckled over the notion of danger on the open sea.

Pytheas was a Greek of the Phoenician settlement of Marseilles. He lived three hundred years before the Christian era. He was a scientist equipped with all the Greek knowledge of astronomy and of the form and motion of the globe which the mediaeval world was to lose. He made a celebrated voyage out into the Atlantic and along the coast of Europe. He “discovered” the British Isles, “travelled all over Britain on foot” (the words are those of the historian Polybius), estimated its latitude and circumference. He brought home news of the “tin islands” on the coast of Cornwall. He sailed eastward along the shores of the North Sea, then westward six days from the ‘last land’ (Iceland). It was beyond this island and further west that he came to the meeting of sea and sky in the mist. Had the sky cleared he would have seen Greenland: from there the transit was easy to the mainland of North America. Had Pytheas ever seen, as the Norsemen did, the woods of Nova Scotia and the wild vines of New England he would never have let go of it as they did. Canada and Great Britain would have been discovered in the same voyage. Yet it made no difference. No one would have believed him. Even as it was, no one did. It was two hundred years before Mediterranean sailors came back to British shores: and thirteen hundred years before the Norsemen made their westward way past Ultima Thule to Greenland. Pytheas wrote an elaborate book, *A Journey about the Earth, or All about the Ocean*—it has different titles, sounding singularly up-to-date. But it was lost. It survives now only in quotations of other earlier quotations from it.

---

With the Norsemen began a real knowledge of the northern seas. As everybody knows they colonized Iceland, establishing settlements, schools, a centre of civilization<sup>[3]</sup>. From Iceland certain Norsemen (first Eric the Red) sailed on, or were blown, to Greenland. There they made a settlement, well equipped, with stone houses and barns, cattle and comfort, and trade with the home country. Inevitably the Norsemen

[3] F. Nansen, “In Northern Mists,” 1911

of Greenland were blown on to the mainland. We have in their sagas and in their records accounts of the Voyage of Leif Ericson to a land of rock and slate (Labrador), a “markland” of trees and woods (Nova Scotia) and a “softer country with grapevines and longer days”—Vineland—which is, or isn’t, New England. No one knows. They even attempted permanent settlement there: but their contact with the savages of the woods, with ambush and sudden death, gave them a horror of the place—as sailors are said to have of life ashore—and they left, never to return, except for random voyages in search of timber.

America was no lost paradise to the Norsemen. They just didn’t want it. Had they been in earnest about settlement their ships would have run back and forward as easily as a ferry. We are in some doubt of what Pytheas’s ship was like. Greek galleys of that date are known only from pictures in vases and are probably only about as truthful to a real galley as a willow-pattern plate to a willow tree. They look hopelessly clumsy and shallow, with a mast dead-centre and a sail as square as Euclid.

But the Norsemen’s ships, the first vessels ever to sail Canadian seas were wonderful things, superior in many ways (apart from their limited cargo space) to anything that sailed the seas in the days of Christopher Columbus. We do not have to guess what they were like from pictures distorted by an artist’s fancy. Several actual ships have been dug out from the heavy clay of the Scandinavian hill sides which has preserved them intact.

---

Moreover one of the Norse sagas<sup>[4]</sup>, the epic poems of old Norway, gives us a full account of the building of King Olaf’s ship. It was 135 feet long on the keel, a length which the sweeping rise of stem and stern would increase to 165 feet overall. People accustomed to hotel life will be amazed to hear that the ship contained “thirty rooms.” But these “rooms” merely meant “spaces,” one for each bench of rowers. Compare, as a matter of philology the “living room” which Mussolini needed in Ethiopia. This leaves 45 feet for the fore and after decks for cargo space and living, or rather “huddling” quarters. “The sailing equipment of these ships,” writes a technical authority<sup>[5]</sup>, “was rather rudimentary. Primarily intended to be propelled by oars, their floors were rather flat with very easy lines of entrance and departure. The sides rose almost vertically with quite a sharp turn in the bilge. With a free wind they must have sailed fast.”

[4] *“Saga of Olaf Trygg-Yason”*

[5] *Quoted by H. B. Culver; “Book of Old Ships,” 1924*

The mast of a Viking ship was not maintained upright all the time. When erect it

was wedged fast with a sort of wooden boot-jack and held with stays and shrouds but by slackening away these ropes it could be lowered or slanted back to any required extent to serve as a ridge pole for a tent-covering lashed over the entire ship on a still night at sea or when at anchor. The rudder was rigged, not at the extreme of the stern, but a little way along the right hand side of the boat, this side being therefore the “steer board” or “starboard.” The tiller stuck out sideways, not lengthwise, from the rudder post, the steersman thus sitting in board and holding the tiller as one does an oar, with two hands. The remains of Viking boats, such as the one in a Chicago museum are at best but venerable memorials of time and wear and decay. The actual reality must have been all life and light and colour: the coloured sail, full to the wind, the glittering shields, the sparkle of the polished wood and the foam that smashed white under the oars! Such were the first ships in Canadian waters.

---

The Norsemen abandoned Greenland. They ceased any regular visit to the settlement after the middle of the thirteen hundreds. When the Danes came again the settlers were gone—nothing left but the crumbled stones of roofless house and byre and church, over which slowly advanced the moving ice of the Greenland glacier. They may have died of the Black Death, the Plague which devastated all Europe, moving westward: they may have sought other homes: the best authority, Vilhjalmur Stefansson<sup>[6]</sup>, thinks that they were absorbed by moving hordes of Eskimos. At any rate they dropped out of the maritime history of Canada for six hundred years. Then with the coming of the Great War of 1939 Greenland suddenly assumed a new meaning to us, a European danger on our door step, a vital point in the air map of Europe and America, not to be left under the sovereignty of a small dairy-farm nation unable, not from lack of valour but from lack of numbers, even to protect themselves. Among the minor points of settlement of a later day will be the readjustment of the status of Greenland.

[6] *Vilhjalmur  
Stefansson,  
“Greenland,”  
1942*



THE GRIFFON OF CAVELIER DE LA SALLE—FIRST SAILING VESSEL  
ON THE UPPER LAKES

Robert Cavalier de La Salle (1643-1687), the explorer of the Mississippi designed a plan for building sailing vessels of size and armament on the Upper Lakes. These were to replace the paltry traffic of canoes and dominate the interior of the continent. The Griffon, intended as the first of the fleet, built after great pains and labour at Cayuga Creek on Lake Erie was lost on its first voyage in a great storm. With it ended La Salle's ambitious plan.

## CHAPTER THREE

### EXPLORATION AND DISCOVERY

Early Navigation—The Dead Reckoning of Christopher Columbus—Ships and Rigging—Fore Castles and Square Yards—Astrolabes and Cross Staffs—The Santa Maria on Toronto Bay—Jacques Cartier's Ships—Sailing and Tacking—The Fisheries of the Banks—A Hundred Silent Years

It was not for five centuries after the coming of the Norsemen that the great age of American discovery began. In its earlier phases the voyages were purely expeditions of discovery, of search for treasure which was not there and for countries eight thousand miles further on. We have to remember also that at this date maritime navigation was still a strange, haphazard business. Science was not yet ready for it. Galileo's telescopes and Newton's mathematics belong in the sixteen hundreds. Celestial navigation was still in its infancy. The ordinary Spanish and Portuguese pilots knew nothing of it and even Christopher Columbus next to nothing. Today an Alberta high school boy who never saw salt water can learn from his manual of physics that the altitude of the polar star, as seen from any particular place, shows the latitude of that place. At the pole the polar star is, practically, right over the spectator's head; at the equator, at his feet. The same boy will realize that one can always tell when it is noon because then the sun is at its highest for the day and every shadow at its shortest. If one has a watch set for Greenwich time one can tell by a comparison of twelve o'clock by the sun and by the watch how much difference in time there is between Greenwich and the place where one stands. This indicates its longitude, since obviously there are fifteen degrees for each hour to make twenty-four a full circle of 360 degrees.

But these principles can have no application without a set of delicate instruments to apply them. Columbus had been dead two hundred years before any one invented a watch that would keep time at sea. Such instruments as were available were so crude as to be of little worth—except on land where they at least stayed still. In Columbus's day there was a rudimentary appliance called an astrolabe. It was like a flat plate hung up by a string through a hole in the edge. A pointer was pivoted in the centre. The observer squinted along the pointer at a star and the slant of the pointer showed the height of the star. Champlain, who was well ahead of his time in all work of survey and navigation, used an astrolabe in his inland exploration of Canada, used one and lost it up on the Ottawa where it was found some three centuries later.

Columbus was not in that class. He had an astrolabe with him on his first voyage

but he couldn't use it<sup>[1]</sup>. Later on the navigators found that instead of an astrolabe shaped like a whole plate a quarter of a plate would do. It swung on one corner and had a plumb line hanging across it. It was tilted till one could see a star through eyelets along one edge when the plumb line would indicate the angle of the star's elevation. There were the equally simple devices of the "cross staff" and the "back-staff." Familiar pictures show Christopher Columbus in a heroic pose "shooting the North Star" with a cross staff. The truth is, as the latest and greatest of his biographers tells us, that he never saw a cross staff.

[1] S. Morison,  
"Admiral of the  
Ocean Sea," 1942

Indeed the navigation of the "admiral of the ocean sea" would, but for its venerable aspect, appear almost comic. He steered by "dead reckoning." To know how fast his ship was going he threw something over the side and took a guess. To know in which direction it was going he shook up his compass—a circular card, pivoted in a bowl, rocking and jamming with the motion of the ship—and took another guess. This second guess was doubly uncertain because Columbus and his fellow pilots knew that the compass varied from place to place but didn't know how much it varied in any one particular place<sup>[2]</sup>. The days of tables and nautical almanacs were still to come. As to longitude it was hopeless. Pendulums couldn't swing at sea. Ship's time was calculated by an *ampolleta*, or glass of dry sand that took half an hour to run out. Theoretically these half hours added up day by day and compared with the ship's noon would give degrees west of his starting point; practically they wouldn't; somebody had forgotten to turn the sand. Even on shore in America longitude west from Europe was for a long time just a guess. A scientific attempt to "locate" Mexico City by calculating the Mexico hour of day of an eclipse, as compared with the Spanish time of the eclipse, got Mexico correct "within 1,340 miles."

[2] E. Keble  
Chatterton, "Ships  
and Ways of Other  
Days," 1913

One might well say that under these circumstances the wonder is that Columbus ever got anywhere. The answer is that he never did. He was steering for Japan and landed in the West Indies. The story is well known that, to prevent his sailors from taking alarm at their increasing distance from home, Columbus gave out each day a false reckoning and kept the true one to himself. In reality his false reckoning was much the closer.

It appears further that Christopher Columbus as he grew old took on all the easy and pardonable vanity of old age and would speak of navigation as a "mystery," and talk of "taking the sun," a thing he couldn't do. Luckily for him it was impossible to miss hitting America. It blocks the way from the frozen Arctic clear down the globe

to the almost unpassable Cape Horn. Europe was slow in appreciating this simple but amazing geographical fact. For the two centuries between Columbus's "Indies" and La Salle's "La Chine," explorers butted at the continent to find a way round it or through it, as football players buck the line. Practically all the early voyages to what we now call Canadian waters originated from this impulse.

Columbus and those who followed him for a hundred years were impeded not only by their lack of celestial navigation but by the short-comings of the poor tubs they called their ships. We know those of Columbus best because various models and drawings have been made of them, in particular those made, or intended, as exact duplicates for the World's Fair at Chicago in 1893. These floated for many years in a lagoon at Jackson Park in Chicago: the *Santa Maria* still floats, precariously: the *Pinta*, foundering in 1918, and the *Nina* burnt to the lagoon's edge in 1919, have joined the vanished ships of yesterday. But the ship of Cabot and those of Cartier, Frobisher, Davis, Hudson and Baffin and of all the earlier discoverers of our coast were of this Jackson Park pattern. Authorities dispute the correctness of the carvels of 1893 but, taking them as made, we find that the *Santa Maria* was of two hundred tons: was sixty feet long on the keel with a full length of hull of ninety-three feet. But the ungainly superstructure that she carried—the box-like "fore castle" that rose high and stuck out in front and the "after castle," equally clumsy, which lingered behind, brought the total length of the *Santa Maria* to one hundred and twenty-eight feet<sup>[3]</sup>. She had three masts of which the centre one far exceeded the others and carried an enormously wide main yard. All ships of this class had relatively far more beam than Viking ships and fighting galleys. In the ancient days of Greece and Rome all ships fell into two general classes, "long ships" for fighting, and "round ships" for cargo. The *Santa Maria* represented the full and most matronly development of the round ship. Tubby and top-heavy, she rocked, rolled and pitched in any sea. On the homeward voyage she ran gently one night on to a coral reef—waking nobody—opened at the seams and went down.

[3] William Wood,  
"All Afloat," 1914

Such were the deficiencies and the disadvantages of Christopher Columbus. But after all he *did* discover America. Civilized Europe had had two thousand years to find it and hadn't done so. Such small facts as that Columbus couldn't navigate, or that Lord Nelson was habitually sea-sick may be left among the little ironies of maritime history.

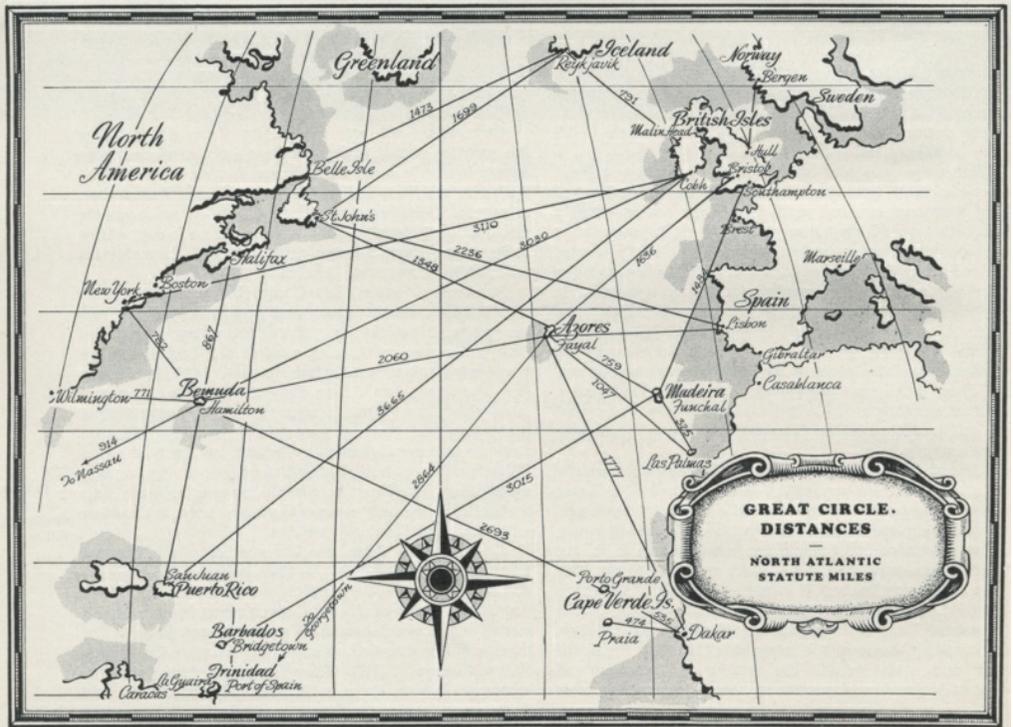
The *Santa Maria*, not the original but her Chicago Exposition duplicate or ghost of 1893, floated once in Canadian waters—as she ascended the Lakes. Some of us can still remember her at anchor on a still summer evening in Toronto Bay, a flock of

row boats around her and the Spanish sailors—the genuine article—they had sailed her out—looking down from the high aftercastle and standing about in the waist. It recalls Longfellow’s memorable verses that tell of,

*The Spanish sailors with bearded lips  
And the mystery and beauty of the ships and the magic of the sea.*

But for these particular Spanish sailors the sea had lost its magic. They had been too much rocked in the cradle of the deep by the sea-saw *Santa Maria*.

All the ships of the period were of this general class, commonly called carvels. Cabot’s ship, the *Matthew*, as far as is known, was a carvel but much smaller than the *Santa Maria* since eighteen men made her full crew. She is placed at fifty tons. Jacques Cartier’s largest ship the *Grande Hermine*, a vessel of over a hundred tons, was of the same type as the *Santa Maria* but carried only two masts, a square-rigged mainmast and a foremast. With these was a bowsprit, set, after the current fashion, at an angle of forty-five degrees and itself carrying a little mast and sail. Of the same type were the ships of the explorers of the north, Frobisher, Davis, Henry Hudson and Baffin.



But with the beginning of the sixteen hundreds a great and continuous improvement can be seen both in the art of navigation and in the building and rigging of ships, an improvement that is continuous from the days of the Tudors, when improvement was beginning, until the middle nineteenth century when the sailing ship reached its acme of beauty and efficiency just when its days were numbered. One realized the advance best by taking it in one single leap from the clumsy carvel *Santa Maria* to the clipper ship *Lightning* marking its record of 436 nautical miles in 24 hours, and the beautiful yachts, all aslant in the wind and sailing into it at “four points,” or forty-five degrees. This sailing into the wind or “tacking” was unknown in Columbus’s time. Ships that used oars—vikings and galleys—never needed it. Tacking came in as oars went out. It is commonly said to have first come into use as “invented” in England in Queen Elizabeth’s time. No doubt it came, like much else, half by accident as a consequence of deeper draft and better-cut sails. Gradually of course it transformed both the rigging and the hulls of ships, bringing in fore-and-aft sails, square yards that could be set all of a slant, and hulls with a clear run that would drag as little water as possible when heeled over. But all this was still centuries on.

---

All these early voyages to the coast of what is now the Dominion of Canada during the hundred years from John Cabot (1497) to Sir Humphrey Gilbert (1583), came to nothing as far as their immediate purpose was concerned but had amazing results in other directions. John Cabot was looking for Asia, and understood that he had found it. But the main consequence of his voyage was the opening up of the cod fisheries of the Grand Banks of Newfoundland and of the Gulf of the St. Lawrence. These banks are the “continental shelf” that runs out into a submerged plateau of half a million square miles, before the real ocean begins. This upper layer of these shallow waters is thick with “plankton,” the rudimentary form of animal life in water, such as floats as scum on ponds, a natural food of fish. Hence there were found in Cabot’s day inconceivable codfish to be taken out by the basketful without nets, food enough for the Fridays and fast days of all the pious Christians of western Europe<sup>[4]</sup>. The codfish on the older grounds round Iceland were as nothing.

Cabot’s voyage in 1497 and his discovery of the fisheries of the coast and the second fruitless voyage of 1498, in which he reached Baffin Island (lat. 66 north), came to nothing, we say, as far as the discovery of a route to Asia was concerned. But they had great consequences. Word went around about the marvellous draught of fishes to be had off the coast—the “New

[4] *H. A. Innes,*  
“*The Cod*  
*Fisheries,*” 1940

Isle,” they called it, and in French “Terre Neuve.” At this time the fishing fleets of northern and western Europe used to fish in the North Sea and around Iceland. The attraction of the new ground brought at once a flock of fishing vessels, at first French from the Channel ports and Basques and Spaniards from the Bay of Biscay. But presently, in the Stuart times, the English fleet, mostly out of the British Channel and Devon, was the largest of all.

It was a strange unrecorded traffic. No one wrote it up. Lescarbot, Champlain’s merry associate of 1604 and our earliest historian, who woke the first laughter out of the morose silence of an Indian continent, tells us that he knew an old fisherman who had made eighty-four crossings of the North Atlantic, forty-two round trips. But it all left no trace, no record. Even the names of places fell on them as from Heaven—Cape Breton, the Harbour of St. John and so on.

The fisheries went on thus for nearly half a century before they led to wider exploration. The fishermen neither wandered nor wintered. They landed only to get bait and cure fish. With the boats full they drove home on the north west wind. In the course of time they made their way from the Atlantic into the Cabot Strait and by the northern passage of the Strait of Belle Isle. But the fish were less plentiful there especially as the water got less salt. The bleakness of the North Shore (Cartier decided that God had reserved it for the murderer Cain), and the fierce winds and currents of the Gulf near Anticosti forbid further penetration towards the West. But there must have been the legend of a river. The Indians knew all about it. The current proved it. Every river is a mystery. One thinks of the unknown Nile, the mysterious Niger; so on our continent the legendary “River of Canada,” and, already discovered at the time of which we speak, the Mississippi. Hernando De Soto had gone inland (1541) through the sands and swamps of Florida, beyond all reckoning, and there came to a great flood of water moving south, from somewhere. He never lived to get out. But some of his men went on down the river and in time came to the sea and followed the coast and came to Mexico. But where the rivers came from no one knew. Old-time explorers must indeed have often wondered where they were. Nor could Indians tell them. Our Canadian Indians of “Canada,” questioned by Champlain, ran out of information beyond Lake Huron; one or two talked vaguely of a salt sea up the Ottawa river. For Vérendrye’s Indians of the Assiniboine (1738) the world ended somewhere round South Dakota. The South Dakota Indians knew there was a sea beyond the mountain.

Such was the background and such was the legend which led Jacques Cartier to his immortal discovery of the Saint Lawrence. It is characteristic of the period that he passed a large French ship from the Port of Rochelle as he went in through Belle Isle

Strait. He thought nothing of it: no doubt there were plenty. Contrary winds and the Anticosti currents drove him away in 1534 but he came again in 1535, ascended the River to “Canada” and clear past it to Hochelaga and began therewith our Canadian history. Religious wars at home, the first call upon a religious people, kept the French away for half a century more. Then came Champlain and the definite foundation of New France.



## THE BATEAUX OF THE ST. LAWRENCE—THE DAYS BEFORE THE STEAMBOAT

The word bateau in French means in the general sense any boat or craft. But in our Canadian history it is specially applied to the type of boats used for the navigation of the St. Lawrence in the days before steamboats and canals. These bateaux were shallow, flat-bottomed boats about forty feet long, of so little draft that they could be poled or hauled through the rapids. They carried masts and lugsails and could also be rowed with oars in calm water. A bateau carried about five tons. After 1809 the steamboat replaced them between Quebec and Montreal and with the opening of canals after 1821 their utility ended altogether.

## CHAPTER FOUR IN THE DAYS OF NEW FRANCE

New England Follows the Sea, New France the Forest—The Bateaux of the St. Lawrence—La Salle's Project of Ships on the Lakes—Success and Shipwreck of the Griffon—War Fleets of Canoes—Ships of War on Lake Ontario—The Oswego and the Ontario of 1755

The history of New France, of the Old French Régime in Canada, is mainly an inland story. The French, the Channel coast apart, are not a sea-faring nation. Their beautiful compact territory contrasts with the broken outlines of England wrapped in the mists of the sea, no place in it more than seventy miles from salt water. Hence the people of New England also kept their close touch with the sea, their fishing boats, their coastwise navigation, and used, as soon as they could rise to it, shipbuilding and the West Indies trade as the basis of a new commerce clear across to Africa and out in the boundless world. To Africa they sailed with rum to buy "niggers," thence to the West Indies to sell "niggers" and buy sugar, then home to New England to turn sugar into rum and off again—with a profit all round the triangle. Thus rose the counting houses and the mahogany homes of Boston while the settlers of New France were out in the forests playing Indian, or lost in the heart of the continent, finding rivers for the English to use later.

New France turned its back upon the sea. It left the fisheries of the Newfoundland Banks, as far as they were French at all, to another set of Frenchmen. Ocean ships in the old days of French Canada practically all stopped at Quebec. The ascent of the river to Montreal was made by skiffs and sailboats, in particular by the kind called *par excellence* "bateaux." These were large shallow, flat-bottomed boats, sharp at each end, about forty feet long, with masts and lugsails but also oars for calm water and ironshod poles for work in the shallows. A bateau carried about five tons—plenty for the limited commerce of the day. Rarely did ships come up from the sea. The delays of calms and currents and shoals prevented for the most part the ascent of ocean ships. Even below Quebec they sailed in a haphazard fashion. The river was not sounded and charted till Admiral Sanders's officers, principally Captain James Cook, took the job in hand for Wolfe's expedition.

In this, as in everything, the economic life of New France was given a false lead, by the attraction and profit of the fur trade. Here men might find a "natural liberty"—the phrase is that of the day—denied by a paternal government; the hope at least of

inordinate gain—as with the gold prospectors of today—and above all the claim of the unknown, the adventurous, the infinite. Hence agriculture languished, leaving the best soil unknown, manufacture was forbidden, minerals but little worked and ships and the sea neglected<sup>[1]</sup>. The everlasting Indian and his canoeful of beaver skins filled the whole horizon, while down in New England there was the sound of the hammer and the saw, the ship building on its cradle, the farm and the field, and the axe clearing the forest. To these busy people the Indian was just a curse and a nuisance, seen best along the barrel of a shot gun. Anyone acquainted with the annals of Indian savagery will agree that the last of the Mohicans was the best.

[1] *F. Parkman,*  
“*The Old Régime*  
*in Canada,*”  
*Chap. XX*

Some wiser Frenchmen saw it all, as notably Jean Talon, the first of the Intendants of the colony, officials intended to aid the governor as business managers.<sup>[2]</sup> Talon was all for sea trade and ship building. Ships had indeed been built by the French from the earliest colonial days. Pont Gravé, the associate of Champlain, built two little vessels at Port Royal in 1606 to use for reconnaissance. A ship called the *Galiote*, was built at Quebec in 1663 and rigged as a brigantine. But Jean Talon—unfortunately only in New France from 1665 to 1671—went to work in earnest. He had men search the forests for the right timber and began experimenting at his own cost. The home government, the famous minister Colbert, encouraged the idea, supplying funds for building ships and for exporting timber to France. This would have put the clock forward a hundred and fifty years to the great days of shipbuilding at Quebec and the timber trade. Everything was all there except a sufficient continuing of interest. Three small vessels were built at Quebec (1670) for the French West Indies trade. Talon built a five hundred ton ship and had three hundred and fifty men at work in shipyards at Quebec, and this of a total population of some seven thousand. Ship building went on to a certain extent at Quebec all through the French régime both for the West Indies trade and for home voyages. But the ships never equalled in number or in quality those from France. Not enough care or experiment was given to the selection of timbers and to the difference of environment. Ship building in the old world, like everything else there, took time. Timbers must be weathered, must set, and must wait. It was a matter of years. Nelson’s *Victory* was laid down in 1758 and launched in 1765. But then ships were built to last. Nelson’s *Victory* floated for over a century and a half and is still propped up in dry dock. Lloyd’s Register shows that many ships that were afloat when Queen Victoria came to the throne outlived her reign by ten years or more. The record seems to be that of a Danish sloop the *Constanz* launched in 1723 and

[2] “*The Great*  
*Intendant*  
*Chronicles of*  
*Canada,*” 1913

going strong as a coastal vessel till the Great War of 1914.

Hence the initial difficulty of colonial ship building. The circumstances called for rapid completion with untried timbers. It was not possible to make “a proper job” of it. Our own Maritime ship building, presently so glorious a success, met with this same trouble at the start. The French never had time to get over it.

It is possible that it was the use of unweathered timber that occasioned the shipwreck of La Salle’s *Griffon* (*Griffin*), the ship he built for the Upper Lakes, in the very moment of its obvious success. The famous explorer Robert Cavelier de La Salle (1643-1687) was a man as far ahead of his time as most people of his time were behind it—or behind its potentialities. He came to New France in 1666 and became fascinated with a vision of the opening up of North America. All that came later he saw then. There was no limit to where exploration might reach—to the Southern Sea, all the way to China. Round his seigneurie (on Montreal Island, at its west end) La Salle’s visions and preparations became a joke, as when Noah built the Ark. They christened the place “China”—and roared over it so heartily that it is still Lachine. One joke went a long way then. It had to.

But La Salle had really had the insight to see, as no one yet had, or had yet tried to realize, the full meaning of the navigation of the Great Lakes. Here were vast inland seas with a reach and access to half a continent, with excellent harbours, navigable everywhere except where the great Fall of Niagara cut the chain in two, and the heavy current of the Sault Ste-Marie to some extent cuts off Lake Superior. But in each section boats, or rather, ships, could sail at will in a region abounding with native resources of timber, fish and furs, and a tributary population to gather these treasures at the price of a few blankets and trinkets, cheap guns and cheaper rum. All that was needed was ships, real ships, not a little birch bark toy floating like a lily, and carrying about as much freight.

Why did not the Europeans at once build ships on the Lakes? Why did they wait for a hundred years after La Salle? Why did they have to wait for the urgency of war (1754-63) to teach them, as it always does, the things they might have learned in peace? The answer is that in the first place the Europeans were not really on the Lakes. The English and the Dutch sailed up and down the Hudson—from Manhattan to Orange, that is, from New York to Albany—but navigation beyond that was impossible except by streams and portages through the forest. The French access reached to Montreal but there navigation from the sea was terminated. To reach the Great Lakes they must portage around waterfalls, carrying heavy loads through miles of bush, or, harder labour still, haul and push flat-bottomed boats, their typical river bateaux against the current that swept along beside the river bank. By the time they

reached Lake Ontario the French voyageurs were so out of breath, so to speak, that it never occurred to them to begin again—to build ships and go on.

Here then was La Salle's great idea, as simple as Newton's apple or Archimedes's lever. Till this time the European had been content to take over the Indian canoe, as hopeless for real trade as a walnut on a pond. The canoe was marvellous as an evolution, the only thing ever "evolved" by the North American Indian. The best canoes of the Lakes were made of birchbark on a wooden frame rendered water-tight with what was then called "chewing gum" (spruce gum)<sup>[3]</sup>. Canoes made of elm bark were not so good. The Algonquins of central Canada excelled in the art. Before the whites came most canoes were about 16 to 18 feet long and only carried two men with a package of furs or freight between them. Some smaller canoes, only twelve feet long were handled by one man. A few canoes carried more than two paddlers but they were rare. The great "war canoes" that carried as many as twenty-four men, and which are still made for gala occasions of peace, were no part of the original Indian equipment. Their war parties travelled in fleets of small canoes. The French, with the aid of Indians, built larger and larger canoes, and the Indians then adopted the idea for war canoes. Hence was evolved what was called the "*canot de maître*," of which the normal crew was eight paddlers and a guide: but larger ones were also made. The French government built such canoes at Three Rivers. The British fur companies, both the North West Company and the Hudson's Bay Company, took over the idea and adopted the large canoe as their standard inland transport.

[3] *Memoirs of the  
Late War  
Commander  
Peuchot, Lake  
Ontario  
Command, 1759*

What La Salle saw was that canoes had no place on the Great Lakes except for people who had nothing better<sup>[4]</sup>. His vision was that of a succession of 'ships,' not canoes, a fleet on Lake Ontario, another, the main one, to cover and control all Lake Erie, Lake Huron with the Georgian Bay and Lake Michigan with Green Bay, and beyond that a fleet on Lake Superior and a fleet on the Mississippi. The idea was too large for his fellow colonists. It excited jealousy, opposition and intrigue from the start. It was the first "octopus of transportation" that always threatens to devour North America. Hence the ultimate ruin of La Salle's fortunes, the failure of his hopes and his tragic death in the Mississippi wilderness (1687). It was a hundred years and more before his phantom fleets appeared as realities.

[4] *Francis  
Parkman, "La  
Salle and the  
Discovery of the  
Great West"*

La Salle went roundly to it. He went back and forward to France: borrowed money: brought out shipwrights, carpenters, smith's tools, cables and equipment. He built first a small sailing vessel at Cataraqui to carry supplies back and forward to the Niagara peninsula. His grand prize was to be not Ontario but the lakes beyond. He portaged the Niagara peninsula. At the mouth of Cayuga Creek he found a suitable spot with low shores, still water and timber ready at hand. There he laid out his shipyard and set up his forges. The Seneca Indians stood about, watching the work, waiting when to strike. They waited too long. La Salle's *Griffon* slid backwards down its ways and floated out on the creek, its crew safe in their tall fortress.

The making of the *Griffon* illustrates, at its very outset, the way in which our Lake shipping has been copied from the original ships of the sea and gradually, by difference of environment, readapted out of all resemblance. What Neptune of the ocean would recognize a whale-back ore carrier as his offspring? What fast pinnace would not flee "like a fluttered bird" (the words are Tennyson's) at the sight of its cousin, the halfmile long timber raft? Right here at the first launching of the first lakeship we touch the problem of the latest: can a sea boat be also a lake boat?

The *Griffon* couldn't; but it perished too soon to know it. It was fashioned after a Dutch model (a galleot), designed for the shallow waters, the steady winds and the large cargoes of an opulent and drowsy trade. Its makers had not yet encountered the varying breezes, the sudden squalls, the awkward current and the unsuspected shoals of the Canadian Great Lakes. The *Griffon* was rigged as a brig with broad yards, a sail under the bowsprit and a spread of square canvas with shipwreck in every yard of it.

She made what should have been an epoch-making voyage up Lake Erie, through "the Detroit," Lake St. Clair, then so named, and its river and out across Lake Huron. It is true that a great gale on Lake Huron drove her before it, beyond all control, to the terror of all hands who fell down in supplication to St. Anthony of Padua, promising a chapel. Apparently St. Anthony knew Lake Huron. They came safely through the gale to the mission post at Michilli-machinac (Mackinaw). Thence the *Griffon* passed into Lake Michigan (Lac des Illinois) and so to Green Bay, the transit point for the Mississippi. There a flock of savages watched in amazement the unloading of the *Griffon*. "The Pottawatommies," writes Mr. Cuthbertson<sup>[5]</sup>, were "dumfounded to see the prodigious quantities of goods which came out of the ship." Well they might be. If the *Griffon* had a burden of sixty tons and if a two man canoe carried 500 lbs. of furs it would take a fleet of canoes three quarters of a mile long to compete with the cargo ship. The sight would

[5] George A.  
Cuthbertson,  
"Freshwater",  
1931

dumbfound more than a Pottawatommie. It should have dumbfounded the managers of the fur trade. Instead it only awakened commercial suspicion and fear. The *Griffon's* freight included the tools and equipment for more ships to be built further on. When all unloaded she filled up with a cargo of furs and started on her return. That was the end. The *Griffon* stood out into the Lake as the night fell on a gathering storm. From the shore they saw the flashes of intermittent lightning in the growing darkness and heard the salute of the ship's guns; then a great storm overwhelmed lake and shore and the vessel was never seen again. The epoch-making event failed to make its epoch. There were no more commercial ships on the lakes for a hundred years.

---

Even for the purposes of war, itself the background of the North American scene, there was no realization of the potentiality of ships on the Lakes. After La Salle's *Griffon* the French under Frontenac (1672-82) and his successor LaBarre built a few small vessels at Cataraqui, their dates, capacity and number uncertain. Governor Denonville's ambitious but disastrous expedition of 1687 was carried by a vast war fleet but it only included three small sailing vessels, the mass of it consisted of a hundred and ninety-eight transports mostly flat-bottomed bateaux, built for the occasion, and a gathering of a hundred and forty-two canoes. This "fleet" carried two thousand men. One or two ships of war could have scattered them like a flock of loons. But the English had none. They had no ships, no harbours, no posts on the Lakes till they established Oswego in 1722. They left the control of the Lakes to their savage allies the Iroquois, strung out like a daisy chain all the way from the Hudson to Niagara, the Senecas, the most savage, the most cannibal, the most implacable holding the western end. The French, after La Salle, had no ships on the Upper Lakes nor had the English any.

It was only just before the throes of the final conflict (1754-1763) that both sides realized the value of "sea-power" on these inland seas and began building feverishly. The French were the first. At some time after their rebuilding at Cataraqui the Fort Frontenac, which had been abandoned (1688-1694) during the war, they began building schooners and apparently also brigs to connect Fort Frontenac with Fort Niagara. It would seem that they had four vessels by 1741. But they only began to build in earnest in 1755, with the *Hurault*, a square-topsail schooner of ninety tons, seventy-five feet overall, with a broadside of seven guns a side. Similar but larger was the *Marquise de Vaudreuil* of a hundred and twenty tons. Others followed in 1756.

The English began with haste equally feverish. Before any ships were built by

them on the Lakes their flag had flown for over thirty years at the trading post of Oswego, a wretched spot isolated in marsh and forest, intended to connect with the trade route to Albany. Across this portage with infinite labour and industry Shirley the governor of Massachusetts (Lieutenant General of the Forces) hauled chains, cables, and naval equipment and laid out a dock yard. Fierce attacks of French Indians beset the builders at their work. Some were killed, some carried off to die at the stake. But the job was done. In the summer of 1755 the sloops *Oswego* and *Ontario* floated in the shallow harbour of Oswego. The sloop is a one masted vessel, the cart-horse brother of the race horse cutter. The word thus transplanted from Britain became and remained the common name for the rough single masted sail-boats of the Upper Canada settlers. But the Oswego sloops were large boats. They were forty feet over all, the mast up to the cross trees (where the topmast began) fifty-three feet, and the main boom fifty-five feet long. Cart horse, perhaps, as beside a racing cutter of a century later, they were things of beauty as beside the *Santa Maria* and La Salle's *Griffon*. Gone are the tubby sides and the high castles; the hull runs smooth, the rail runs even; the "fore castle" is now, and remains, just a place under the deck, bad enough for the crew to sleep in. These boats carried five guns a side, eight and ten pounders. Like the French ships they carried square topsails one above the other, a rigging that reflected the design of the ships yards of Chatham and Toulon.

The *Oswego* and the *Ontario* were rapidly followed by other larger boats, topsail schooners. The war fleets on Lake Ontario became a factor in the Seven Years War. The record of their combats and evolutions—more evolutions than combats—does not belong in this place. The curious may obtain a vivid picture of them by turning to the forgotten pages of Fenimore Cooper<sup>[6]</sup>, himself a sailor, with a touch of old tar and salt sea and language not now heard in the lake resorts of Ontario. The fleets played no decisive part in the war. But their existence presaged later history. The war of 1812 was to show what naval power on the Lakes could mean; and with it what a force of disunion and separation naval establishments and rival naval preparation could mean for a continent already, in that critical epoch, sufficiently threatened with disunion. Fortunately common sense and common interest combined to banish the war ships from the lakes by the Rush-Bagot agreement of 1818. The *Oswego* and the *Ontario* made way for the great fleet of lake schooners whose sails for over a *century* lent to our Great Lakes an added charm that blended with their natural beauty.

[6] Fenimore Cooper, "The Pathfinder," 1840



THE TOPSAIL SCHOONER NANCY OF 1789—ITS HULL IS STILL PRESERVED

The building of ships on the Great Lakes only began in earnest as the wars between Great Britain and France drew to their close. After the Cession of Canada ship building moved fast with the Provincial Marine as a branch of the Royal Navy. Lake vessels now began to depart from the ocean type and move towards the fore-and-aft rig later typical of the Lakes. The midway type is seen in the top sail Schooner Nancy launched in 1789. She was built of oak, had a keel length of 68 feet and a beam of 20 feet.

## CHAPTER FIVE

### PEACE AND WAR ON HUDSON BAY

The French and the Hudson's Bay Company—Radisson Changes Sides Again—Attacks from French Canada—The Crusade of the Chevalier de Troyes in 1686 by the Ottawa-Abitibi Route—Iberville's Naval Victory of 1697—Fort Prince of Wales—La Pérouse in the Bay 1782—Capture of Fort Prince of Wales

This maritime conflict between Great Britain and the French in what are now Canadian waters was not confined to the Great Lakes and the St. Lawrence. The Hudson Bay was also a theatre of naval operations and for about a third of a century, from 1680 until 1713, the scene of ravage on shore and conflict at sea. It seems strange that war should have come even to these empty snow-covered latitudes where peace should have been as still and silent as the Aurora Borealis, and where life itself was heroic enough. But war will not have it so.

---

The explorers had long since given up the Arctic Seas as a bad job. They were convinced at last that the Khan of Tartary did not live there. Davis's mark of 73° north latitude remained an unchallenged record. But the waters where Cabot and Frobisher, Davis and Hudson sought a passage to Asia turned out to be the entrance to a vast inland sea, Hudson Bay.

Hudson discovered it from the ocean. But a Frenchman, the *coureur des bois* Pierre Esprit Radisson, reached it from overland. Here was a strange forceful character who took on savagery at will, did and saw such wonderful things that he passed into the liar class, along with Herodotus, Pytheas, Marco Polo and those others who strained credulity with too much truth. As such our history long passed Radisson by. Ill-treated, as he thought, by the French government, Radisson sold out to England. Hence the Hudson's Bay Company of 1670 and thence much else. At the time of which we speak (1680) the company had its posts established on James Bay at Fort Charles, at Fort Rupert and Fort Albany. They had four ships in regular service, and after having paid off the original cost of its ships, plants and equipment the Company was returning to its share-holders a profit of 200 per cent a year. But meantime the French had never accepted as valid this vast gift of half a continent from Charles II to a group of his subjects. They could set against it the gift of Francis I to Jacques Cartier which reached as far as Asia. They themselves had a fur company, the *Compagnie du Nord*, based on Quebec, and claiming anything it

could reach.

The French moreover had a readier access to the Bay than the English. They could reach it by the sea either from France or from Quebec, and reach it over land by the route of the Ottawa River, the Montreal, Lake Temiskaming and the Abitibi. Nor did they wait for the existence of normal war between the nations to begin their attacks on the Company's posts<sup>[1]</sup>. Radisson and his associate Groseillers, having again changed sides, obtained ships from Quebec and appeared in the Bay (1682), set up Fort Bourbon, on the Hayes river, on the west side of the Bay at the very time when the Company was establishing Fort Nelson lower down. From then until the Treaty of Utrecht in 1713 there was intermittent war and ravage on the Bay, lasting through King William's war (1689-1697) and Queen Anne's war with a brief respite for the Peace of Ryswick of 1697.

[1] *Beckles Willson, "The Great Company," 1900, Vol. I, Ch. IX*

The Chevalier de Troyes, an aged soldier of New France, led what he looked on as a crusade, overland from Montreal in 1686 to drive the English from the northern seas. With his expedition were thirty veteran soldiers, and, of still more worth, three sons of the famous Charles le Moyne, one of them the Sieur d'Iberville, the most heroic name of an epoch of heroism. At the earliest opening of the rivers they ascended the Ottawa and the Montreal, and passed the Temiskaming portage, little dreaming that under their feet as they passed was all the gold of Hollinger and Porcupine, far surpassing the spoils of Cortez and Pizarro in Mexico and Peru.

The crusaders seized and ravaged the helpless posts on James Bay, returning in triumph to Quebec with 50,000 beaver skins. A treaty patched things up as between King James and King Louis but gave place to open war between King Louis and King William. The ravages in the Bay, where the Company between 1682 and 1688 claimed to have lost already seven ships and six forts and factories—a money loss of £38,332/15s., were part of the grounds of the declaration of war. Both kingdoms now sent expeditions into the Bay and in a series of conflicts the forts changed hands, and changed names with the varying tide of success. As the most famous exploit of this remote forgotten war, history chronicles Iberville's naval triumph of 1697. With his single ship the *Pelican*, forty-four guns and two hundred and fifty men, separated from his consorts, he fought three English ships of war, inferior singly but far superior as a force. Two were sunk, one escaped crippled, and Iberville was left in triumph, with ninety men struck down, his ship a wreck—a triumph empty but glorious.

Churchill<sup>[2]</sup>, destined ultimately to be the major port of the Bay, was first founded, then burnt and abandoned during these

[2] *"The Founding"*

tumults (1688). Its permanent foundation took place (1717) after the Treaty of Utrecht, based on other victories elsewhere, had given the Hudson Bay Territory permanently to Great Britain. But in those days and for long after intermittent war between France and England seemed the natural destiny of the nations. One war over they planned for the next. After the Treaty of Utrecht the Hudson's Bay Company determined never again to be exposed to ravage by the French. They rebuilt and strengthened their forts (Fort York) and established new ones, Henley House (1720) 150 miles up the Albany to check invasion at the source, and Moose Fort to command James Bay (1730). Above all they erected as a great central basis of defense Fort Prince of Wales beside the mouth of the Churchill River. Its crumbled remains still speak history. One could sit and muse on its ruined battlements (were it not for the cold or the flies) as on the ruins of Nineveh, or as some future philosopher may well sit on the Maginot Line. The musing is ever the same—that each advance in means of sustenance of human life must carry with it the dead weight of the increasing apparatus of death.

*of Churchill," J. F.  
Kenney: 1932*



For Fort Prince of Wales was, so to speak, the Maginot Line of Rupertsland<sup>[3]</sup>. It was absolutely impregnable, provided it had so many men to defend it that they would have been impregnable without it. To be exact, it needed about four hundred. It was built first of wood (1718) then of stone (1734), from military plans used under Marlborough. Its walls were forty-two feet thick. It was built in a great square, some 170 feet across, with huge projected bastions, shaped like spearheads at the corners, with sunken stores and magazines, a “ravelin” to defend the gate and all the lost art of the days when the defence still beat the attack. Yet in the sequel La Pérouse took it (1782) for the asking.

[3] *D. MacKay,*  
*“The Honourable*  
*Company,”* 1936

War came again in 1744. It was delayed by the newer tendencies of the dawning dream of commercial peace but it came. The previous war was fought as to who should govern Spain: this time Europe was convulsed over the sovereignty of Austria; and already the curse of European dissension fell upon America.

But the war of 1744-48, the war of the Austrian succession, never reached the Bay. The Company were too well prepared. A chain of defense was organized so that each post might aid the others. It warms one’s heart to read of the precise and vigorous instructions sent out (May 10, 1744) from London when the war broke out to the chief factors at Fort Albany and elsewhere: “We do hereby strictly direct you to be always on your guard and to keep a good watch . . . fix your cannon . . . keep them constantly loaded . . . exercise (drill) your men once a week . . . employ any Indians you can confide in . . . if overpowered, nail up the cannon, blow up the house destroying everything that can be of service to the enemy.” That was so to speak “the stuff.” It was too good for the French anyway. They never came: but partly no doubt because the capture (the first capture (1745)), of their great naval base at Louisburg impeded any attack by sea.

---

This same timely “preparedness” carried the Company’s forts safely through the Seven Years War of 1755-63. The conquest of Canada removed the danger of overland attack on the forts of the Bay, and brought apparently a false confidence that forgot preparedness and neglected precaution. As a result, in the War of American Independence, the French appeared again in the Hudson Bay. The famous Admiral La Pérouse—whose later shipwreck and loss in the southern seas became one of the mysteries of maritime history—appeared in the Bay in 1782. He had a powerful fleet, the *Sceptre* of seventy-four guns, the *Astarte* and the *Engageante* of thirty-six and a full equipment<sup>[4]</sup>. Fort Prince of Wales with a garrison of thirty-nine men surrendered at discretion, August 8,

[4] *Stephen*

1782. In command of it was Samuel Hearne, the famous explorer of the Coppermine River, with but little stomach for war and less means of making it. Luckily the Company's autumn ships had sailed for home. La Pérouse took away what guns and supplies he could. He also took the manuscript of Hearne's famous *Journey*, but restored it when he witnessed Hearne's distress at losing it. La Pérouse was an author also, and knew how it must feel. Powerless to destroy the vast stone fort La Pérouse burnt what he could of its "trimmings." The rest, crumbled and weatherbeaten stands there still, being unable to do anything else. British and American writers who ought to know better have made much of the French depredations on the forts. "Utter looting of the fort . . .," "sacking, plundering and devastating," etc. This is false colouring. War is war. And the record of the French carefully leaving food on the shore so that the English might not starve in the coming winter calls back a lost world, forgotten now.

*Leacock,  
"Adventurers of  
the Far North,"  
1913*



## THE ATLANTIC PACKET—THE SWAN SONG OF THE DAYS OF SAIL

The sailing ship only came into its own in point of maximum efficiency and speed, as in point of nautical beauty and seaworthiness, at the moment when its days were already numbered. The Atlantic Packets, stout and steady, all-sail vessels, carried the first flock of migration to America after the Napoleonic Wars. The Clipper Ships, designed for greater speed, succeeded the Packets and held the field till they also succumbed to the sail-and-steam ship that lasted out the century.

## CHAPTER SIX BRITANNIA RULES THE LAKES

Lake Shipping after the Conquest—The Provincial Marine—First Vessels on Lake Superior—The New Lake Types of Sail—Fore and Aft Rig and Centre Boards—The Ships of War of 1812—The Naval Attack on York in 1813—Perry's Victory—The Rush-Bagot Convention of 1818 bans War Vessels from the Lakes

The defeat of France and the cession of Canada opened wide the reach and opportunity of British naval power and British maritime commerce. The interior of the continent lay open from the great sea way of the St. Lawrence and the thousand lakes and rivers connected with it. Not only the hostile force of France but the Indian power was gone. The great armies transported and recruited in America for the Seven Years War and the appearance of armed ships of war on the Lakes showed how powerless the Indians were against the Whites, as soon as the full force of European arms was brought into play. Henceforth Indian treachery might impede, Indian savages might ensanguine, but neither could block the path of the advance. After Pontiac's War<sup>[1]</sup> and the campaigns of General Anthony Wayne in the Ohio territory<sup>[2]</sup> the Indian factor no longer controlled, as the Iroquois had done, the destiny of the continent. The Indian, apart from such single heroic figures as a Tecumseh or a Brant, an Oskosh or a Sitting Bull<sup>[3]</sup>, became nothing but the hireling savage ally, despised by both sides, then the humble dependent, and finally the vanishing race that cannot vanish—a historic ghost, held in a queer equilibrium.

[1] 1763-64

[2] 1792-95

[3] *S. Morison,  
"History of the  
United States"*

The conquest and the cession, we say, greatly stimulated the progress of navigation of the St. Lawrence. The fleet of boats and ships that came up from Quebec to carry General Murray's section of Amherst's army which forced the capitulation of Montreal (1760) contained 35 bateaux, three frigates and three gun boats. It put, as it were, a new face on the St. Lawrence. It was clear now that the great river and the lakes above could be used as highways of trade as they had been as a path of war. Even before the war was technically over British trade struck out on the new path. Alexander Henry, the famous pioneer trader, with two companions, reached Michillimackinack (Mackinaw) in 1761. An increasing flock of traders followed in his track. These were the nucleus of the later North West Company, tapping the Hudson's Bay Company's territory from Lake Superior. With the traders

appeared farmers from New England as the vanguard of actual settlement. The government as early as 1762 built, at Navy Island in the Niagara, two 80 ton topsail schooners, the *Huron* and the *Michigan* to protect this growing trade and carry both troops and commercial goods.

Across the shifting scene swept the sudden ravage of Pontiac's war<sup>[4]</sup>. Pontiac, a forest Caesar, planned to kill all the English and restore the French. To him the stubborn, calculating English meant land settlement and the deposition of his race; the easy, wandering French, trade and rum, and nothing more. His attempt failed—achieving nothing but random massacre. Indian power was gone. The schooner *Huron* anchored at night in the Detroit river, with all guns loaded to the muzzle, and blasted a night attack of Indian canoes into eternity.

[4] *Francis Parkman, "The Conspiracy of Pontiac"*

With Pontiac gone, navigation and trade multiplied on the lakes—with Cataraqui (Kingston), Niagara, Detroit, and Mackinaw as the main ports. It would have increased faster but for the peculiar policy of the British government in trying to prevent all private building of ships. The government proposed itself to build the Lake ships and to have them serve at one and the same time as vessels of patrol and cargo carriers. Thus came into being the Provincial Marine, at first directly under the Admiralty, then indirectly, through the Governor General of Canada. The vessels were manned by seamen brought from England and by others recruited on the Lakes<sup>[5]</sup>. Among the earliest ships were the topsail schooner *Kent* (1776), 80 tons, and the cutter *Caldwell* of 1777. By 1780 the Provincial Marine had five vessels on Lake Ontario and nine on Lake Erie. The government monopoly had been relaxed in one instance even before this (1770) to permit to certain English interests to develop the copper deposits of Lake Superior which had early attracted attention. The enterprise failed, leaving behind it a sloop and barges, laid up on shore.

[5] *George A. Cuthbertson, "Freshwater," 1931, Chap. VII*

This restriction on private ship building served a useful purpose during the war of the American Revolution from 1776 to 1783. As the government controlled all floating craft of any account on the Lakes the war fortunately lacked those features of a naval war which were to form so large a chapter of the War of 1812.

But in between the two wars the development of lake shipping made continuous progress. The government monopoly proved impossible to retain. Repeated protest induced the Lords of Trade in London to relax the rules. Colonial officials were allowed to give permission to build and sail Lake vessels under regulations in

something of the spirit of the famous British Navigation Acts of that period which lasted till 1849—stipulations as to the status and nationality of officers and crew and as to trading regulations. With that, ship building started in earnest and never slackened for a hundred years, till it had dotted the great lakes with that vanished fleet of eighteen hundred sail which was once their most picturesque concomitant.

First in the field were the western traders. A sloop of 45 tons, christened all too soon the *Beaver*, was built on the Upper Lakes, to be hauled up the rapids of the Soo for use on Lake Superior. The current proved too strong. The *Beaver* had to fall back on the more commonplace voyages of Erie, Michigan and Huron. But the *Otter*, a seventy-five ton sloop (1785) built by the organized North West Company, sailed as the first vessel, apart from the abortive sloop and barges of the English mining syndicate, to navigate Lake Superior.

Meantime the government with imperial consent threw ship building and navigation on the lakes wide open with the Inland Navigation Act of 1788. This became a sort of charter document of the Lakes; provided officers of supervision, ports of entry, harbour dues, clearance papers for all departing vessels, even for the timber rafts that now began to make their appearance, slow enough in clearing to give time even to the tardiest official.

Lake ship building moved speedily forward, breaking away from the deep sea models on which it had been based. The topsail schooners of the Provincial Marine were in a sense still square-rigged vessels of the ocean type, for they carried a main yard that could replace the fore-and-aft mainsails with square sails, and the two topsails above were those of a square rigged brig. The government stuck to its pattern: governments are apt to: and in any case these vessels on patrol work on the open lake could take full advantage of the prevailing western winds that could drive them foaming down the length of Ontario and Erie<sup>[6]</sup>. But for dodging about the channels, twisting in and out of harbours and river mouths, the cumbrous square rig was nowhere as beside the fore-and-aft rig, the topsails, staysails and jibs of the schooner.

[6] C. H. J. Snider,  
"Yachting on Lake  
Ontario" (Sailing  
Craft) 1937

The schooner came into its own as the typical vessel of the lakes, a thing of great beauty as it developed into the capacious and luxurious schooner yachts of Toronto and Oswego; and not without beauty even in its humblest form that some of us can recall, the "stone-hooker," carrying on its menial work of carting stone from the lake beaches before the rising structure of the cement mill blanketed its sails for ever. With the fore-and-aft rig came the ingenious device of the "centre board" which combined the ability to beat up to windward with a power to avoid shoals. Without it

the choice had been between leaway in a shallow boat or wreck on a shoal in a big one.

We may take as a type of the opening period the topsail *Nancy* built in 1789 whose poor old hull raised up from the mud of the Nottawasaga River, still stands exhibited nearby. From these ancient timbers the eye of imagination may reconstruct the ship in her pride, and the eye without imagination can reconstruct the *Nancy* as well or better from the spirited pictures reproduced by Mr. Cuthbertson from the archives of the Canada Steamship Lines. There she sails, riding the blue and green waves and the long white foam into which they break on Lake Ontario, with every sail drawing as she heads—what is it called?—two points into the wind?—at any rate where ever it is that a schooner heads when she is heading at her best. The great fore-and-aft foresail and mainsail are sheeted in and drawing full: so are the two square topsails above the foresail and the three jibs—or is the first a staysail?—between the foremast and the outer end of the jib boom. From the peak of the mainsail gaff flutters the Union Jack. We can only hope that it is correct for 1789: the artist may have forgotten to forget Ireland. From the top of the mainmast there flutters a long streamer, flag or wind vane, such as lake vessels came to use—we cannot in our ignorance tell which it is.

A brave picture the vessel makes. The *Nancy* was built of oak, had a keel length of 68 feet, a beam of 20 feet. She served as a transport in the war of 1812, was later burnt and sank and in due course resurrected.

---

The war of 1812 found a large fleet of these Lake ships already in being, ships of war of both countries and trade ships of each of them. It is no part of the present record to follow the varying episodes, the intricate details of the naval operations on the Lakes in the War of 1812, all the more intricate from their close connection with operations on land. The curious may read it all, as in connection with naval war at sea, in the scholarly pages of Kingsford's *History of Canada*, in Captain A. T. Mahan's *Sea Power in its Relations to the War of 1812*, in Theodore Roosevelt's admirable volume *The Naval War of 1812*, and in particular, as a specific story of the war on the Lakes, in Mr. George Cuthbertson's *Freshwater*, where it occupies some eighty pages of close print.

But a glance at one or two of the outstanding episodes of the naval war on the Lakes may help to form an idea of the ships of the period and the way in which they had developed up to the war and under the stimulus of the war itself. Let us look back to the capture and burning in 1813 of the little town of York<sup>[7]</sup>, the capital of Upper Canada standing on a site selected

[7] *J. Ross*

by Governor Simcoe in spite of its then desolate surroundings for the sake of its protection behind its island sandbar, and its river and marshes on either flank. The site is all changed now. But those of us who can recall the Toronto of sixty years ago can revive the scene as the men saw it from the decks of Commodore Chauncey's ships in the sunrise of April 27, 1813. The little town, huddled together a little west of the river Don, was built close to the shore of the wide shallow bay. A peninsula of sand shaped like a crescent shut in the Bay leaving a gap on the west end for ships to enter. Covering this gap on the shore was York Fort, which we used to call "The Old Fort" but which was the new fort then. It was protected with heavy earth ramparts, with guns in embrasure-openings, commanding the gap, and on the land side the rampart has the scissor-blade zigzag of stakes called *chevaux de frise*. Many of the stakes, original or renewals, still stood out at the Bathurst Street corner of the Old Fort, no longer very formidable, a century after the first construction.

Now look at Chauncey's fleet as it approaches the Fort from the outer lake, rounding the end of the island, all the ships aslant in the morning breeze, to come up into the wind and anchor off the shore, a little west of the Fort, down nearer to where the old French Fort Rouillé had stood. Compare this collection of ships with the flocks of canoes, the yelling savages, and the river bateaux of the Old Régime.

Chauncey has twelve ships of war and three transports. Hauled behind them as they threshed across the lake are a number of open boats—large flat bottomed bateaux. These are the ones used as "landing barges"—how easily we read and understand it now. The sailors and soldiers number 1,800 men. The flag ship is the *Madison*, built as the war threatened, a frigate, meaning thereby a three-masted ship of war, square rigged and only second to a man of war as a cruiser is second to a battleship—less weight, more speed. The *Madison* in any case has weight enough for Fort York—560 tons, 44 guns and a crew of 200 men. She carries the generals of the expedition, Dearborn and Pike. With her are the *Oneida*, a brig of 250 tons, 16 guns and a 150 crew, and nine schooner gunboats (meaning schooners converted into ships of war), which range from 50 to 110 tons, carrying from one to ten guns each. With them three lesser transport vessels, a swift despatch boat and the flock of empty bateaux threshing on the waves on the towing lines ready for the landing. All this in sunrise of an April morning in a fresh breeze. It must have been a grand sight—the ships rounding into the wind to anchor, the loosened headsails of the schooners rattling—all light and colour. It all happened off the shore where now the Canadian National Exhibition views the marathon contests of lady swimmers, coated in grease.

---

The ships pounded at the ramparts, the Fort, with but few guns and outraged, pounded at the ships for an hour and a half with no harm to either side. But the flock of crowded bateaux landed its men on the Humber beaches and when they came driving through the woods there was no force to stop them. The British blew up the main magazine of the fort, bringing death to a crowd of defenders and attackers, among them General Pike, carried to the *Madison* to die. The few British soldiers in the town retreated eastwards. A capitulation was arranged with all the courtesy of the day between General Dearborn and a deputation of townsmen. Then General Dearborn's sailors and soldiers got drunk and spoiled the courtesy of the capitulation, pillaged and burnt down the Parliament Buildings and many warehouses and residences. In the sequel this helped York to move up to better ground and leave its original aristocratic quarter to become a dingy, drab corner of the rising city of Toronto and later to be flattened down again to railway sidings, lumber piles and junk yards.

---

The victors sailed away with the schooner *Duke of Gloucester* from the harbour as a prize, its work done—another “famous victory” as old Caspar would have said.

---

Take again the most heroic episode of the whole naval war, Perry's famous victory of Lake Erie (Sept. 10, 1813)<sup>[8]</sup>. Here again were ships worthy of Rodney and Nelson. Captain Barclay's British *Detroit* and his *Queen Charlotte* were both frigates, 490 and 400 tons. They were each (exact figures are disputed) about 100 feet along the main deck with a beam of 27 feet. With them Barclay had two brigs, a schooner and a cutter. Perry outnumbered Barclay with nine ships of war to six. He had no frigates, but his *Lawrence* (from which, when she was smashed almost to a wreck, he shifted his flag to the *Niagara*) although rigged as a brig was a powerful ship of 450 tons and twenty guns: so too was the *Niagara*; both were more heavily armed than Barclay's *Detroit*. As to who should have won the battle, naval experts disagree and patriots dispute. But there is no doubt who did win it—Perry did.

[8] *George A. Cuthbertson, "Freshwater," 1931, Chap. VII*

The main naval operations of the War of 1812 were fought in the Atlantic Ocean and concern our Imperial naval history at large rather than Canadian in particular. One famous conflict, however, connects closely with our shores.

We all remember from our school days the story of the historic fight of the

*Shannon* and the *Chesapeake* off Boston on June 1, 1813; the courteous challenge sent by Captain Broke of the *Shannon*; its acceptance by Captain Lawrence; the terrific battle and glorious victory, Lawrence mortally, and Broke desperately, wounded; a lesson to all the world in the gallantry of honourable war with equal renown to the victors and the vanquished.

Yet very few people know what happened afterwards to the captured *Chesapeake*; fewer still know that a large part of the historic frigate is still intact, the best of its deck timber, still just as the naval builders first framed them, set up into a mill that still steadily grinds corn in a Hampshire village.

A legend has got into the history books that the *Chesapeake* was taken over into the British service. This is not so. Terribly battered by the fight (portholes and bulwarks smashed in by the broadsides) she was sailed in the wake of the *Shannon* in a five days' voyage (June 1-6) to Halifax harbour. Judge Haliburton, the famous *Sam Slick* of the clock-maker books, witnessed and described her arrival—the contrast between the gay strings of victory bunting above, and the terrible sights below. The ship's main-deck he called a "charnel house" of wounded, dead and dying men. Captain Lawrence's body lay on the quarter-deck under the Stars and Stripes. Along with many others it was buried in Halifax<sup>[9]</sup>.

What happened to the *Chesapeake* afterwards? The writer of this book has been to some pains to find out and expresses here his obligation for the assistance of the Librarians of the Boston Public Library.

[9] C. H. J. Snider,  
"The Glorious  
*Shannon's Blue  
Duster*," 1923

The *Chesapeake*, refitted as might be, was sailed across the Atlantic to Portsmouth. She was never used by the British Navy, nor does there seem any record of her going to sea again. She was sold by the Government intact to a Mr. Holmes for £500. Mr. Holmes did well out of the bargain. He broke up the *Chesapeake*, sold several tons of copper from the sheeting, sold the timbers for householding in Portsmouth and more than doubled his money. But the best of the timbers were bought up by Mr. John Prior, a miller of Wickham, near Fareham, Hants, who built out of them (1820) a new mill beside that village. Into this went intact as they came from the ship the deck timbers of pitch pine, thirty-two feet long and eighteen inches square. The purloins of the deck went into the mill as joists.

After that oblivion settled on the *Chesapeake*. A member of the Broke family searching the record of the great sea-fight fifty years later received a letter from the then Vicar of Fareham<sup>[10]</sup> (1864) to say that the mill, timbers and all, was in active operation and "likely to last yet hundreds of years."

[10] Letter of W. S.  
Domergue, Vicar

An entry in a Hampshire Gazeteer of 1901 speaks of the mill at Wickham built of the timbers of the *Chesapeake* as still going strong.

A letter from Mr. George Orwell, a well-known Hampshire antiquarian, to the writer of this book (April, 1943) says: "I am glad to inform you that the Wickham mill which contains the timbers of the *Chesapeake* is still in very active operation and is likely to remain so."

One might think that there would be a national opportunity here for the purchase of the timbers of the *Chesapeake*, their reassembly as again the deck of the gallant vessel and a presentation to the Naval College at Annapolis, the repository of many trophies.

---

These vanished fleets, these gallant combats sounded a note and opened a vision of glory in our history: yet sounded with it a note of alarm, opened also a vision of disaster. Would this mean that North America must go the way of Europe, that an unending rivalry in arms must turn the continent to a camp, that the unending conflict between Britain and France was to be converted by the sheer lust and custom of fighting into an unending conflict between two communities of settlers, in whose hearts was peace. The greatest result of the naval war on the Lakes was the warning that it thus gave. It ended war on the Lakes. Many patriotic Americans, as for example John Adams and Chief Justice Jay, had long since reflected on what such sustained armament and rivalry would mean. The war acted as an object lesson. To serve in it people were drawn from both sides of the frontier, taken from their half-made farms, their half grown orchards, the villages still building, to take part in a conflict that was none of their making and in which their own sympathies were divided, many on each side sympathizing openly or secretly with the other side. The Rush-Bagot Agreement of 1818 associates the names of Richard Rush, the American Secretary of State, and that of Sir Charles Bagot, the British Minister at Washington, with the honour of the reduction of naval armament on the Lakes to the mere dimensions of necessary patrol and revenue collection. Only after the lapse of a century can we realize the contribution thus made towards the ultimate peace of the world.



## SAIL AND STEAM ON THE ST. LAWRENCE—THE BYE-GONE FLEET OF YESTERDAY

The Royal William, built at Quebec, crossed the Atlantic under steam as early as 1833. But throughout the nineteenth century sail was not displaced but remained as the auxiliary of steam for ocean voyages. Hence arose on the St. Lawrence the beautiful fleet, as typically those of the Allan Line, of steamers under sail which for two generations were the chief feature of the ocean passenger voyages from Canada to the British Isles.

## CHAPTER SEVEN

### BY THE ST. LAWRENCE TO THE SEA

Canada the Gift of the St. Lawrence—Ascent of the River in Old Days—The Coming of Steam—John Molson Accommodates the Public—Sailing Ships at Montreal—Will Leave On or About—The Lachine Canal of 1825—Mr. Dickens is Delighted—Ocean Liners and the Allan Line—Sail and Steam Together: Days When a Voyage was a Voyage—The Sarmatian, the First Last Word in Steamers—White Wings that Grew Weary—Beating out Nature—Channels, Lights, Marks, Icebreakers and Flood Walls—The Moving Panorama of the River

The Egyptians have a saying that Egypt is the gift of the Nile. With similar imagery we might say that Canada is the gift of the St. Lawrence. It is only on reflection that we realize the extraordinary position the river holds in the geographic and political structure of our Dominion. For most of our country it is, if not the only way out, at least the only way without considerable physical difficulty which we hold under our own control. Nature holds the Arctic exit, the United States the forty-ninth parallel; British Columbia and the Maritimes are physically cut off from us. The rest of Canada, to use the term, so happy and now so universal, is “bottlenecked” into the St. Lawrence.

If the sea-coast of the Hudson and James Bay had a mild climate which would open their capacious harbours all the year round; if Ungava were not Ungava and Labrador not Labrador; if the Arctic Coast were as genial as the Riviera and if the United States were not where it is, or rather if the “unguarded frontier” were not a commercial rampart, this would not be so. But, as it is, for anyone or anything once inside Canada, as between the Rocky Mountains and the Gaspé Peninsula the St. Lawrence is the sole way out, or at least the main exit.

---

It was said in the previous chapter that with the cession of Canada and the extension of British power over the greater part of North America, the St. Lawrence came into its own. The statement perhaps might stand revision: it came into its own in point of opportunity, but in point of actual achievement it was the coming of the age of steam that was the decisive factor. Till that time the ascent of the St. Lawrence above Quebec had been an arduous business—tide and current, shallow and broken water, no great rapids, indeed, all the way to Montreal but stretches of swift current, terminating at the very end, at the foot of Montreal Harbour itself, in the powerful St.

Mary's current almost defying the power of sail. With wind enough a ship might sail up against it, but without wind, or with an adverse wind added to it, a ship from the sea might lie there day by day helpless at the foot of it. Even well into British days, after steam, but not steam tugs, had begun, long teams of oxen were used for this last and final haul of a ship in from the sea.

In the old French days ships from the ocean rarely attempted to go beyond Quebec. For the river voyage they used a special type of *bateau*, as described above, a long flat boat, shallow, just the thing for scraping over the rocks and hauling and pushing against a current with a shore tow line and pike poles, utterly unseaworthy but never intended to go to sea. This was the special 'bateau' of the St. Lawrence, used for a century to ascend the river by fighting the current and even to get past the great rapids above Montreal<sup>[1]</sup>, a historic craft that never lost its place till the building of the St. Lawrence canals cut its occupation from under, not its feet, but its bottom. It must be remembered of course, that "bateau" often meant in French any kind of small craft just as "boat" does in English.

[1] *L. Tombs,*  
*"The Port of*  
*Montreal," 1926*

---

This kind of navigation went on until far into the British régime, indeed for the half century between the Cession and the War of 1812. The few ships that came were of only about 150 tons. We have it recorded that in 1813 only 9 ships from the ocean reached Montreal, a tonnage in all of only 1,589 tons.

---

Hence till steam came, Quebec was the sea-port and emporium of British Canada just as it had been of New France. But the time had now arrived when a number of people, seeing the amazing power of steam as developed for pumps and such devices, were experimenting on making it drive a boat. Among such experimenters John Molson, a patriot immigrant, father of British Montreal, was tinkering with a "steam boat" (still thought of as two words like the later "gasoline buggy") on the river bank beside his brewery<sup>[2]</sup>. The day came (1809) when his oddly and humbly named boat, the *Accommodation*, was launched, or pushed sideways, into the St. Lawrence. She paddled herself easily and lazily down to Quebec with the current, taking 36 actual hours as apart from time spent at anchor, and paddled herself, feebly but doggedly, all the way back again. "Her progress," said a contemporary report, "was very slow." The Quebec newspaper gave a patronizing approval. It said, in terms, that the *Accommodation* was no good: but hoped that Molson would go on. He did go on, and his going on

[2] *Stephen*  
*Leacock,*  
*"Montreal Seaport*  
*and City," 1942*

was destined one day to turn the port of Quebec into mere history as compared with the metropolis of Montreal. Interrupted and impeded for a time by the war of 1812, steam navigation on the St. Lawrence went rapidly on. Molson built more powerful boats. Others joined in. After the Peace of 1815, a regular service of passenger and freight was run between Quebec and Montreal. Humbler but marvellously effective, the world over, was the steam tug. It was a later arrival. The earlier steamers had all they could do to haul themselves. Yet presently appeared this new monster of the sea, a boat all engine, fire and belly—the strength of a giant in the body of a dwarf—never making a voyage in its life but the harbinger of a thousand outgoing farewells and a thousand incoming welcomes. The world over, the harbour tug put an end to the labour of capstan and windlass, of warping and hauling to sunken anchors. Such was the *Hercules* that appeared in Montreal harbour in 1823.

Nowhere in the world did the steam tug mean more than it did on the St. Lawrence route and for Canadian Inland navigation. The terrors of St. Mary's current became meaningless; the access to every inland harbour, no matter how crooked, how perplexed with shoals, easy and certain. No burden was too heavy for the tug. Presently, though this was a good many years later, it even hitched on to the huge timber rafts that now began to be built for the export trade to Great Britain—hitched itself alone or with one or two companions to a quarter of a mile of floating timber, and puffed away its hardest—apparently motionless. Yet give it four good days and it would have the raft all the way from Lake Ontario to Quebec—a journey that used to take the raft, floating on its own, as many weeks.

Steam on the St. Lawrence grew apace. The "ferries" from Montreal to Quebec became large steamers with hundreds of passengers. Each innovation forced others. The improved ocean highway to Montreal forced canal making above. A little more than a generation gone the Loyalists had made their painful way to Upper Canada, hauled in bateaux and trudging it on foot and camping on the shore. Some of them, by sea from the States, were a year out from their old home to their new one. But now river steamboats picked up each open stretch of lake and river and between them stage coaches, thumping over corduroy roads and hauling through swamps, hooked up the connection. The acme of speed and comfort, no doubt it seemed, but, like each new acme of speed, never fast enough. So they revived the old French plan of a Lachine Canal to pass the big rapids, a plan which Dollier de Casson, the Head of the Seminary at Montreal, had attempted to initiate a hundred and twenty years before. He failed for lack of means. But these were the days of immigrant "navvies" and labour power in the mass. The Lachine Canal, started in 1821, was completed four years later. It was at first only five feet deep—carrying barges and

small boats. But it underwent a continuous deepening never to be finished till it reaches the limit of some 35 feet imposed by nature in the rock bed of the river below Montreal.

Greatest change of all, of course, was the coming of the transatlantic steamship for which the St. Lawrence route may advance a certain claim of historic priority. The *Savannah*, a vessel with auxiliary steam, crossed the Atlantic in 1819. But she was not the first ship to cross the Atlantic by steam; for she used very little of it and went mostly by sail. She was a clipper-built full-rigged ship—the beautiful type of sailing vessel that came only with the era of steam, but for the time being, given half a chance, faster than steam itself. No ocean steamer for two generations ever touched the record of over 400 nautical miles in twenty-four hours made by various clipper ships.

The *Savannah* hardly needed the steam. But the *Royal William*, built at Quebec and engined at Montreal, crossed the ocean (Pictou to London) on an all-steam voyage. This ship was really built to inaugurate a steamer service as between Canada and the Maritime Provinces (Quebec to Halifax). A heavy subsidy was to be paid for successful service. There was a great official to-do at her launching, with the garrison band of the 32nd Regiment playing martial music (April 27, 1831) while Lady Aylmer christened the ship after Britain's sailor King. She made her first trip in six and a half days. But the route didn't "pay"; nor the Halifax-Boston route; so the *Royal William*, sent to England for sale, attained the higher distinction of crossing the Atlantic entirely under steam Pictou to Cowes in 18½ days<sup>[3]</sup> (1833). In the course of time the good ship changed her name, nationality, sex and disposition ending up as a Spanish war vessel, *The Isabel the Second*. But her work was done. After that the introduction of steamer ships for the ocean went at a great pace in the St. Lawrence. Sea borne trade was increasing as never before in these years of peace and industrial progress. They couldn't build ships fast enough, wooden steamers and wooden sailing ships, with the saws and hammers busy in all the shipyards of British North America—the forest as the raw material, the seven seas of the world their customers. These were the great days of Quebec—this vanishing era of the wooden ship—and these were the grand days of the Maritime provinces, whose farmers were too busy to farm.

[3] <i>W. Wood, "All Afloat"</i>
----------------------------------

With the building of wooden sailing ships in Canada, largely for export to Britain, went the buying of iron ships in Britain for use under sail and steam on the St. Lawrence route.

---

The eye of history can see the moving panorama of the craft on the St.

Lawrence to the sea in a sort of “calvacade”—another phrase of the day, like “bottleneck”—all the way down three centuries. Here are the wooden bateaux of the Old Régime coming down from Montreal to transfer their people and their cargo, mostly furs, at Quebec. With good luck and the wind astern the shallow boat with one great sail skims like a bird, flying and driven at once. With bad luck the weary oars tug it along against wind and rain across Lake St. Peter. The boat it hopes to “catch” at Quebec—easily catchable for it won’t sail till it’s ready—is almost as square and clumsy as a Christopher Columbus carvel.

---

Here next is the British régime, the early days—with Molson brewing beer and dreaming dreams but as yet no steamers. Brigs are lying below St. Mary’s current, unloading “general cargo”—meaning, a little bit of everything that settlers need, and taking on grain, furs and, strangely enough, “ashes.” It seems a mournful cargo. But it was not the ashes of defunct patriots—only hardwood ashes for potash. The brig will (it is announced on a placard and printed in the newspaper) sail *about* July the Something—that is, most likely. She has “commodious accommodation for eight passengers.”

Now let us shift to the days of the “Province of Canada”—the United Province of 1841, that never would unite, and later took in the Maritimes and the North West to make a tolerable union, the jam taken with the powder. The year is 1842, the world, or all of it that matters, is at peace, everything booming, immigration coming up the St. Lawrence in a flood, the cholera unable to keep pace with it. Young Mr. Charles Dickens<sup>[4]</sup> is in town at Rosco’s hotel, Montreal, and he’s writing his *Notes* about the river and the shipping. He hasn’t come by the St. Lawrence; he came to New York in a new sail-and-steamer regular Cunard packet. But he has seen a lot of Canadian transport, too, as he has just come down from Toronto, by steamer and stage, Lake Ontario and the river, and, think of it—Mr. Dickens can’t get over it—has seen a great raft half a mile long (Mr. Dickens says so) with a village on it! And then at Montreal—here is a real sea-port with stone docks built and building, ships in the river, shiploads of immigrants. It is a bright happy picture that Dickens saw, a mirror in which his own youthful exuberance “reflected itself”—a pleasant countryside, a quaint loyal people (Dickens was done with “freedom” for ever) and a new sea-port, all stir and sunshine.

---

[4] *Charles Dickens, “American Notes,” 1842*

It is indeed just at this period that the real St. Lawrence sea voyages begin, in the grand old ships that carried steam and sail both, and plenty of each, the ships

which represents the St. Lawrence navigation to and from Montreal from the time of the Crimean War till the close of the nineteenth century. The first transatlantic steamer to come up to Montreal was the *Geneva* of 700 tons, arriving in 1853. Two other boats, one of twelve hundred tons, arrived that same season initiating the mail service. The Crimean War, drawing all shipping to the Baltic, came only as an interruption. The war was followed by a forward rush in the Montreal trade with larger tonnage, iron ships and higher power. With this went a progress in deepening the ship channel of the river from its original eleven feet to fit it for ships of deeper draft, better surveys and better marks.

Here begins the famous Allan Line, a part of the history of Canada. It had a fleet of twenty vessels by 1861, did a roaring trade, took of necessity great risks in the still ill-lit, ill-marked river and ice-strewn gulf, suffered many disasters but deservedly won through. Other lines followed, the Dominion Line, and the Beaver, whose ships later became a part of the Canadian Pacific fleet<sup>[5]</sup>. But the Allan Line set the pattern and overtopped the trade for the rest of the century. Till almost the end of the century also they kept their sail, their vessels being ships of from 2,000 to 5,000 tons, rigged as “ships.” One of the most typical and best remembered is the *Sarmatian*, a “ship” (three masted and square rigged) built in 1871 and surviving in the Montreal route into the present century. She served as a troop-ship in the Ashanti War (1873-74) and on the St. Lawrence had the honour of carrying out to Canada, as Governor General the Marquis of Lorne and his wife the Princess Louise—and other eminent persons. But sail proved of doubtful value, as steam power increased—a dead weight of mast and rigging to drag against the wind. More and more sail was shortened. It appears almost gone on the reconstructed *Parisian* of 1897, the last word of luxury in the nineteenth century and quite gone with the beautiful outlines of the *Victorian* and the *Virginian*, the first word of luxury of the twentieth.

[5] *Henry Fry,*  
*“North Atlantic*  
*Steam*  
*Navigation,”*  
*1896, Chap. IX*

---

Meantime the development of the port, the building of docks, had kept pace with the progress of navigation. The Dominion of Canada took over the control, and cost of harbour and river navigation after Confederation. A Board of Montreal Harbour Commissioners (Dominion Officials) vigorously worked on port facilities. All the port area and docks was presently (1894) vested in a Harbour Corporation. The ship channel had already been dredged out to 20 feet at Confederation: by 1882 it was down to 25 full feet, by 1887 to 27½. A vigorous struggle was waged against the ice by the ice breaker ships installed on the river. The spring flood water,

an annual danger since Maisonneuve's first settlement in 1642, when it washed out the graveyard, was held back with heightened banks and flood walls. The tonnage of the port from Confederation till 1900 increased from two hundred thousand to more than a million and a half by the end of the century.

This development of the port of Montreal had behind it the increasing development of the St. Lawrence route itself by the deepening of the canals that carry the traffic to the upper lakes and the development of special types of boats, grain and ore carriers. But the ending of the century was only the beginning of this new union of Canada to the sea. The port of Montreal and the improvement of river navigation carried on into the twentieth and will carry on beyond the war period as one of the greatest factors of the economic life of Canada.

---

But meantime, in looking back over it, one thinks of it not in terms of efficient statistics but as a moving panorama in which are reflected on the face of the St. Lawrence as seen from the Royal Mountain that looks at it, all the changes of three hundred years, the sea, as it were, moving further and further in its contact with the inland continent.



## THE LAKE SCHOONER—ITS PRIDE OF PLACE SANK TO HUMBLE USES

The lake Schooner which was evolved from the less suitable square-rigged vessels of the ocean, once dominated the Great Lakes. It held the lead for both passengers and freight, unexcelled in speed, convenience and capacity. Its sails covered the inland lakes. The railroad and the steamship reduced it to its last days as a “stone hooker.”

## CHAPTER EIGHT THE ARCTIC VOYAGES

The Lure of the North West Passage—The Amazing Mr. Dobbs Searches for India in Manitoba—The Hudson's Bay Company's Annual Voyages—Descriptive Narratives, Captain John Franklin (1819), R. M. Ballantyne (1841)—Revival of the North West Passage and the Search for the North Pole as a Form of National Adventure, Sport and Science—The Voyages of Ross and Parry—Parry Originates the Dash for the Pole—Ross Lost for Four Years—The Tragedy of Sir John Franklin

After the days of naval warfare against the French in the Hudson Bay the navigation of the far northern seas plays little part in the evolution of British North America except in connection with the supply route of the Hudson's Bay Company. All dream of a practical North West Passage was dead, or was only a dream. The knowledge of the geography of the Pacific, though still limited, showed how long and how far outside of the field of practical commerce would be any voyage from London to the ports of China by way of the Polar Seas. The dream indeed lasted when the reality was over. The discovery in 1728 (corroborated 1741) by the Russian explorer, Captain Vitus Bering, of the strait separating Asia and America woke the dream for a short time to life. It was argued that the strait must lead somewhere: the other end of it must be the North West Passage.

The Hudson's Bay Company half believed this. A discussion of the problem in a contemporary history says, "The opinion has prevailed for upwards of two centuries and a half, among the most knowing and experienced persons, that there is a passage to the North West."<sup>[1]</sup> A Mr. Arthur Dobbs, an English gentleman of means and influence, persuaded the Company (1737) to send out two ships, the *Churchill* and the *Musquash* to look for the passage. They got no further than latitude 62° 15" (still inside the Bay), the *Churchill* being out only ten days and the *Musquash* about six weeks. They reported nothing but "small islands and an abundance of black whales."

[1] *B. Willson,*  
"The Great  
Company," 1899

The Company had enough of such fooling but Dobbs went on. He seems to have had the persuasiveness or the pertinacity that wears down opposition. He went on looking for India—that is where he was heading for—during ten years. He hired a queer, disgruntled shipmaster out of the Company's service. He got his friends to supply money. He worried the Admiralty into lending him a couple of small ships.

Middleton, Dobbs' captain, carried out a kind of comic opera exploration, all quarrels and mysteries. He said he had found the passage, but that the Company were hiding it. The Admiralty gave another ship. Dobbs' enthusiastic friends got an Act of Parliament offering a reward of £20,000 for the discovery of a "passage to the Southern Ocean." An Association raised £10,000 and sent out quite a big ship, *Dobb's Galley*, 140 tons, and a consort, the *California*—a name at that time as vague as their aspirations. They cruised round in the Bay for over a year, kept the ship's company alert with offers of premiums for everybody—£500 and downwards—when they should get to the Southern Ocean. They wintered (in Manitoba) a little way up the Hayes River, in a log house with brandy for all. It seems a pity they didn't find India. This "fun" lasted till 1748. All this, one notes, was happening in the years when Great Britain was convulsed with the French war (1744-48) and with the Jacobite Rebellion of the Young Pretender. After that, the North West Passage fell asleep again for half a century till it came back as a sort of national sport, along with the discovery of the North Pole.

---

But meantime the voyages of the Hudson's Bay Company went on from year to year to and from the Port of London, round Scotland and through Hudson Strait to the Bay. In the entrance to the Bay the Company lost only two or three ships in 200 years. This is really a wonderful triumph of seamanship and seamen's instinct, so steadily, so watchfully performed that it was largely taken for granted. It seemed commonplace as compared with wild voyages in the typhoons of the China Seas or among the Malay pirates of the East Indies. But typhoons and pirates, proas and cyclones are largely a matter of luck and adventure. These voyages were the work of watchful seamanship. The waters around the north of Scotland are danger itself—current and shoal and the enshrouding mist. Hudson Strait is one long chasm of danger—even in its open season its northern walls of rock are swept with high tides and torn with currents. It never freezes to one solid mass but it is never free from the drift of ice, from the crush of the closing ice pack. To linger too long is death. Beyond it is the great open Bay, an inland sea, with difficult shifting harbours, in those days much of it unknown, uncharted, and below it the James Bay, shallow and shoal-strewn, with a low, mournful horizon of scrub and muskeg—in those days, shores without life, with help nowhere. Shipwreck and you die.

Such voyages needed stout hearts. They continued steadily from the beginning of the Company's history till more than a hundred years after the vagaries of Captain Middleton and Dobb's *Galley*. The Company's servants came and went that way: so did the governors. Lord Selkirk's colonists came that way, via the Bay and

Norway House on Lake Winnipeg, to the Red River. That way came Captain John Franklin sent out (1819) to explore the Polar Seas by reaching them from the Mackenzie River. So came also a little later R. M. Ballantyne, a servant of the company, famous to a generation of British boys for his stories of the wilds and the sea.

There is a strange romance, a wistful realization of the past in the long farewells, the complete separation from the world that was imposed by such long voyages and such long silences. We have nothing like it now. One turns with interest to the chronicles of those, very few they were, who left accounts in detail of the Hudson Bay voyages.

Here is young Captain John Franklin<sup>[2]</sup>, young in years (thirty-three) but a veteran of Trafalgar and a dozen other sea fights and shipwrecks, a scientific-navigator, marked out and chosen by the Admiralty. Let us take ship with him and see bye-gone reality at first hand.

[2] <i>J. Franklin,</i> "Narrative," 1823
--

Sunday, 23 of May, 1819 . . . We embark at Gravesend on the *Prince of Wales*, getting under weigh with her consorts the *Eddystone* and the *Wear* . . . unfavorable wind . . . beat down in the night . . . easterly winds . . . then a sudden change, all sail and we reach Yarmouth, May 30 (one week out) . . . more delay . . . passengers land . . . sudden change of wind . . . ship fires guns . . . Mr. Midshipman Back left behind [he is twenty-one years old, has been at sea since he was twelve, and, will one day be Admiral Sir George Back and leave his name on our Back or Great Fish River that flows into the Arctic] . . . he shows his quality now . . . makes a wild dash by stage and horse, nine days without rest, joins us at Stromness in the Orkneys at night in the rain . . . a dance is going on, the untiring Mr. Back joins in . . . More delay . . . leave Stromness June 16 . . . "passage between Hoy and Pomona, weather, tide . . . strong breeze . . . beating through . . . dangerous rocks" . . . Beat into the outer Atlantic . . . progress slow, end of June, still open sea . . . July, open sea . . . July 25, enter Davis Strait (between Greenland and Baffin Island) . . . speak the whaler *Andrew Marvel* . . . "ice heavier than ever recollected" . . . reports two whalers crushed in the ice 74° 40' north, crews rescued . . . clouds, icebergs, streams of floating ice . . . July 30, dense fog . . . masses of ice . . . severe blows . . . Aug. 4 (in Hudson Strait) large ice-bergs . . . Mr. Midshipman Hood measures one 149 feet high . . . consort ships join . . . Aug. 4, loose ice beating down on ships . . . danger . . . attempts at towing . . . strike sunken rocks . . . driving against ice-berg . . . "ship receives water fast" . . . all hands at the pumps . . . wind increasing . . . fear of masts going . . . signals to consorts . . . get older women off to

the *Eddystone*: younger women at the pumps . . .

This desperate situation lasts from August 4 to August 12.

August 12, ship's leak patched . . . we reach Resolution Island and enter Hudson Bay . . . "tides appear to be strong and uncertain: dangerous rocks" . . . the cliffs we pass are fifty feet high, perpendicular rock . . . Aug. 19, we pass Digge's Island "at the termination of Hudson Strait" . . . five days heavy blow . . . forced to beat along the East coast of the Bay . . . Aug. 25 fair wind, start across Hudson Bay . . . "the morning of August 30 presented to our view the anchorage at York Flats."

From which place began Franklin's journey by river and lake to Fort Chipewyan, then down the Mackenzie, and to the Coppermine, the Arctic and back. He reached England in 1822 and made a second land journey to the Arctic in 1825.

Or we turn to the livelier pages, a contrast with those of Franklin since Franklin habitually dealt with fact and Ballantyne with fiction, in which young R. M. Ballantyne<sup>[3]</sup> relates his leaving his Edinburgh home, at the age of sixteen, to join the service of the Hudson's Bay Company in what he calls "the wilds of North America."

[3] R. M.  
Ballantyne,  
"Hudson's Bay,"  
1848

It is the middle of May 1841. Here he is at Gravesend after a sea voyage from Scotland, to go aboard a "huge ship"—so he calls it—the *Prince Rupert*, lying ready to sail with her two consorts, the *Prince Albert* and the *Prince of Wales* . . . crowded docks . . . steamers and tugs . . . Company passengers and emigrant missionaries for the Red River Settlement . . . banquet at Gravesend (annual custom) given by the Company to its outgoing officers and clerks . . . "ceaseless din of plates, glasses, knives" . . . embarkation . . . then, six days "completely prostrated with sickness" . . . wakes up to find the ship running through Pentland Firth . . . sudden storm, ship on beam ends . . . in port at Stornoway . . . then out on the Atlantic . . . "dreary and monotonous: the same unvarying expanse of sky and water" . . . a month of this, "having seen nothing but one whale." Then Hudson Strait . . . the consort ships join . . . "channels and mountains of ice" . . . "surrounded by ice" . . . "thousands of grotesque, fanciful and beautiful ice-bergs . . ."

Unlike Franklin's voyage they move easily and smoothly southward over calm sea among the ice . . . Young Ballantyne has become quite a sailor . . . skips up the rigging . . . sits up on the royal yard, gazing out to sea . . . "I thought nothing of taking an airing on the royal yard before breakfast" . . . then stormy weather, a "drive across Hudson Bay" . . . the shore anything but prepossessing . . . low and

flat . . . scarcely a tree . . . “We could just see the tops of one or two houses in York Factory, seven miles up the river” . . . “The boat’s keel grated on the gravel: my voyage was ended.”

Time out, apparently about two months and three weeks.

Ballantyne spent six years in the “territories of the Hon. Hudson Bay Company,” and misspelt its name even after that.

---

The *Andrew Marvel* mentioned above was a whaling ship, a reminder of the fact that whalers had been coming and going into Canadian Arctic waters for more than a century before the time of which we speak. Early whaling, as begun by the Norsemen in the North Sea was an off-shore industry, the carcasses hauled to the beach. Thus the Norsemen fished off Norway and the English in the days of Queen Elizabeth off Spitzbergen. The whales, diminished by pursuit, moved westward into the Atlantic. The whalers learned to boil down (“to try out”) the blubber on board ship. Thus whaling became a deep sea industry with no contact with the shore off which it might be carried on and little record in local history. A whaler, like a whale, was a denizen of the deep. There were whalers in Davis Strait in Queen Anne’s time, with as many as 350 ships, mostly Dutch, in the fishery. Later in the century British ships out of Liverpool and out of the North Sea ports (Hull, Whitby, Dundee, etc.) predominated. Atlantic whalers went out from the ports of Newfoundland and New England and thence, after American Independence, the industry was carried to our Maritime Provinces. It became, as will be seen, one of the features of their great days on the sea.

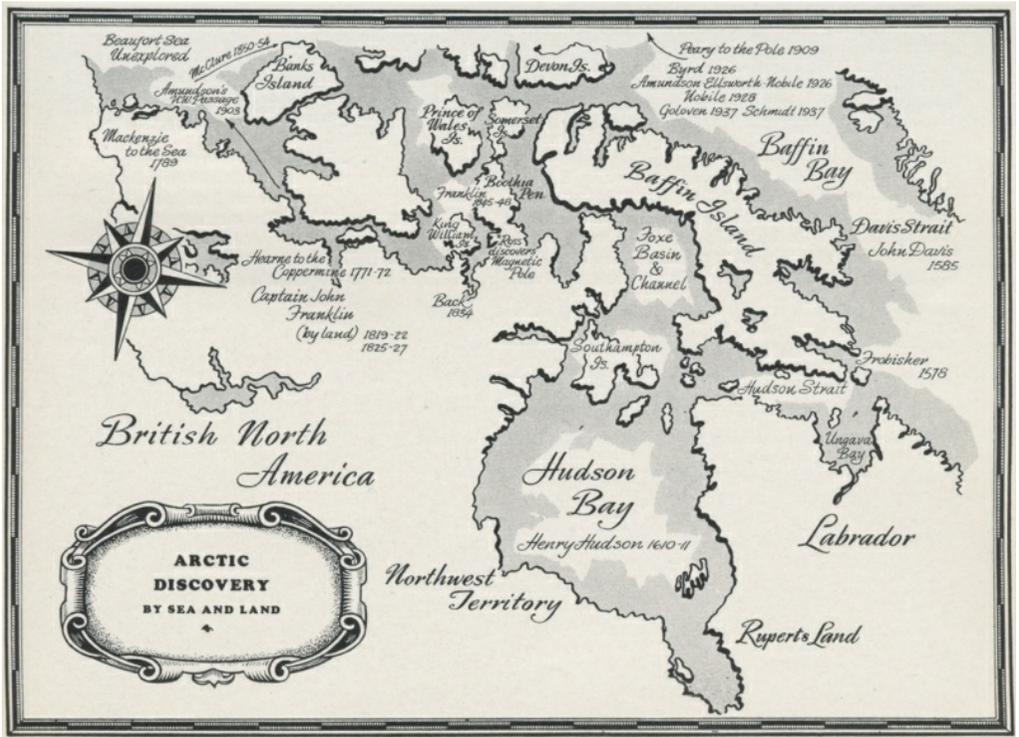
But the best whale, the sperm whale, the so-called “right” whale, grew rare to find and far to seek. The vanishing industry moved to the Pacific and later to the Antarctic. There, in the period between the wars (1918-1939) the demand for oil gave it a sudden and extraordinary development. It became “mechanized” with floating factories, on-shore stations, and all the apparatus of a machine industry. But the lonely whaler of the old days, out of Aberdeen for the *Aurora Borealis* off Canada, is gone.

Gone also is “the North West Passage” as a geographical problem, solved and found as empty as a nut, solved by Captain Ronald Amundsen when he took the *Gjøa* from the Atlantic to the Pacific in 1903, and solved North Eastward by the Royal Canadian Mounted Police in 1942 when they took a patrol boat from the Pacific to the Atlantic. But before the problem was solved it had a grand revival in the early part of the nineteenth century, a revival for which the mysterious loss of Sir John Franklin and all his men afforded a tragic end and sequel.

---

Dead as a commercial proposition after *Dobb's Galley*, the North West Passage came back after the Great Peace of 1815 as a form of national sport, as a subsection of the progress of science, as a competition of national prestige. As such, like other scientific enquiries, it helped to fill the time of a navy idle for want of war. Thus did Charles Darwin make his memorable voyage in the *Beagle*, preparing the world for the origin of species and the decline of Genesis. Thus, too, went the young Huxley to Australia and the Melanesian Seas, on the *Rattlesnake*.

In our Canadian northern seas there were the expeditions of Captain John (later Sir John) Ross and Lieutenant Edward (later Sir Edward) Parry to Davis Strait in 1818: Parry's second voyage of 1821-1823 to search for a direct passage north west from Hudson Bay: Captain Lyon in the *Griper*, 1824, trying to sail through the Arctic to connect with the furthest reach of Franklin's first land expedition at Point Turnagain; Parry's third voyage, 1824, a courageous attempt to "break through" the Arctic with the specially built *Hecla* and *Fury*, the latter crushed by the ice and lost. Then came, as a link in the same chain though not in Canadian waters but via Spitzbergen, Parry's final exploit, "one of the most extraordinary voyages" ever performed by man, being no less than an attempt to reach the North Pole by boat and sledge travelling over the ice. The "extraordinary voyage" hit the record mark of 82° 40' 30" north: Parry's boats got back to his ship.



After that came John Ross's second voyage of 1829 in the *Victory*, with the aid of his scientist nephew, Commander James Ross<sup>[4]</sup>. They made their way to our central Arctic region, outlined 500 miles of coast, including King William Island, then named, and they located the Magnetic Pole. Their ship was beset by the ice. They were lost to the outside world. After three years they abandoned the *Victory*, with the colours hoisted and nailed to the mast (May 29, 1832)—“the first vessel I have ever been obliged to abandon,” wrote Ross in his narrative, “after having served in thirty-six, during a period of forty-two years.” They set out in boats, froze in, and then, dragging sledges, set out over the ice to reach open water and ships. The attempt failed. Winter overwhelmed them again. They lived through it in a house of sticks and snow, fighting against scurvy by the only means to fight it, eating fresh meat. One man died. Spring came. They got back to their boats. They sighted a ship. They reached England in Oct. 15, 1833, “received as men from the grave”.<sup>[5]</sup> “Orders, medals and diplomas from foreign states and learned societies rained down upon Ross . . . London, Liverpool, Bristol, and Hull presented him with the freedom of

[4] Sir John Ross,  
“Narrative,” 1835

[5] G. Hartwig,  
“Polar and  
Tropical Worlds,”  
1875

their cities . . . He received the honour of knighthood and Parliament granted him £5000 as a remuneration for his outlay and privations.” . . .

---

The game was evidently worth the candle, even if the candle burnt in a snow hut. We cannot wonder that brave and ambitious men, sailors threatened with what seemed to be permanent peace, eagerly welcomed the opportunity of such adventure and distinction. It must have been rare fun anyway, with a good ship's company, and the apparatus of wholesome amusement (the amateur theatricals, the ship's newspaper, etc.) and the vigorous daily exercise which Parry and others learned to recommend. The courage of it was undoubted yet there was something, as Stefansson has pointed out, almost childish, or shall we say, boyish, in the extraordinary ignorance and lack of adaptation to conditions with which Arctic exploration was carried on: no attempt to eat as Arctic men eat; no attempt at equality and uniformity of tasks such as nature imposes on Arctic men; still master and servant, officer and seaman; paid hunters and beaters—as if elephant shooting in the Dekkan.

Against this background we can understand the tragic and final episode of Franklin's expedition. Before it ended the European world had gone back to war again, never wholly to leave it.

---

All the world still remembers, or dimly recalls, the story of the loss of the *Erebus* and the *Terror*, their commander Sir John Franklin with his 128 officers and men, without a single survivor<sup>[6]</sup>. The expedition was equipped to the last degree, Franklin himself a man of fifty-nine but his crew picked men in the full vigour of their strength, experienced, as they thought, in Arctic life. They sailed from England in May 1845, were sighted two months later in Baffin Bay, sent home from there the last letters ever received from them, and then were gone forever. The first winter closed over them, unregarded, for that was expectation; the second with doubt and then the third with consternation and national dismay. Then followed eleven years of the search for the missing ships, organized by the government or initiated by Lady Franklin, in which no less than forty expeditions were sent out at a cost, if such noble efforts must be assessed in money, of four million dollars. The whole story of what happened has never been known. Not even its outline was known until the discoveries of the search expedition of 1857-59 under Captain (later Sir Leopold) McClintock. Later details were gathered by inland expeditions from the evidence of relics and from the testimony and the legends of

[6] Vilhjalmur Stefansson, "Unsolved Mysteries of the Arctic," 1939

Eskimos, continuing as late as Major Burwash's Canadian survey party of 1928-29 and the search made by Hudson's Bay Company men in 1931.

We know now that the ships were beset in the ice off King William Island. This desolate island lies in the centre of the maze of the Arctic Archipelago. It is midway between the Atlantic and the Pacific, poised, as it were, over the centre of Manitoba. Near it is nothing. The Hudson's Bay Company's post Norway House is a thousand miles away. Sir John Franklin himself died on board ship (June 11, 1847). After two winters in the ice the situation of the ships appeared hopeless. The remainder of their crews under Captain Crozier abandoned the ships (April 22, 1848). Later on the Eskimos invaded the vessels. In one of the ships they found corpses lying in the dark. The natives in their ignorance cut a "window" in the side of the ship and she sank. The other ship with its contents was broken up piecemeal in the course of years, carried away or sunk. The spoils were scattered over hundreds of miles of ice. The melancholy relics still come to light and as late as 1931 seven skeletons, undoubtedly of men of Franklin's expedition, were found on Douglas Bay, King William Island.

It appears that Captain Crozier and his main party, hauling a heavy boat, headed south and east for Back River—contrary to the direction expected by all the earlier search parties who looked further west. The Esquimos, living there at home on the food that for men with guns was an open larder, watched the tragic procession in wonder; the men stricken and ghastly, fighting the languor of scurvy as they staggered on in the blizzard instead of sitting down in it; fighting on till they dropped one by one: eating their last remnants of food out of foul cans with game all about them; ignorant of how to use even the food they found, chewing burnt leather when they should have smashed bones for marrow. All along their track were later found the traces of bones, of frozen bodies, of skeletons in uniforms, of half cooked remnants and bones divided by a saw that have suggested the even more appalling horror of cannibalism.

---

Years ago, and for many years, there was in the Canadian school readers a poem that recorded the heroic end of Franklin's men.

*. . . A band of gallant hearts  
Well ordered, calm and brave,  
    Braced for their closing parts  
Their long march to the grave.*

*. . . Till all the weary way  
Is dotted with their dead  
And the shy foxes play  
About each sleeping head.*

It is a pitiful but heroic story, this unsolved mystery of the Arctic now so tragically clear.



A NOVA SCOTIA SCHOONER—ONCE KNOWN IN THE SEVEN SEAS  
AND NOT VANISHED YET

In the last great days of sail the shipyards of the Maritime Provinces seemed to be moving into the lead of the world's shipping. Ships were still built of wood and the facilities offered by the native forests and commodious harbours of the Maritime Provinces were nowhere matched. Even today the Nova Scotia Schooner holds its own in a smaller field and the triumphs of the Bluenose still attract the eyes of the nautical world.



## THE QUEEN OF INLAND NAVIGATION—THE RIVER AND LAKE PASSENGER STEAMER

These beautiful boats present a symmetry of outline which recalls the vanished fleets of the clipper ships and the ocean greyhounds which succeeded them. The battleship has long since been compelled to sacrifice symmetry to efficiency. The giant liner, seen close up, resembles a floating city block. Only from the air does it regain its lost outline. But our Canadian river and lake steamer that carries its tourist passengers all the way from Quebec to Duluth and Chicago, hopeless though it would be in an ocean storm, is Queen in its own domain.

## CHAPTER NINE THE CALM PACIFIC

Captain Cook Annexes the Pacific—Nootka Sound and Spain—Vancouver Reveals the Pacific Coast from the Sea, Mackenzie from the Land—The Fur Companies Reach the Pacific—Oregon the Unknown—The Rush for Gold—Fort Victoria at the End of the World—Hail Columbia, British

The long years of these Arctic explorations in pursuit of unrealities produced at least the reality of Canadian dominion over the Northern Seas, marked out a frontier, if only of ice, and gave us our claim to our slice, nearly one quarter, of the North Pole. The same impetus, the pursuit of the North West Passage, sought in this case from its terminal end, gave us ultimately the reality of British Columbia. Thus began Canada from the sea on both sides as a tunnel drives blind through a mountain.

---

Calm is the Pacific ocean and calm indeed are its annals as far as Canada is concerned. Its history only begins with Captain James Cook and our first knowledge of much of its coast is still within reach of living memory or direct hearsay, its great seaport and metropolis a growth of yesterday.

---

It was in pursuit of the North West Passage by way of the Pacific that Captain Cook's voyage of discovery led him to what has become our western coast. Cook was a notable man—a farm boy, a ship's apprentice and, by his own efforts, a marine surveyor, navigator and astronomer of exceptional eminence. He sailed the sea, as it were, by instinct. His famous chart, the first, of the St. Lawrence, made as an aid to Wolfe's expedition on which he served, commended him to the Admiralty. They sent out Captain Cook to the Pacific (1769) with a party of inquisitive astronomers anxious to obtain an unimpeded view of the approaching Transit of Venus. Cook knew of better things than that to look for in the Pacific. Moreover he rightly understood the principles of the British advancement of nautical science of his day whereby if there was anything good to be picked up for Great Britain by scientific navigators they must pick it up.

Cook made three voyages: the first (1769-70) in search of Venus; the second (1772-75) in search of the "Great Southern Continent," which was not there; the last (1776-80) in search of the North West Passage, to be found by striking clear across the Pacific among the Islands<sup>[1]</sup>. On his first voyage, for Venus, he picked up, in the sequel, Australia and New Zealand; on the

[1] *A. Kitson,*

second in which he sailed 20,000 leagues in the Indian and Pacific Oceans and returned via Cape Horn, he located a great number of Pacific Islands of which Britain kept some and left others; and on the third voyage which took him clear through Bering Strait to the wall of the Arctic ice, he picked up the Sandwich Islands, hoping much from his discovery. There, in an unhappy quarrel, the natives killed him. But on his way in he had already “picked up” British Columbia. Cook’s discovery of the Island, later called after Vancouver, and his visit to the beautiful inlet of the sea in its western coast, called by him from what seemed a native name, Nootka Sound, remains as the first basis of the British claim to the Pacific Coast.

“Captain James Cook,” 1907

It looked as if the discovery of these happy latitudes, equable in climate, with excellent harbourage everywhere, rich in untouched resources on land and with waters teeming with fish, would have created an immediate and expanding commerce. But physical distance and difficulty combined with political complications to forbid it. British Columbia was not exactly strangled in its cradle but it was kept in so long that it ultimately fell out full grown.

Cook’s ships went home via China. There they learned the extraordinary value of American sea otter skins, of which they had a few, in the Chinese market. As a result a maritime fur trade was thus offered across the Pacific to the Orient. Hence began voyages and further explorations of the coast by British captains sailing across from the China seas. Captain Hanna in 1785, brought to Canton five hundred and sixty otter skins.<sup>[2]</sup> The Chinese price averaged twenty dollars a skin, with the best ones selling at over two hundred dollars. Other ships followed in the trade, from India and from China, in spite of the still existing China monopoly of the East India Company which was in force till 1833 and forbid all other British traders to sell anything in China. To the sea otter trade was added the culling and cutting of ships’ spars from the beautiful forests of the coast, and presently the setting up of fisheries with Nootka Sound as a basis.

[2] F. W. Howay,  
“British Columbia,” 1928

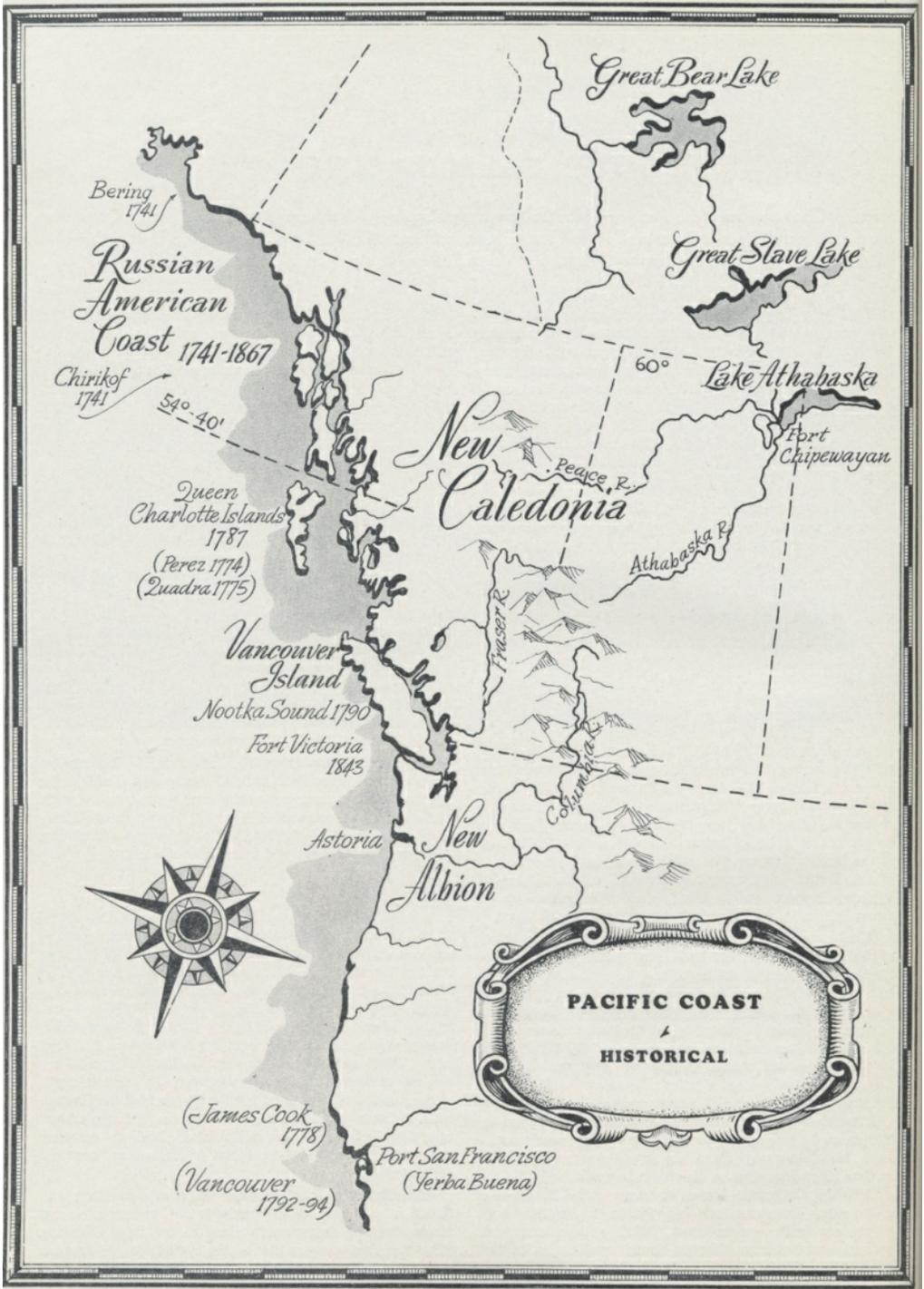
All of this, however, was “illicit” trade, illicit as against the privileges of the East India Company and illicit, so the Spaniards said, as contrary to their sovereignty over the whole west coast of the continent of America. The Spanish difficulty broke out suddenly in the Nootka Sound quarrel which forms “page one” of the history of British Columbia.

---

At that period Spain still held, although within sound of the first mutterings of the coming storm, the whole of her vast American possessions. These included all the

west coast of South and Central America, as well as the coast of North America as far as known. The Spanish missions had spread gradually up from Mexico to California and had reached Monterey and San Francisco (1776). From overland, by way of the Rio Grande river, Spanish missions had long since (1598) reached Santa Fe. But on the west coast there was still a stretch of territory between the furthest north of the Spanish missions and the lowest reach of the Russian whaling fleets and Russian explorers who had made their way down what we now call Alaska. Midway on these unexplored shores slept the Island of Vancouver, beautiful and unknown.

Yet where the Spanish claims ended as a *fact* they continued as a dream. The Spaniards are, to use a current phrase, *long* on dreams, as witness to this day, Gibraltar. They cherished a dream that all the Pacific coast of America was theirs, whether they had ever seen it or not, Pope Alexander having given it to them in a dream of his own in 1494. They resented alike the advance of Russian occupation along Alaska, which they had no power to prevent, and British intrusion at Nootka which they determined to terminate. Spanish armed ships were sent to Nootka, seized two British fishing vessels and held them as confiscated.



*Russian American Coast 1741-1867*

*Bering 1741*

*Chirikof 1741*

*Queen Charlotte Islands 1787  
(Perez 1774)  
(Quadra 1775)*

*Vancouver Island  
Nootka Sound 1790  
Fort Victoria 1843*

*(James Cook 1778)  
(Vancouver 1792-94)*

*Astoria  
New Albion*

*New Caledonia*

*Great Bear Lake*

*Great Slave Lake*

*Lake Athabaska*

*Fort Chipewayan*

*Peace R.*

*Athabaska R.*

*Fraser R.*

*Columbia R.*

*60°*

*54°-40'*



News travelled slowly. But when this news at last reached England, the patriot prime minister, William Pitt, wrote with his own pen a protest against Spain and he dipped deep into the ink pot to do it. Both sides prepared for war. Spain, as a trump card, called upon France to make good the royal “Family Compact” of the Bourbon Sovereigns still reigning in each country. England, it is thought, could not have faced a war against both monarchies; but luckily did not have to. The French Revolution had begun, and the first wails of our British Columbia in its cradle were mingled with the tumult in Paris. This was not the Revolution of the Terror, of the Massacres; the King was still alive—as much as he ever had been. This was the constitutional Revolution with Lafayette and Mirabeau cast for the parts of Washington and Jefferson, a reform movement much admired in England where it promised a divided France and a long peace. Hence British Columbia was not strangled in its cradle by the Family Compact. Mirabeau said that “Family Compacts” didn’t hold now, but only “national” compacts. The Spanish bribed Mirabeau but the English outbid them. The affair ended with the discomfiture of Spain and the Nootka Sound Convention of 1790 which declared that the Pacific Coast from San Francisco to Russian America was open to the peaceful commerce of both nations.

---

Spain soon dropped out of the running, overwhelmed by war in Europe and revolution in America. But in spite of the open opportunity maritime development on the Pacific was slow. We must remember that at the time of the Nootka Sound Convention the overland route was unknown. No one had crossed the Rockies. The tempestuous voyage round the Horn, and the Voyage by the Cape, the Indian Ocean and the Pacific were both too arduous to give commercial value to the small volume of trade as yet obtainable.

---

Yet development began. Alexander Mackenzie of the North West Company made his way from Fort Chipewyan and Lake Athabasca through the mountains by way of the Peace River gap and so to the Sea Coast (1793). At the same time the voyages of Captain George Vancouver disclosed a fuller knowledge of the coast<sup>[3]</sup>. Vancouver’s name is commemorated in the name of one of our noblest islands and of our great Pacific metropolis and it is well that it should be so. He was a great sailor and lived in great days of the sea, sailing on uncharted oceans in an unknown world. Vancouver was with Cook both in his second and his third voyages (1772-4 and 1776-80) and served under Rodney in the great victory over De Grasse in 1783. He was sent out in 1791 to take over the north west coast

[3] E. S. Meany,  
*“Vancouver’s  
Discovery of Puget  
Sound,”* 1907

of America now relinquished from the Spanish monopoly and to search for an eastern passage from the Pacific Coast to the Great Lakes. Thus the roles of history were reversed: early explorers looked for the Khan of Tartary in Davis Strait. Vancouver tried to reach the President of the United States from Puget Sound. But in each case the results were momentous. Vancouver sailed by way of the Cape, the Indian Ocean, Australia, New Zealand, and across the Pacific. He visited the Sandwich Islands (April 1792, one year out from Falmouth) and from there struck the coast of “New Albion” (California) in latitude  $39^{\circ} 27'$  a little more than a hundred miles north of San Francisco, and explored it closely as far as  $52^{\circ} 18'$  north (Queen Charlotte Islands), discovering Puget Sound and the Gulf of Georgia and thus circumnavigated Vancouver Island. In a second survey during the same vast voyage, Vancouver sailed from below the Spanish settlements at San Francisco (lat. 37 to 38) to within the boundaries of Russian America (lat. 56) thus filling in the whole extent of the later British claim to “Oregon.” Vancouver went home in 1794—round the world.

The name New Albion, reminds us that British Columbia only got its name in 1856. “New Albion” along with many other curiosities of nomenclature, may be found on the old maps of our Pacific coast which antedate the Oregon Settlement. In Dr. Butler’s *Atlas of Modern Geography* (c. 1840) it is marked as covering all the coast southward from Juan de Fuca Strait to Port S. Francisco. Below it is Upper California, reaching to head of the Gulf (where the U.S. now ends) and then California. Above New Albion is New Georgia, round the mouth of the Fraser and above that New Hanover. The interior being mostly empty as far as the Rockies, Dr. Butler has written across it in despair “Flatheads,” but the Scotsmen of the Hudson’s Bay Company who traded there called it New Caledonia. The name Oregon vaguely applied to the whole coast, but became purely American after the settlement of 1846. The attempt of the Hudson’s Bay (Scottish) people to change Oregon to New Caledonia, presently clashed with the name of the new French penal settlement. Hence Columbia, tactfully altered by Queen Victoria herself, to British Columbia, to take the “Hail” out of it, became the final name of the province.

---

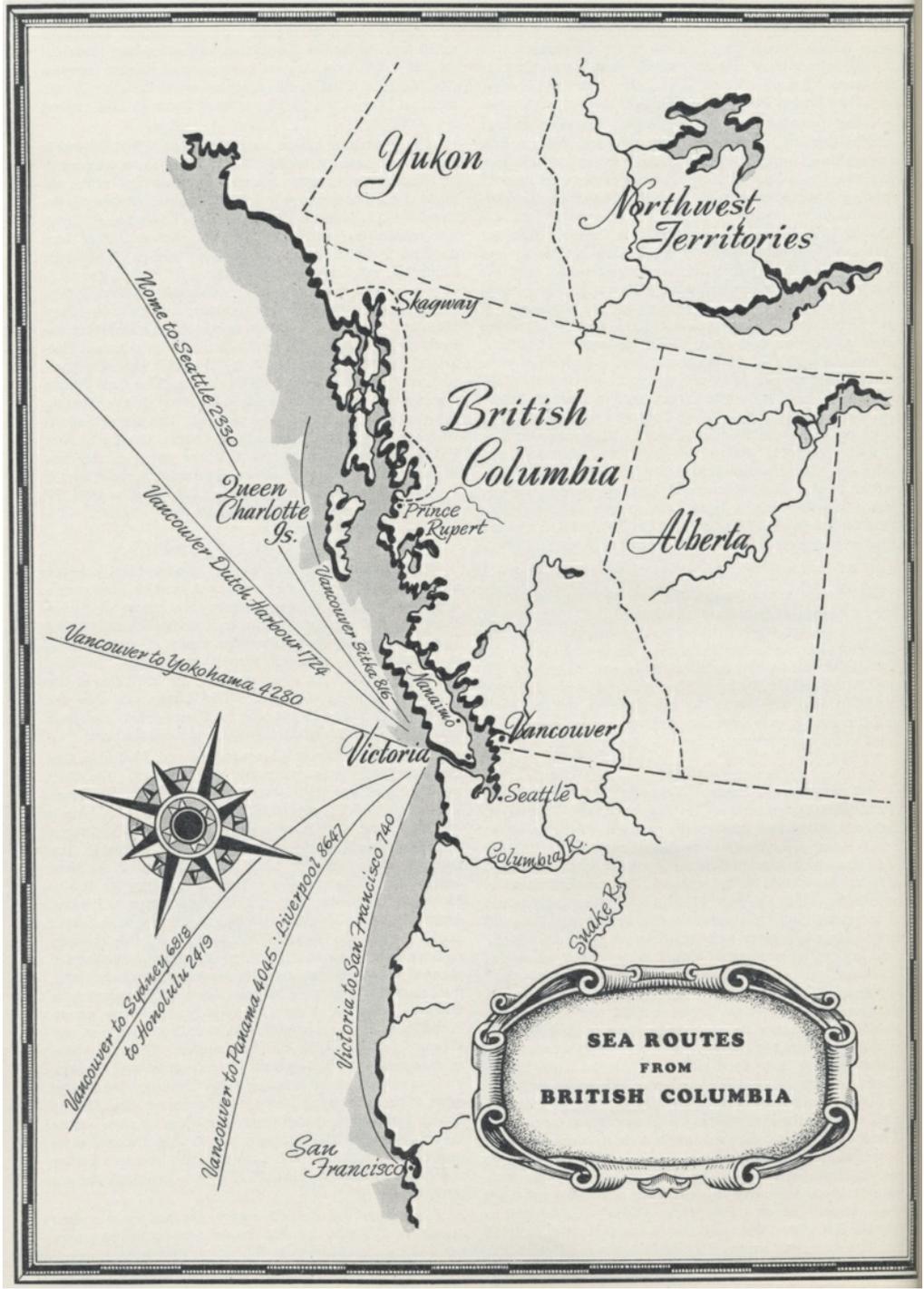
Maritime trade on the Pacific coast evidently began soon after Vancouver’s discoveries. Alexander Mackenzie’s overland explorations were followed by those of Simon Fraser, who descended the Fraser River to the sea, and of David Thompson who reached the mouth of the Columbia in 1811. He found there, already established, the Fort Astoria of the Pacific Fur Company, an enterprise of the illustrious John Jacob Astor. The Company’s ship the *Tonquin* had come round the

Horn. There seem to have been other trading vessels moving along the coast at the time.

Both the Northwest Company and the Hudson's Bay Company built forts and traded on the coast. The chief maritime post was Fort Vancouver on the Columbia River. In all there were 13 posts in 1826, though six of them, including Fort Vancouver itself, turned out, under the Oregon Boundary Treaty of 1846 to be in the United States. The Hudson's Bay Company after the annexation of its rival became the sole government of the country from the Rocky Mountains to the Sea, from the United States to Russian America<sup>[4]</sup>. The Company had one ship a year sailing from England round the Horn and sent "brigades" of its servants and canoe-men back and forward over the mountains and the plains to Norway House from which goods went on to England. For the sake of local supplies and in view of the approaching threat of losing the lower Columbia territory they set up Fort Victoria on Vancouver Island in 1843 as a sea post and a centre of local farms for food supply. This was done, as were most other things until Confederation with Canada, by James Douglas of the Hudson's Bay Company, the guiding spirit of the settlement, and its first governor. In 1849 the British government made Vancouver Island a colony under the supervision of the Company and in 1856 a colony in its own right. In 1856 British Columbia also became a colony and found its name and in 1866 the two colonies became one province.

[4] "*Douglas, Selkirk, Simpson,*"  
*Makers of Canada*  
*Series*

A vital part of the new colony, the feature of it best known in England, was the Naval Station at Esquimalt which dates definitely from 1857. It had a strange origin, one that reminds us of the peculiar turns of fortune's wheel along the tracks of the past history of the European nations. Esquimalt was established as a base hospital for the wounded who were to be brought from a proposed British attack, a second attack, on Siberia in the Crimean War. The first attack had been made, disastrously, by British and French ships, against Petropavlovski in Kamchatka in 1854. There were two hundred wounded men, who suffered greatly for want of any proper base to which to take them. It was decided not to make the mistake again. Esquimalt began with the wooden hospital sheds that Governor Douglas built on the harbour shore for the wounded who never arrived from an attack that never was made.



Yukon

Northwest Territories

British Columbia

Alberta

Home to Seattle 2350

Queen Charlotte Is.

Vancouver to Yokohama 4280

Vancouver to Sydney 6218  
to Honolulu 2419

Vancouver to Panama 4045 : Liverpool 8647  
Victoria to San Francisco 740

Skagway

Prince Rupert

Victoria

Vancouver

V. Seattle

Columbia R.

Snake R.

San Francisco

**SEA ROUTES  
FROM  
BRITISH COLUMBIA**

The real beginning of course goes further back. The Royal Navy had had a Pacific base—that is, a point of repair, supply and communication—in the Pacific as far back as 1837. They used—it seems odd now—the Spanish port of Valparaiso. The Oregon troubles brought British ships up and down the British Columbia coast. They noted the excellence of Esquimalt harbour near-by the new port of Victoria. Men of vision like James Douglas urged them to make a base there. Years of talk and correspondence came suddenly to action, as always happens, under the stimulus of war. Esquimalt and its buildings became not only a point of rendezvous but in actual fact a shore establishment of the Royal Navy, though not so recognized till an Order in Council of 1865 gave it legal birth. Even at that the Navy continued for years to use Valparaiso at times as “Pacific Headquarters.” As late as 1869 the British Navy at Valparaiso was supposed to keep an eye on the Latin American Republics.

But these were the days of large words and small things, or things great only in the magnificence of future empire. Trade, shipping, and population remained upon a small, almost a ridiculously small, footing for so large a foothold. Victoria was founded in 1843 and laid out in 1852, but it had only 300 souls in it in 1855<sup>[5]</sup>. There were 125 more, presumably a little blacker, in the coal mines discovered at Nanaimo. The company had three small sailing vessels trading up the inlets and creeks but the Russians, by virtue of their treaty of 1825, kept them out from the entries of what we now call the Panhandle. The channels being difficult for sailing, the company had brought from England, in 1835, a steamer, the *Beaver*, which became for many years a feature of the maritime life of the coast. The gold rushes (Queen Charlotte Islands, 1851; Columbia, 1855; Fraser River, 1858 and Cariboo, 1860) brought sudden influxes of miners, a sudden development of Victoria as the port of entry and supply, with a backwash like an ebb tide. The alluvial “gold diggings” in the streams soon petered out. The true gold of British Columbia, buried in the rocks, slept till the century was running out. Early attempts, while still the Company ruled, to bring in settlers from Great Britain to take up land, after the successful pattern of Upper Canada (1815-41) failed utterly, owing to the long sea voyage and the unattractive terms offered. The scheme was supposed to begin in 1850. In that year there seem to have been 15 “independent settlers,” for they petitioned, with true British instinct, for a “council.” But apparently there was only one such settler, a certain Captain Grant, direct from Great Britain: presently he left for the Sandwich Islands and then, as with the little niggers in the song, there were none. Meantime the Maritime sea-otter trade, constantly diminished by unchecked

[5] *Canada and Its Provinces (Series), Vol. British Columbia*

slaughter and made difficult by American opposition and lack of British support, had diminished and ultimately vanished (about 1835). A first class sea-otter skin is said to be worth now about two thousand dollars. But you must first catch your otter.

Meantime the vague attraction of gold, the rumour of a delightful climate, of a land of plenty where a penny went as far as a pound at home, brought out to British Columbia a certain movement of British settlers. They came round the Horn, or across the Isthmus or across the States by rail (after 1869) and by ship from San Francisco. Many of these were retired officers of the Crimea and the Mutiny, and were people of what we used to dare to call the "better class," lacking the means by which the better class can keep better in England. Of Canada they knew nothing. They lived, as it were, in a lost corner of the world, their thoughts still on "home." Victoria and its adjacent villages formed their chief places of settlement. Hence the peculiar "English" atmosphere and tradition that belonged with the earlier days of British Columbia. Where not English it was American. Of Canada it knew nothing, of French Canada even less. British Columbia, indeed, only wanted and accepted Union with Canada to get rail connection to go somewhere else. Yet in the sequel the rail connection was to give it those windows on the world which have turned the lost corner to a main highway.



## THE GREAT LAKES FREIGHTER—NOTHING ELSE LIKE IT IN THE WORLD

These enormous boats which bring down cargoes of ore and grain from the Upper Lakes are unique in their peculiar construction and their high cargo capacity. They are made for rapid mechanical handling of freight, rely on dock machinery and need more hatches than an ocean vessel dare carry. They illustrate the way in which the peculiar conditions of lake carriage have altered vessels from their parent ocean type.

## CHAPTER TEN

### THE GREAT SHIPPING DAYS OF QUEBEC AND THE MARITIMES

Great Days of the Wooden Sailing Ship—British North America Leads the World—The New Clipper and the Old Indiaman—The Maritimes and the Sea—Whalers and World Voyages—Beat this Who Can, says Saint John—Quebec’s Forest of Masts—Sillery Cove and the Timber Ships—Yarmouth and its Fleet

Canada under its present or its previous names, has had the distinction at various times, in various activities, of leading, or bidding fair to lead the world. In the eighteenth century it led the world in the fur trade. At the present time it leads in the production of nickel and is not far from leading the world in the production of wheat: it is probable that within a generation it will lead in the output of gold. But it never had a more striking eminence or one that seemed destined to greater things to come than in its building of wooden sailing ships in the middle period of the nineteenth century. Here was a manufacture that had become, in a sense, more important than any other since all the others were dependent on it. The sailing ship has come into its own, not merely in point of artistic beauty, but in point of service and efficiency. Steam was not yet so much a rival as an auxiliary, still hopeless by itself for the long voyages to the Orient and to the Antipodes, not yet independent in its transit even of the Atlantic but marvellous in the services offered in and out of harbours by the steam tug and the stationary engine, and in the power developed by the new steam railway to collect freight and passengers on a scale never known before.

We must add to this the peculiar character of the epoch of the Great Peace which began in 1815<sup>[1]</sup>. With it the industrial revolution that had initiated machine production in the eighteenth century found its first real opportunity. England became not only the workshop of the world but also the world’s bank, the world’s policeman and the world’s transportation agency. With this went the comfortable British feeling that this situation was just as it should be and was destined to last forever. This very error had its service in making the British people willing to invest money, that is, to perform physical services, anywhere and everywhere—to build railways in the United States and Argentina, with their own Empire still mostly empty. Who has finally won or finally lost on this is not yet known.

[1] *W. Cunningham, "Growth of English Industry and Commerce"*

But there is no doubt of the expansion which this era gave to shipping. It was needed not only for the transport of goods but for the transport of the new emigration that for the first time became a large scale feature of the world's economics. In the days of colonial America about 3,000 immigrants a year, at the most, crossed the Atlantic. The Great Peace of 1815 was immediately followed by large scale emigration from Britain<sup>[2]</sup>. In the first five years after Waterloo 98,000 British people went overseas as emigrants. Twenty years later (1835-9) the five year total had risen to 287,000 and by 1850-54 the British emigrants in all numbered 1,629,000.

[2] *W. A. Carrothers, "Emigration from the British Isles," 1929*

To these were added the people from all western Europe, especially from the German monarchies where tyranny and oppression fomented migration as a form of escape. Hence each new revolution, each new repression in Europe, each new distress of famine and poverty brought people in thousands, presently in millions, to the continent of liberty and plenty. Even if the liberty was a little rough and the plenty a little rude at least it was "bread and work" and they were people humble enough then to ask just that. Hence appeared on the seas the emigrant sailing ship carrying its outgoing poor—crowded, dirty and triumphant. The emigrants fed and bunked on their own, crowded into the "steerage." At times ship fever and shore cholera wiped them out like flies. But still they came. People forget that for the emigrants of the "hungry forties" and the gold-seeking fifties it was a matter of this one voyage and never again. On those terms men and women, bound for the promised land, could stand a lot. One may read and visualize the mingled hope and misery of the emigrant sailing ship in Charles Dickens' *Martin Chuzzlewit* or shudder away from the emigrant cholera as described by Mrs. Traill's account of its visitation on Montreal<sup>[3]</sup>.

[3] *Mrs. C. P. Traill, "The Backwoods of Canada"*

After the emigration of poverty came the emigration of the Australian gold rush. The sailing ship looked after that. It was too far for steam. It was largely the shipyards of Quebec and New Brunswick that built the fast wooden ships for the Australian emigration passages. For speed now had begun to count for much even on the long passages. Before this period it had not. The stout and stately Indiaman, heavily sparred and heavily armed with cannon, was out for safety, not speed. The East India Company had a tight monopoly and could get there when they liked as far as trade was concerned. Their only fear need be of shipwreck and of the French. But the clipper ship could laugh at both of these.

Hence the clipper was all of a rush, the Indiaman heavy with form and formality,

officers in gold lace, sailors in uniform, and passengers, such as Macaulay on his way to India, settling down for a quiet six months' reading<sup>[4]</sup>. On the East Indiamen they send down the royal yards at sunset, let the weather be never so fine. They put the ship to bed for the night, all tight shut. Thus they carried on their sweltering stuffy passage, of five, six, or seven months, and eventually got there. It is not fair to over-idealize the sea and the sea voyage of the bye-gone sailing ship. The "palatial liner" at whose softness we love to scoff has something to be said for it. Try this in place of it, this description of a stormy night spent in an East Indiaman's cabin. "The timbers creak and groan. The cabin grows stuffy and almost unbearable by lack of ventilation, for every hatch is battened down, every skylight closed and covered with tarpaulins. You try lying in your bunk reading by the light of a swaying lamp, with the constant groan of the ship's timbers, the incessant rolling back and forth, the irregular pitching, the occasional trickle of water from the deck and the lack of ventilation, has made your cabin an oppressive place seemingly unfit for human habitation."

[4] E. K.  
Chatterton, "The  
Old East  
Indiamen," 1914

The East Indiaman with all its glory and its sins was driven off the sea. It was not fast enough. The full rigged ship of the clipper type—"streamlined" is the present word—carrying a press of an acre of canvas that at times drove it over 400 nautical miles (460 road miles) in twenty-four hours, put the Indiaman out of work. The company ultimately sold their whole fleet sometime after their monopoly expired and went out of shipping.

Especially the new China trade, set free from the Company's monopoly (1833), and the new demand for tea, called for speed at any price. The first tea of the season fetched high prices and all delay on such valuable freight cost high interest. Hence the fast China clippers and such historic episodes as the race of the six tea clippers in 1866 from China to London with the *Ariel* and the *Taeping* docking side by side after a voyage of 99 days from Foochow to London<sup>[5]</sup>.

[5] Hawthorne  
Daniel, "The  
Clipper Ship"  
1928

Hence the insatiable demand of this period for ships, more ships. The yards couldn't turn them out fast enough. Thus came the wonderful opportunity of our Maritime shipyards with the forest at the door. English oak indeed they lacked. Canadian oak proved inferior. But Canadian softwoods, though less durable served well enough, pine and spruce and, odd as it seems, hecmatac (tamarack), a wood of little use in ordinary building that mostly lies sleeping as a railway tie. Quebec more fortunate still, had all the

forests of the Lakes to draw from and all the St. Lawrence water-ways to bring them.

---

Hence it was that for a period of half a century the building of wooden ships, and the export of timber became the great industry of the Maritime ports of British North America—in especial Quebec, Saint John, N.B., and Yarmouth, Nova Scotia.

---

Quebec sailed many of its ships but also sold them: Saint John built them chiefly for sale, and for long voyages; Nova Scotia built its own ships and mostly sailed them, building many of them for home use and on a small scale, adjuncts of the farm and the fishing. Hence the predominance of Nova Scotia in the number of ships owned. Sir Edmund Head, who was Governor of New Brunswick (afterwards of Canada), writing home on the shipping situation in 1852, said, “Nova Scotia is destined to be one of the largest ship-owning countries in the world. She now owns nearly one third as much tonnage as France.” A count of ships made a few years before that date showed Nova Scotia with 2,583 vessels as against 604 for Canada.

---

The economic life of the Maritime provinces only began in earnest after the influx of the Loyalists of the American Revolution and the British migration after the Napoleonic wars. Then for a long time it outstripped that of British Upper Canada. Among the earliest efforts at Maritime expansion was the attempt to establish the whale fishery, already successful out of New England ports. Governor Parr in 1784 brought up twenty Quaker families from Nantucket, pious people used to the deep sea. He settled them at Dartmouth, across the harbour from Halifax. Although the British government would give no aid some voyages were made into the North Atlantic apparently with no great success. Samuel Cunard of Halifax (1787-1865) of later steamship fame was an early promoter<sup>[6]</sup>. From Saint John, N.B., whaling voyages were also made to the North Atlantic and West Indies grounds. Little came of it until the great boom of American whaling in the South Pacific that began after 1830.

[6] F. W. Wallace,  
“Wooden Ships  
and Iron Men”

From then on until about 1850 New Brunswick ships, of from 250 to 400 tons, some of them built at Saint John, others bought elsewhere and fitted there went whaling in the South Seas. The voyages were of two to three years' duration, or even more, involving many strange happenings and adventures. One ship, the *Pacific*, turned up in Valparaiso, four years and nine months out from Saint John. She was there sold, too far gone for the long voyage home.

But the home base proved too distant. The whaling came to an end, as did the

whaling out of Quebec which the British government, with queer inconsistency, tried to foster with Nantucket sailors after refusing to help them at Halifax. But Maritime ships from both provinces and from Quebec, sailing ships of a thousand tons and more, came back to the South Seas with the new trade in “guano,” a word that covers a multitude of seabirds’ sins<sup>[7]</sup>. This guano had lain unheeded for uncounted centuries, of less than no value. Now came modern chemistry, divorced from alchemy to be the new bride of agriculture, and discovered in guano an elixir of new life to the worn out fields of Europe. So the guano was gathered from the century old deposits on the sunbaked rock islands of the Peruvian dry belt (Chincha Island, etc.) where no wind blows. This trade went strong, was in good odor, from 1850 to 1870—mostly gone now. It came as a product of advancing science and a better science went past it.

[7] *Alexander Humboldt, 1802*

But meantime the real ship industry of the British North American provinces, the building of wooden ships, was launched in its full career. Going strong by 1840 it reached its peak in Nova Scotia, where conditions favoured it, in 1870. By that time iron was displacing wood. The wooden sailing ship by the middle eighties was everywhere being replaced by the iron, then the steel, sailing ship. Then sail itself went. Steam ruled the ocean and sail could only claim the odd voyages, the inlets, the forgotten seas of dhows and proas and sampans, and, as a consolation of honour, the grandeur of the yacht club and the sport of the yacht race.

Saint John, New Brunswick, sea port from its birth, found its principal business in shipbuilding as the expansion of commerce gathered way. We have an admirable description of it as seen by the intelligent eyes and delineated by the smooth pen of Mr. Silk Buckingham<sup>[8]</sup> in the opening year of the forties of the last century. Buckingham, who ran round the Orient, the Near East, the States and Canada as one of the first of the “globe-trotters,” and as one of the first of the “temperance” lecturers, had been a sailor when he was a boy and so when he speaks of a ship he knows what he is talking of. He is all praise for Saint John, a city of 30,000 people, “fifty years ago a wilderness” (as we like to say of Vancouver today); admires its elevated rocky site; its phenomenal tides; its all-year harbour, its rapid rise like a phoenix from its city fires, the last one only last year (1839); its “civility and attention”; its royal barracks; its Grammar School; its Temperance Society offset by its St. George’s Society. It had no negroes, no French Acadians, very many Irish as judged by the signboards on the whisky shops, “less

[8] *James Silk Buckingham, “Canada, Nova Scotia, New Brunswick,” 1843*

elegance than at Toronto,” and an “American air of equality and eager bustle.” A true vignette of the colonies of the young Queen’s opening reign.

For the shipping Silk is warm in admiration. More ships are entering the harbour of Saint John (statistics of the end of the thirties) than of Quebec, 2,549 vessels (1836) as against 1,147: Quebec tonnage is greater 373,000 against 289,000. Saint John builds mostly ships of 300 to 500 tons but runs to a thousand tons. There are 410 vessels with crews of 2,879 men registered in the port. In the year 1836 there were 81 ships built, a total of 25,000 tons, one-fifth as many as in all the United States ports put together. Apart from building ships the port exports timber, fish, whale oil from the South Sea fisheries and imports manufactured goods and general cargoes. Buckingham gives a quaint, old world quotation, an advertisement in a Saint John newspaper of the hour.

*BEAT THIS WHO CAN! The following vessels all owned by the Hon. Alexander Campbell, have been launched at Tatamagouche during the last three weeks: Barque “Acadia” built by Mr. James Chambers, burthen about 360 tons; Ship “Frances Lawson,” built by Mr. John Hewet, burthen about 500 tons; Barque “Columbia,” built by Mr. John Wallace, burthen about 360 tons; Brig “Caledonia,” built by Mr. John Pride, burthen about 250 tons.*

But New Brunswick in the sequel was to go far beyond what seemed later the modest beginnings of Mr. Buckingham’s day. It ran strong from this time until the opening of the eighties when iron ships began to appear in the port and, soon after, steel ones. Most firms had dropped out of the business of building wooden sailing ships by 1890. The industry and technical knowledge of Frederick William Wallace<sup>[9]</sup> have done a great service to the maritime history of Canada in the production of his two well known works on the old wooden sailing ships. In particular the rich collection of first hand illustrations adorning his books enables us as it were to see the old days for ourselves.

[9] F. W. Wallace,  
“In the Wake of  
the Windships”

Thus we may in fancy recall some of the typical or notable vessels of New Brunswick.

Here is *The Kate*, a 60 ton schooner, 1840, first venture of the famous Troop family whose name and achievements cover the whole period.

Here are the little brig *Arabia*, the barque *James* and the brig *Ellis* all out of Saint John in the same year, 1850, and sailing to California round the Horn with passengers and general cargo. A long way—but at the end of it in San Francisco—flour is selling at seventy-five dollars a barrel, sugar at five dollars a pound, cloth at

ten dollars a yard and shoes at fifty dollars a pair. Speed on, little ships to this promised land.

The *Rock Terrace* was the largest of wooden ships of the Troop firm and family of Saint John who built, bought, owned and sailed ships locally and all over the world for over seventy years after their first enterprise on the Schooner *Kate* of 1840. The *Rock Terrace* was built at Saint John by David Lynch in 1875. She was a wooden full-rigged ship, 1,769 tons, 216 foot keel, 41 foot 3 inches beam and 25 feet deep. Her mainmast was 193 feet high. Among her ports and cargoes were Liverpool with deals, Peru for guano, New Orleans for cotton, lime her last cargo (1887) from Philadelphia to Japan. Leaking heavily she was abandoned, after twenty-five days of pumping, off Guam. She stopped leaking, blew away on her own, sailed 840 miles and wrecked herself—knocked her bottom out—on the Pacific Island Tarama.

The *Cyprus*, built in Nova Scotia (Annapolis) but sailing out of Saint John, held probably the speed record. She was built mostly of spruce, the keel (175 feet) of black birch; keelson pitch pine, stronger parts white oak. She was 195 feet overall. She crossed the Atlantic (Saint John-Liverpool) in 17 days, crossed three times, no doubt with good luck, while a slow sailor, no doubt with bad luck, was crossing it once. She made a voyage from New York to the head of the Baltic (Reval) in 18 days.

Here is the *Wildwood* one of the finest ships of the great Saint John firm of William Thompson and Company: built in Saint John 1883, trading all round the world from 1883 to 1902; Iloilo to Delaware with 2,340 tons of sugar in 113 days; Cardiff to Rio with 2,475 tons of coal in 35 days. Sold to the Norwegians, the last people to keep to sail, in 1902. But mark the beginning of the inevitable end. Here is the full-rigged ship *The Troop* 1,526 tons built of iron in Scotland in 1884 for the Saint John trade.

---

Quebec was of course in many senses the premier British North American sea port of the old sailing ship and the ship building days. Steam had robbed it of its original St. Lawrence pre-eminence in favor of Montreal. But the port of Montreal, developing at this time a marvellous advance in the combination type of sail-and-steam together which dominated the middle nineteenth century, was out of the running as far as sail was concerned. The river navigation forbade it.

Hence the port of Quebec naturally led British North America in this era of the sailing ship. Mr. Silk Buckingham in his visit of 1840 comments on the evident change from “a military fortress, the principal citadel of our North American

possessions” to the newer aspect of the city as “a port of entry of the commerce of Europe.”<sup>[10]</sup> Ships arriving in the year last reported (1839) numbered 1,147, with a tonnage of 373,669 and with 17,985 seamen. The vessels clearing (1,189) are overwhelmingly for Great Britain, 868, for Ireland 200 (emigrant ships) and 107 for the Maritimes. The excess of departures means that 37 ships were built in the port that year. But from this date on shipbuilding of Quebec moves forward continually till it reaches its highest point in 1864 and then with amazing and saddening rapidity it declines and vanishes. By the middle eighties the building of wooden ships at Quebec was all gone.

[10] *W. Wood, “All Afloat, Chronicles of Canada,” 1913*

Yet the record was striking while it lasted. It has been computed that not less than 2,500 ships were built at Quebec between the beginning of British rule and the close of the nineteenth century. We have seen that 37 vessels were built in 1839, the year of Buckingham’s visit. In 1854 there were forty ships and nine barges and in 1864 there were forty-three ships and twenty-two barges. These last vessels were mostly of from 1,000 to 2,000 tons and notably larger—as the Quebec ships consistently were—than the Maritime vessels. Nova Scotia that year launched nearly three hundred vessels but they only averaged 200 tons; New Brunswick about 150 vessels running at 400 tons.

The quality of these Quebec ships was high. The difficult days of experimentation as under the French and the early British régime were over. The builders knew their timber and they knew the requirement of their market, for most Quebec ships were built to sell. A good many were built of hardwood (oak) while Maritime vessels were almost all soft-wood ships, pine, tamarack, spruce.

A certain number of the seagoing ships rigged and fitted out at Quebec were actually built at ports on the Lakes and brought down through the canals. The *City of Toronto*, 758 tons, was built in Toronto in 1855, built altogether of the fine white oak from the uplands above the city. D. D. Calvin who established at Garden Island (where Lake Ontario narrows to the river) what became the great centre of the assemblage of timber rafts, built there a barque of 870 tons which was put into ocean trade and in the present century with the passing of the sailing ship passed, like so many other vessels, into Norwegian hands. Several ocean vessels, running as high as 1,223 tons were built at Kingston, Ont., in the sixties and the seventies. But all building on the Lakes was restricted to a maximum length of hull of 180 feet, at that time the length of the shortest locks.

---

The Quebec ships may very especially be called “ships” as opposed to the

vessels of the Lakes and the Coast, since they very largely were “ships” and if not ships at any rate were mainly square-rigged (barques, brigs, brigantines). The fore-and-aft rig, as we have seen, especially suited the navigation of the Lakes, as it did also the in-and-out navigation of the Atlantic Coast where it became constantly still more fore and still more aft, running presently to the Maine schooners with six masts. A “ship,” as arm chair navigators may remind one another, means properly a vessel with three masts all having square sails on yards that swing across the mast. Put fore-and-aft sails on the mizzen (rear) mast and the vessel becomes a barque; give it only two masts and it is a brig; put fore-and-aft sails on the rear once again and it is a brigantine.

A “clipper” ship is distinguished not by rigging but by its lines—built for speed—relatively long and narrow and “streamlined”—no superstructures, no “castles” and a press of sail that can spread an acre of canvas on a ship. Its bows were a little pinched in, concave, to cut its path. It could be driven over 400 nautical miles in 24 hours. The experts tell us that the Quebec ships were none of them “clippers” in the full and exacting sense. People are apt to think otherwise since the connection is very close. The two partners of the great Quebec firm of McKay and Warner, which launched 18 ships and barques at Quebec, 1863-1874, were both noted clipper captains. McKay sailed the famous clipper *Sovereign of the Seas* for his brother Donald McKay the builder. But the clipper ship in its true form was built for speed, had to sacrifice cargo space for design and could only operate with profits in the most lucrative trades, such as China tea. As steam invaded these, the clipper had to become a little bit heavier, a little bit humbler.

Yet the Quebec ships were things of beauty. We can judge it for ourselves, for the photograph and the artist’s brush, as seen in Mr. Wallace’s collection of pictures, have preserved many of them for us: the artist’s brush in so much as it had become the lover-like fashion of the day to have the ship’s picture painted. Here for example is the *Cosmo*, ranked by Mr. Wallace as the finest ship built at Quebec. She is three masted, square-rigged, with four square sails on each mast and an extra fore-and-aft sail out from the mizzen. The orthodox five sails, as on the mainmast, were mainsail, topsail, topgallant, royal and sky sail. The sky sail yard on a clipper was about 200 feet above the water and hence spoken of as “delicate tracery.” As a matter of fact it was the size of a large telephone pole, about 40 feet long and 9 inches at its thickest. Owing to the huge size to which single sails grew as ships increased and masts heightened, top sails and top gallants were often divided into upper and lower. But the *Cosmo* carried the more elegant proportion of the orthodox rig. Too much division makes pictured sails look like washing out to dry. The *Cosmo* has a full

flutter of jibs, defying a landsman's classification, and a spread of tri-lateral stay-sails between the masts. The run of the hull is smooth and unbroken. All along the side runs a white band with painted black ports—imitating the old painted gun-ports of the Trafalgar ships—a device retained by Quebec when other ports had forgotten it.

A notable feature of the old ship building days at Quebec was the building of ships, as especially by the outstanding shipbuilder of the port, James Ross, for immediate sale on the British market. The ships were specially designed for the needs of the hour and if the markets were overstocked Ross chartered and sent out the ships at his own venture. Here first came before the public eye the notable figure of Captain Joseph Eleazar Bernier, the famous Arctic voyager who has been affectionately called Canada's "Grand Old Man of the Sea." Born in 1852 Bernier went (was taken) to sea at three years old, took time off presently for six years' education ashore and found himself at the age of twenty-one a ship's captain sailing James Ross's new ships to the British market. In this trade he made forty-six Atlantic crossings with an average of 22 days each and records as low as 17 days. He developed a marvellous knowledge not only of the technique of ships, their fittings, their marketing but of winds, tides and currents, that helped to make his splendid success in his years of Arctic navigation for the Dominion.

The Quebec sailing ships, whether sold abroad or registered and sailing from home, literally sailed the world over. Many, of course, were employed in the general trade with Great Britain of which the timber trade to Liverpool and Glasgow was the largest single feature. But others were in the cotton trade in and out of the Gulf ports, others made guano voyages to Peru. Others, the best of them, were in the Australian emigrant service or replaced the old Indiamen on the British India routes. Somewhat unique is the voyage of the Quebec barque *Signet*, 574 tons, in 1880 from Quebec to Victoria, B.C. around the Horn, a distance of 16,000 miles. It is odd to think that this was entered as a coastal voyage in the "home trade." A striking feature of the Quebec trade even later down in the epoch is seen in the timber ships. These vessels carried over to Great Britain the wood from the Canadian forests hewn square into long sticks of "timber." We now send it as "lumber" cut into deals, planks, boards—thick, thin or any other way. For a long time the British builders wouldn't take it so. Being British, they wanted to see what they were getting, and of course the British navy needed masts "in the piece." Hence the bye-gone wasteful but colourful square-timber export<sup>[11]</sup>. Wasteful it was, since squaring a log meant leaving on the ground, or burning, about one-quarter of it, which the Canadians couldn't use and which the British could have used; colourful, since the timber gathered from a thousand

[11] D. D. Calvin,  
"A Quiet Corner,"  
1941

streams came down the St. Lawrence and the Ottawa in great rafts, broken up and rejoined at each formidable rapid, or on the Ottawa going down prepared “chutes” beside the rapids. The last St. Lawrence raft went down Lachine in 1911: last Ottawa chutes 1908. From Montreal the raft floated lazily to Quebec, less lazily in later years when a tug hauled it. At Quebec the timber was loaded into timber ships, sailing across the Atlantic. The timber ships thus formed a large part of the trade. The great “P.G.” firm (Pollock, Gilmour) in their 1,503 voyages made between 1846 and 1873 included 1,151 with timber. The timber ships used to lie in serried lines in Sillery Cove with acres of square timber floating round them, waiting to be stowed into them through specially constructed ports. Originally many of them were fine ships but as time went on and steam inexorably forced out sail, all sorts of vessels were turned into timber ships. Anything that could float would do. Timber itself wouldn’t sink, but sometimes seasons of terrific gales, such as that of 1872, would break the ships, or scatter the heavy “deck cargo” that the unhappy old vessel carried as its last straw. Any old ship could be pressed into the service. Some had chains bound round their ancient bellies to hold them up, like a paunchy old beau with a corset. Others were bye-gone Indiamen, sold up and worn out, once all gold lace and mahogany now battered out of all semblance, with square timber rammed into them lengthwise. Thus lay Ontario pine where once mused Macaulay, outgoing to India. The trade is all gone now. Timber has turned to lumber and Canada sells, and is glad to buy, littered edgings for ten dollars a cord<sup>[12]</sup>.

[12] *Price Current,*  
*Orillia, 1943*

Instinctively everyone’s thoughts turn to Nova Scotia, as the Maritime province *par excellence*, the one whose life was most associated with the bye-gone days of sail. This is indeed true. In spite of the superiority of Quebec as a port, the sea commerce of Quebec was only one aspect, and a lesser one, of the life of its people and province. Agriculture and the forest and the rising manufacture of its cities far exceeded its maritime occupations. In New Brunswick also the lumbering industry of its extensive forests and the agriculture of its beautiful river valleys rivalled its interest in the fisheries and the sea. But for Nova Scotia the sea was more nearly its all in all; its fisheries, its carrying trade and its building of ships. The connection of farmer, sailor and fisherman was most intimate; since indeed one man was often all three of them. Here shipbuilding, on its smaller scale, became a sort of domestic industry in the Nova Scotia of the early nineteenth century. The frames and timbers were cut in the adjoining bush: the keel laid down on the shore and the ship built and launched as farmers of the same date in Upper Canada laid down, and jointly raised up a barn.

---

Ship building in Nova Scotia began with the building of a vessel at the historic Highland settlement of Pictou in 1798. Ship building went on all over Nova Scotia, not only in the large sea port towns but in the little places otherwise unknown to the world. The *W. D. Lawrence*, of 1874, the largest square-rigged vessel ever built in Canada, was built at Maitland in Hants county, a little village on the Shubenacadie River, that runs into Cobequid Bay, that passes into Minas Basin that narrows into Minas Channel that widens into the Bay of Fundy. On the north corner of the Basin of Minas is Spencer's Island—too minute for the common map. Here were built ships, small vessels and some over 1,000 tons, among them the famous *Mary Celeste*—the ocean's mystery No. 1—found peaceably under sail in 1872 with no one on board.

---

But the great port of Nova Scotia, great in ship building, ship sailing and in making sailors was Yarmouth. Yarmouth mostly built its vessels from the spruce forests of its Yarmouth county. They were almost entirely built for registration and operation out of the port itself. At the height of the old days of sail Yarmouth had a fleet of 297 vessels with a total tonnage of 153,515. Taken in all from 1761 to 1884 Yarmouth owned not far from half a million tons, distributed among 1,916 vessels. Of these 1,105 were schooners. But here too the building of wooden ships was exchanged for the purchase and registration of iron and steel ships that began in the middle eighties. Yarmouth still remains an important fishing port and the Nova Scotia schooner still has its place on the fishing banks and in the estimation of the world. But the great days are gone.

---

The Maritime provinces have voiced many regrets over their union with the Canadas which lost them the American market and free trade with Great Britain and found them the Canadian tariff. Of all this the final result is not yet added up. But the passing of the great ship building days was nobody's fault. It rested on factors which few foresaw, which none could prevent and nothing could rectify. The substitution of steam for sail, of steel for wood, were world changes beyond our policy or control. Wooden ships needed the forest; steel ships the forge and the factory and the mass production which only a crowded industrial setting can furnish.

---

As for the sheer joy of the sea, as applied to the passenger traffic, or the mystery or beauty of the ships, most people would trade it easily. We can not have it both ways. The "palatial liner" enables us to cross the ocean without having anything to do

with the sea. Yet so discontented is man by nature that many of us, in imagination, still sit up on the royal yard of a clipper ship, musing on the deep.



OCEAN LINER OFF QUEBEC

The Saint Lawrence route, reaching into the very heart of the North American continent, has become one of the great sea-ways of the world. Its shipping has passed through all the historic stages that lead from the carvels of Jacques Cartier to the beautiful passenger liners of today. Below the city of Quebec the river widens to a broad flood of water that offers, with its alternating prospect of open horizon, wooded shores and distant coast half-seen, a voyage of singular attraction in touch still with the snug shelter of land yet already facing the boisterous welcome of the open sea.

## CHAPTER ELEVEN

### THE TWENTIETH CENTURY

Isolation Impossible in the World of Today—Rapid Development of Canada in the Twentieth Century—The Royal Canadian Navy—Its Share in the Great War of 1914—The Period Between Wars—The St. Lawrence and the Port of Montreal—Vancouver and the Pacific—The Arctic Coast—Our Outlook Beyond the Wars

Our overseas connections, our relation to the world across the seas have become different in the twentieth century from anything they were before. This is because of the great upheaval, the world disturbance, that has marked the opening forty years of the new century. The advance of science has dislocated human life upon the globe. We live for the first time in a world that has become a globe, in reality a unit, known and self-contained, without escape. Our use, for the first time in English, of the word “global” is evidence of the fact.

In this global world science has made easy the sustenance of life and matched it with the mechanism of death. In the Middle Ages science was man’s familiar demon, banned by the church; in earlier modern times, from Galileo to Isaac Newton, man’s curiosity; in the nineteenth century man’s help-mate towards universal happiness, man’s triumph over nature. With the twentieth century science turned traitor. It has passed for the present beyond all human control. Its spectacular conquest of the air has brought death from the sky. This ends all isolation. The independent bravery that made possible the brave independence of a small state, is gone. There can now be no new rise of a Dutch republic, no new Thermopylae, except one of despair. The world must live in apprehension. We have at present in this world of potential abundance no form of social organization that can bid it abound. Nor can we make a social organization by writing it down on paper, any more than we can make for ourselves a fine character by giving ourselves a reference.

The grim joke is that this abundant world would be a wonderful place for brothers to live in if we only had the brothers to put into it. At present the best we can do is to tell them either to be brothers or to be bombed. Such is the new gospel, or one might say, the new epistle—the Epistle to the Ethiopians who heard it first from the Italians. This is not to say that it is a world of despair. For those young enough it is a world of hope in which the dark clouds of the passing thunderstorm must presently give way to the sunshine. The greater the apprehension the higher the courage. In the end brotherhood must come.

The practical bearing of this is that national isolation is no longer possible. There is no place in the world sufficiently isolated for isolation. Least of all is it possible for Canada, which faces the overseas world on three fronts. Whether we like it or not, naval power, aerial world-transport and what will soon be called “participation in global control” are now manifest destiny.

---

The maritime development of Canada from 1900 to 1939 may be thought of as one continuous period both in respect to the growth of naval defense and the expansion of sea-borne trade. The Great War of 1914-1918 was in each case an interruption, a break that closed over and was left behind. At least we thought it so, and acted as if it were so. Only later could we realize to what a great extent the war had meant a dislocation, a break in the machine not remedied but growing worse. This was especially so in the matter of immigration and transportation. The period before the war of 1914 opened the great immigration into our North West. On the strength of it we built up a vast scheme of transport and settlement, with expanded manufacture and an expanded apparatus of colleges, culture, amusement and advertisement to match it. The war of 1914 kept it going by feeding it on destruction. After the war, immigration slackened, and presently our mistaken policy stopped it dead. We gave up the game without playing it out. Development ended. The frame became too big for the picture—miles of railway track and miles of idle railway cars, unused premises, unused power, unused people, unused resources; people working to support people living on the dole without working. Now the new war has again set the whole apparatus into movement.

---

As with overseas and migration so with the naval defence of Canada. Its history from 1900 until 1939 is more or less continuous with the sudden and unexpected break of the War of 1914 passing like a storm at sea.

When the present century opened, the naval defence of Canada was falling asleep<sup>[1]</sup>. What there was of it was little more than formal and the Canadian people decided, for independence sake, not to have even that. There was still in 1901 the British Fleet of the North American and West India Stations based upon Halifax. When the British Imperial Garrisons left Canada in 1871 there was still retained the naval garrison at Halifax set at 2,000 men. There were in 1901 thirteen ships of war coming and going on the North Atlantic and West India Stations and seven others on the Pacific station based on Esquimalt. All of this, to most people in Canada, had no particular connection with

[1] *Lieut. John Farrow, "The Royal Canadian Navy," 1908-1940, Can. Geog. Journal, Nov. 1942*

daily life or national necessity. Only a few, indeed not very many in Great Britain itself, could see the dark clouds around the sunrise of the new century, as the sun rose out of the North Sea. Those who favoured retaining British ships in Canadian waters did so as part of the old allegiance and those who opposed it did so as part of the new independence, both, as usual, being right.

So, by joint agreement, in 1903 the British ships and garrisons were removed. Canada retained for its protection only its necessary revenue patrol and its police and protection of the fisheries of its off-shore waters.

---

But the opening of the century brought discussion of possible dangers of a great war. People who talked loud began to call it Armageddon; people who talked low called it nonsense. The talk from being an undertone became a call to arms. Hence the change that came with the Naval Service Act of 1910, which set up for the first time a Canadian navy as apart from a mere coastal patrol.

Things moved rapidly. The brotherly Liberal government, wanting more brothers still, went out in 1911. The undertones of danger turned to distant thunder. The new Conservative Government voted, in the House of Commons in 1913, the building of three battleships at a cost of some £7,000,000, the ships to be placed at the disposal of Great Britain. The Imperial world echoed with applause. But the new Conservative Government had forgotten the old Liberal Senate; quite naturally so, since it had been asleep upstairs since the Yukon Railway Bill of 1898. The Senate woke up, came down and refused the bill. It had hardly got to sleep again when the thunder broke.

The precipitation by Germany of a general European war in August 1914 came to the world at large with the shock of the unbelievable, the impossible. An old world passed—a world of impregnable security, of universal intercourse, of pounds sterling, picturesque travel, and profound peace, enlivened by military reviews and naval regattas, all gone. The present generation can form no idea of it.

Small wonder if Canada was but little prepared or had done but little to implement the principles of the Naval Act of 1910. The somewhat antiquated naval dockyards at Halifax and Esquimalt had been taken over by the Canadian Government. The purchase from the British Admiralty of two, more or less obsolete cruisers, the *Niobe* and the much smaller *Rainbow*<sup>[2]</sup>, had created a two-ship Canadian fleet. A loan of British officers and trained men was made in order to carry them through their initial period. The *Niobe* was stationed at Halifax, the *Rainbow* at Esquimalt. But there was little interest in recruiting especially after

[2] G. N. Tucker;  
"The Career of  
H.M.C.S.  
*Rainbow*," B.C.  
Historical

the discouragement caused by the action of the Senate; little interest in recruiting and little in the “Canadian Navy,” to the press at large something between a joke and an aspiration. The few British ships of war in the Pacific came and went as visitors to Esquimalt. Elaborate arrangements were made at the Imperial Conference of 1911 for the general uniformity of Dominion and Imperial naval services and for their union into one integral service in war time. But all such discussions seemed far away from actual reality.

The outbreak of war shattered this security. It was realized that the Germans had a powerful fleet in the Pacific under Admiral Von Spee. The entry of Japan into the war (Aug. 1914) forced this fleet out of China waters. It was known that the larger part of it, the cruisers *Scharnhorst* and *Gneisenau* and three lesser cruisers, had crossed the Pacific. An attack on the Canadian coast seemed imminent. To prevent it were only the *Rainbow* and the British *Shearwater* and *Algerine* gathered into Esquimalt. They were single screw ships of war, “sloops” in the naval sense, though the *Shearwater*, a steel steam ship with two masts and two funnels, seems a long way from the “sloop” of the Great Lakes. Improvised crews were gathered; auxiliary boats, a hospital ship, all pressed into service. Two submarines, building in Seattle for the Chilean Navy were cleverly and hurriedly purchased<sup>[3]</sup>. Their presence was widely advertised, the real reason being, according to the legend, that they had no torpedoes and must fight on advertisement only. But Von Spee took the wrong turn; swept down the Chilean coast instead of up the Canadian; gained his fortunate victory against Cradock’s inferior fleet off Coronel and then walked into the bag held open at the Falkland Islands by Churchill at the Admiralty and Admiral Fisher. British Columbia was saved.

[3] G. N. Tucker,  
“Canada’s First  
Submarines,”  
1943 (Reprint)

---

During the ensuing years of the Great War the defense of the coasts, sea-ports and sea-borne commerce of Canada became of necessity a responsibility, not directly of the Dominion, but of the Royal Navy. Yet in an indirect way, through the imperial authorities, Canada made a valuable and patriotic contribution to the naval defence of its waters. Men were enlisted to man the auxiliary fleet and 1,700 volunteer Reservists were sent overseas. The Royal naval air service enrolled in Canada 580 probationary Flight Lieutenants while 43 Canadian Surgeon Lieutenants entered the service of the Royal Navy. By the year 1918 the numbers of officers and men serving in the Canadian Navy and its auxiliary ships had reached 5,978.

It was generally understood that a reorganization of Canadian Naval forces would follow after the war. To aid in this Admiral of the Fleet Viscount Jellicoe had

visited Esquimalt in H.M.S. *New Zealand* as early as 1919 and had made an elaborate report to the Governor General. But the scheme which he outlined was comprehensive and far reaching; it involved an expenditure of \$10,000,000 a year. Its accurate detail filled three volumes. But this was too much for the spirit of the hour and for the finance of a crippled treasury. Nothing was done. Indeed for the time being the movement was the other way. The rapid demobilizing of the Canadian naval service reduced the enrolment from the 5,978 men of 1918 to 1,048 in 1920.

To aid in enlarging the scope of Canadian defence the Imperial Government had followed up Lord Jellicoe's visit with the gift of the cruiser *Aurora* (six years old) and of two, four year old destroyers, the *Patrician* and the *Patriot* and two submarines (C.H. 14 and C.H. 15). But the attitude of public opinion in the country, busily weaving its ropes of sand into a League of Nations forbid all safer anchorage. The Canadian Naval Act of 1922 lowered the personnel of the Canadian navy to 366 officers and men. The Royal Canadian Naval College, opened in 1911 at Halifax and migrating after the great explosion to Kingston and then to Esquimalt, was now closed. The cruiser *Aurora* and the submarines were sold, a loss partly compensated by the addition of four mine-sweepers, two on each coast.

---

But in spite of all it was not possible for Canada after the Great War of 1914-1918 ended to revert to a policy of isolation. The chaos and danger of Europe, was a conflagration that would spread. There is no isolation in the bush from a bush fire. Europe has killed isolation as Macbeth murdered sleep. Isolation, let it be admitted, is, for peaceful people on a newer continent, in many ways as attractive as it is impossible. It was the first wish of many great Americans. Thomas Jefferson, who thought aloud for us a century in advance, wished that a meridian might be drawn down the Atlantic to divide and separate us from European war power for ever. But the degree of possible isolation becomes less and less, with each intrusive power of the advancing science of war. Between 1919 and 1939 the aeroplane was obliterating distance and promising an even distribution of death.

Hence the naval policy of Canada in this period in spite of its inauspicious beginnings represented a decided advance on the establishment before the War of 1914, while falling far short of even the minimum of what "global participation" will demand if our miserable globe is to be kept at peace. The National Defence Act of 1922 consolidated into one Department of National Defence what had been the Department of Militia and Defence, the Department of Naval Service and the Air. A notable change of policy was made when it was decided to build Canadian war ships for the Canadian Navy. The result was the building, for Canada at

Southampton, of the destroyers *Saguenay* and *Skeena* in commission in 1931. They were ships of 1,300 tons of the latest design with a speed of 35 knots. By the year 1938 the Royal Canadian Navy comprised six destroyers and one minesweeper. The service had an authorized complement in 1938 of 137 officers and 1,582 ratings. A small portion of these, specialists in gunnery, torpedo and marine engine technique, were lent by the Imperial Government. The officers of the Royal Canadian Navy also served in periodic rotation in the Royal Navy to acquire experience of a wider nature than could be obtained in the Canadian service. Halifax and Esquimalt remained as the Atlantic and Pacific bases, with training establishments, shore barracks and the mechanical and scientific apparatus for learning gunnery and the technical routine of naval war. There was also a Naval Reserve of 70 officers and 1,344 men.

---

Such was the nucleus, admirable in its design and in its efficiency, but insignificant in number of men and quantity of material, that became the basis of the Canadian naval effort of the War of 1939. From this was built up the magnificent naval service whose heroism and whose record remains to be described in other pages to which the present volume is intended to serve only as an introduction.

---

The slow beginning and the limited size of the Canadian Navy in the twentieth century contrast with the phenomenal growth of Canadian shipping, sea-ports, harbours and inland navigation<sup>[4]</sup>. Here the great features are the development of the Port of Montreal and the St. Lawrence Route, the rise and growth of the Port of Vancouver and the expansion of trans-Pacific and trans-Isthmian trade. With this has gone the growth of inland navigation on the Great Lakes which has now reached its culmination in the accepted post-war policy of the St. Lawrence Waterway, a continuously navigable seaway that will bring the ships of the ocean to the harbours of inland America.

---

[4] *E. J. Chambers, "The Canadian Marine," 1905 (Official)*

The development of the Port of Montreal had gone a long way at the point described in an earlier chapter when the close of the last century found the era of sail definitely ended and the era of steam definitely inaugurated. But all that had been done up to that point proved mainly to be a beginning. The completion remained for the twentieth century. We may say "completion," as far as we ever dare use such a word, for in its physical essentials the Port of Montreal is now complete. The deepening of the channel between Montreal and Quebec from its original 11 foot

minimum to the present 35 feet maximum has now reached a point where any further deepening would involve the removal of a mass of rock from the river bed too great for any commercial return. But the present depth accommodates with ease ships up to 20,000 tons which have regularly used the Port of Montreal since 1928. The world's cargo trade and even the world passenger traffic has little need for any greater tonnage. The season of navigation of the Port has been progressively lengthened by better marking and lighting of the river and above all by the use of ice-breakers in clearing the spring jams, and by the sensational explosion of ice with the chemical thermit. It is generally estimated that the practicable navigation season, now averaging 234 days a year, is one month longer than it was when the days of mail steamers began<sup>[5]</sup>. Beyond that we cannot go. The dream of an open river all winter—smashed open, blasted open or melted open, as has sometimes been suggested, is just a dream. It can never come true without an open Gulf and no one yet dreams of that. As it is, the St. Lawrence from Montreal to Quebec is open as early as ships can hope to get up to Quebec through the dangerous and shifting ice floes of the Gulf.

[5] *Stephen Leacock, "Montreal Seaport and City," 1942 (Chap. XII)*

In its general lay-out and equipment also the harbour of Montreal may be said to be complete. The harbour area now extends 16 miles on each side of the St. Lawrence from a point 3,760 feet above the Victoria Bridge down to the lower end of Montreal Island (Bout de L'Isle). The original harbour shore down to St. Mary's current and St. Helen's Island is now completely utilized with docks and equipment but below the current there is indefinitely room for the expansion of docks beyond the present ones without proportionate increase in cost. From a shipping point of view Montreal should never have come above St. Mary's current. Jacques Cartier stayed below it. But Champlain got past and found a little harbour below a tongue of land, and that became the Port of Montreal. In equipment the port as a grain port ranks first in the world. Its four great elevators have a capacity of 15,360,000 bushels. Its handling machinery enables ships to load at the rate of 1,000,000 bushels a day. There is a floating dock dating from 1912. The scenic aspect of the port is completed and the congested trans-river motor traffic relieved by the great Harbour Bridge of 1930, renamed on second thought in 1935 as the Jacques Cartier Bridge of the tercentennial year of the discovery. In point of administration the harbour is under the centralized control of the National Harbours Board at Ottawa which in 1935 replaced the previous Harbour Commission, itself local in functions but appointed by the Dominion. Each of the Canadian seaports under the National Harbours Board has a local port-master and staff.

---

Step by step the growth of the inland navigation on the Great Lakes has kept pace with the growth of the Port of Montreal which forms its outlet. A few vessels, but not many, even under present conditions, or rather under those existing before war, clear from the Lake Ports for the Canadian coast or for the open seas. There are voyages from Toronto to Vancouver via the Panama Canal and ships even carry direct to Fort William and Port Arthur products of the West Indies—such as sisal for making binder twine for use in the North West. But mainly the two navigations keep apart. A Canadian river steamer, an over-night steamer as opposed to an excursion boat, is a thing of singular grace with lines that suggest the bye-gone clipper. But it lacks depth. In the ocean it would upset—not at once but presently. An excursion boat is made to carry a First of July crowd and a brass band. It is out for fun and runs for shelter in trouble. An ore-boat and a grain boat must have so many hatches that they can unload in no time. An ocean boat with as many hatches would get sunk in no time. The ore-boat only asks to float; it doesn't propose to manoeuvre.

It is not however that lake boats lack size or capacity. Down the lakes there came in the season of 1943 the ore carrier *Benjamin Fairless*, 614 feet, out of Two Harbours, to dock at Cleveland<sup>[6]</sup>. She carried 17,101 gross tons of iron ore. She broke the record for weight of cargo, as against the 1942 all-time record of 17,082 tons carried by the *Le Moyne* of the Canada Steamship Company.

[6] Press Notice, June 3, 1943
-----------------------------------

Round this point centres the contention in regard to the St. Lawrence Sea-way project. The physical advantage of the proposed water connection is clear to the eye and the sensational appeal clear to the imagination. To link the inland continent of North America to the outer oceans with a series of sea ports of the Great Lakes is a project of fascinating grandeur. Most people probably never go beyond this initial aspect of the sea-way; and it may well be that in such great enterprises the initial appeal to people at large is of better value than the nearer view which easily gets confused with private gains and vested interest. Montreal is closer to inland America than the United States ports themselves. It is 369 miles from Montreal to the Welland Canal leading to Lake Erie, 237 more to Toledo at the head of the Lake, 389 beyond that to Sault Ste. Marie and from there 273 miles to Fort William. The full Canadian transit, Montreal to Fort William by river, canal and lake, is 1,168 miles; Montreal to Duluth, the physical head of the lakes, is 1,245 miles. Montreal to Chicago is 1,200 miles. There inland navigation connects with the vast Mississippi system—the original Chicago drainage canal expanding now, in imagination and in fact, to a universal inland water way. The old time Mississippi steamer, crowded with

lights and faro tables and desperadoes, and roaring out its shower of sparks in a midnight race on the darkened river—all this bye-gone pageant is exchanged for the timeless dignity of the cement barge and the lumber scow. Let the imagining carry on up the Mississippi to the Red River and the Assiniboine and to the Saskatchewan and the Mackenzie and all America is joined in one vast system moving gently to the sea.

---

Against such dreams cold calculation talks of difficulties that cannot be dreamed away; of ocean boats that will not convert, too costly for the long delays of locks and docks; of lake boats that dare not face the storms of the ocean and of special boats for special trades, unhandy for all others. The sea-way is still a dream. Is it a dream such as the Panama Canal once was or such as the North West Passage turned out to be?

---

One other Maritime dream—or rather nightmare—haunted Montreal for a brief time—the sudden apprehension that Quebec might again become the chief port of the St. Lawrence.

Strangely enough it appeared, at the peak of the false prosperity of this period—or at least it appeared to eyes with a focus large enough to see it—as if Quebec might once again assume the premier place it held for over two centuries as the chief St. Lawrence sea port. The building of the vast wilderness railway, the national Transcontinental (dating from its inception in 1903), the huge bridge which was to carry it over the river it had no reason to cross, and presently the launching of the *Empress of Britain*, a ship of 43,000 tons—seemed, if only in fancy, to indicate a new era. Quebec was to become the harbour of great ships—the *Aquitania*s, the *Queen Mary*s and the *Normandie*s—which only half a dozen of the most capacious ports and deepest docks in the world could accommodate—New York, Southampton, Cherbourg and such, and Sydney of New South Wales, ready for them a hundred years ahead.

Here then was a giant's dream of vast trainloads of cars rolling out of the wilderness from the West, miles and miles of them, such as go to carry the cargo of a steamer of forty to eighty thousand tons, with the tracks and docks and cranes that load it in four days in port. Here was all the world on the move, the Orient flooding eastward to see Europe, all Europe crowding westward to see the Orient and Quebec as the centre of it all. In such a picture Montreal is thrust aside, a secondary port up a river, like Cardiff the coal port as beside the fluttering fashions of Southampton.

---

It all proved a dream. There was no such wilderness and no such cars. The Orient, if it moved, wanted to see something else than wilderness out of the train window. Europe wouldn't pass America unseen to see Japan. Freight clings to water transport. Even the dream of the big ships is just a vision that vanishes on a nearer view. These colossal vessels of which the world contained in 1939 only nine larger than the *Empress of Britain*, do not carry any appreciable part of the world's trade. The tonnage of the whole of the ten indicated vessels formed less than the one hundredth part of the world's shipping, even disregarding all boats of less than 100 tons. For these great ships any port is really too restricted, the tourist world too small and the Atlantic ocean too narrow. As beside the new transport by air they are hopelessly slow and are left behind in the vanity of luxury travel. They will prove in the new era too rich for the poor and too poor for the rich. They only existed in their day for the sake of national prestige, not national efficiency, and as a part of a competition in time of peace that borrowed beforehand the antagonism of war. They may also have embodied the concealed purpose of serving as troop transports in a possible war. Yet, if so, it is strange that nations who prepared so little in most ways should have prepared so much in one. In any case their time is done. They have gone the way of the Indiaman and the Clipper. For Canada at any rate there will be no more of them. The *Empress of Britain* lies on the bed of the North Atlantic, an early tragedy of the war of 1939. It is not likely that Canadian maritime progress will demand the rebuilding of such ships. Yet since in dreams lies inspiration, the Port of Quebec may still keep its giant's dream that the gigantic folly of our overbuilt, overduplicated railways, with the trunk line from the West to Quebec may some day be found in the class of the world's inspired follies—of the crazy Louisiana Purchase of 1803, of Seward's Alaska Icebox of 1867, of De Lesseps Canal through the Isthmus of Suez of 1869 and the crazy railway that actually—just think of it—went over the top of the Rocky Mountains in 1886.

---

Meanwhile Montreal, unvexed by Quebec's dreams, or by the ambitions of Toronto and Fort William, goes steadily on.

---

The mention of the Panama canal suggests at once its peculiar connection with the Port of Vancouver, and the unexpected diversion of a large part of the grain trade. Vancouver arose—was bidden in 1885 by the Canadian Pacific Railway to arise—as a Pacific port to replace Victoria, disqualified for larger destiny by its island situation. Cities on islands may be great sea-ports as notably New York, and

the Singapore that was. But they must have one foot, if only a bridge, on land. This foot was the Achilles heel of Singapore, but in a restored world will have its meaning again. But on Vancouver Island Victoria, bridgeless, meant transshipment of ocean cargoes, a thing easy enough for old-time cargoes and old-time schooners, but impossible for metropolitan trade. Hence came Vancouver of which the commercial destiny is only limited by the future of the Pacific world itself. The port was established with an eye on Yokohama and Hong-Kong, thus harking back to the old Nootka Sound days, to Canton and to the sea-otter skins by which British Columbia began. But from the Orient the eye moved easily to Australasia and the All-Red Route.

Quite unforeseen was Panama. It is probable that few Americans realized its commercial possibilities. They built the canal for political reason, for national defence by the navy, so as to turn two fleets into one. The object lesson of the American *Olympia* going round Cape Horn to fight in Manila Bay was plain to the naval mind. To teach it to the business mind it was pretended (with a wink) that the canal would pay. History is full of such winks, later extolled as wisdom.

A distinctive feature of Canadian maritime development in the twentieth century has been the exploration and patrol of Arctic waters. The old fantastic aspirations of a North West Passage and the competitive struggle towards the North Pole long since passed away<sup>[7]</sup>. In place of them has come the steady purpose of opening up the Arctic coasts and islands as a contributory part of the economic life of Canada. Even now but little is known of the mineral resources that lie beyond the Arctic circle but even that little is ample warrant for further investigation. The work has been mainly done, as apart from private or company prospecting done on shore, by the Dominion Government.

[7] *The North West Territories*  
(Official), 1943

In 1884 the Government sent Lieut. A. R. Gordon in the Sealer *Neptune* to explore the outlying islands of the Arctic and to test the navigability of Hudson Strait. In the next year the Government sent out under the same command the screw steamer *Alert*, one of the specially built ships of Sir George Nares' polar expedition of 1876. The reports of these expeditions both as to navigation and fishery resources were highly encouraging. In 1903 the *Neptune* was again sent out under Mr. A. P. Low of the Geological survey, visited Baffin Land, wintered on Chesterfield Inlet and returned to Halifax after a voyage of 10,000 miles. In 1904 began the Arctic voyages of the celebrated Captain Bernier, mentioned above, and since that time Arctic exploration and patrol, has become a regular and most important task of the Dominion.

At the present time there is a regular annual patrol of the waters of the Eastern Arctic accessible from the Atlantic side. This is carried on—and we are here quoting from the official report of 1943—chiefly by R.M.S. *Nascopie*, a vessel owned and operated by the Hudson's Bay Company and used by the Government of Canada for the annual Eastern Arctic Patrol of medical centres, Royal Canadian Mounted Police detachments, post offices, radio stations, trading posts and missions in the region. This vessel was designed to navigate northern waters under all conditions. Auxiliary services are provided to reach other points not served directly by the *Nascopie*. Some of these boats operate out of Churchill, Manitoba, making connection with the Hudson Bay Railway. The Hudson's Bay Company, Royal Canadian Mounted Police and missions also have small seagoing motor boats by means of which they are able to maintain communication with the native encampments along the coasts.

Each summer the R.M.S. *Nascopie* sails from some port in Eastern Canada with a party of government officials for a voyage of more than 10,000 miles to posts in northern Quebec, on islands in Hudson Strait and Hudson Bay and in the Arctic Archipelago. The party usually includes—as the quoted report indicates—administrative officers, doctors, Royal Canadian Mounted Police and others going north to relieve those who have completed their term of service in the Arctic. In normal times, scientific parties and a limited number of tourists also accompany the expedition. Ports of call are visited for inspection, administration of justice, delivery and acceptance of mail, change of personnel and renewal of supplies. Eskimos frequently are transferred to more abundant hunting grounds. The voyage usually extends over a period of from fourteen to sixteen weeks during which twenty-five to thirty calls are made.

Among other things this Arctic patrol has helped to “keep the flag flying,” in other words to consolidate by actual visit and by the occupation of northern stations the claim of Canada to its “slice” of the Polar area. Time was when this meant nothing more than idle curiosity and national pride. Time will be, since time flies, when it will mean a great deal.

---

Meantime the expansion of Canadian commerce on both oceans and the increasing complexities of navigation have necessitated a corresponding expansion of the operations of the Government of Canada in aid of shipping and sea-borne trade. The original scheme of departments and services instituted at Confederation with the creation of the Department of Marine and Fisheries (1867) proved inadequate for the wider tasks and expanded horizons of the present day. The Fisheries became a

separate Department in 1930. The Department of Transport Act of November 1936, gathered together a number of previously separated agencies into one co-ordinated group. In the new Department of Transport are merged the former Departments of Marine and of Railways and Canals (dating from 1879) together with the Civil Aviation Branch of the Department of National Defence.

Even before the expansion of the war period the Department of Transport represented an enormous field of work<sup>[8]</sup>. The largest part of it, the operation of the Canadian National Railways, is indeed segregated entirely under the control of the Canadian National Railways Company. But its nautical and maritime sections, wide and varied in scope, carry with them everywhere something of the atmosphere of interest and romance that clings like a mist around all that concerns the sea. Through the Minister, affiliated with it, is the National Harbours Board which has taken over the great sea-ports of the Dominion in place of the previous local Harbour Commissions. The National Harbours Board is a distinct unit as apart from the Department but reports directly to the minister. It operates the grain elevators of its sea-ports and also those of Port Colborne, Prescott and the Port of Churchill on the sea-coast of Manitoba. The Department has taken over the Canals including the St. Lawrence Ship Channel. It supervises Civil Aviation, the Meteorological Services and Radio.

[8] *Annual Reports*

The most elaborate and the most characteristically nautical of its functions are perhaps those grouped under Aids to Navigation. In this connection the Department has charge of the construction and repair of light houses, lightships, fog-alarms, buoys and beacons. It publishes its *List of Lights* (3 volumes). It issues also *Notices to Mariners*, about a hundred a year on over two hundred different subjects. It looks after the 300 public harbours of Canada which contain 2,000 wharves. It searches out and destroys derelicts and obstructions to navigation; and it keeps its eye on the Humane Establishment at Sable Island, "the grave yard of the Atlantic."

A similar salt of the sea flavours the duties of the Nautical Services Division which registers ships, examines masters and mates, conducts navigation schools, licenses pilots and examines into wrecks and salvage. Such is the wide and impressive dominion over the sea that has grown up under the Dominion of Canada.

---

From all that has gone above one may gather a picture of the maritime life of Canada, in naval defence and in peace-time commerce, that may serve as an introduction to the volumes dealing with the War Effort of Canada by sea to which this outline of maritime history is intended as an introduction. But the close of the war

will mark, we hope, only a new beginning. There are great things ahead. The St. Lawrence Sea-way is destined to become the most important inland waterway of the world. The Arctic coasts and seas of Canada will take on a significance and a new service when aviation goes over the top of the world and joins Europe to America by a polar route. There is no doubt that for such a traffic great depots, bases, points of repair and supply will be needed in the far north, especially for the transshipment of sea cargoes into aeroplanes. Water transport, by reason of its inconceivable cheapness in comparison with the air, will carry its cargoes to the farthest available northern harbours. The very traffic itself, permitting great capital expenditure, will open up and maintain such harbours, now impossible. It is quite possible also that such a route may develop a by-product of mineral wealth, especially of copper perhaps of rarer metals. Still wider is the view across the Pacific. The extinction of Japan as a "power" may mean the beginning of a new Orient and a new Pacific, to rival in coming centuries by the re-born energy of old countries, such as China, and the new born strength of Siberia and Australasia, all that once went with the Mediterranean world and later with the Atlantic. Such is our outlook. There are wonderful things coming to Canada as well by sea and by land. All that we need is a nation fully conscious of it and equal to the occasion.

## INDEX

- Aberdeen, [42](#)  
Abitibi, [29](#)  
“Acadia,” The (barque), [55](#)  
“Accommodation,” The, [36](#)  
Adams, John, [35](#)  
Admiral of the Fleet, [60](#)  
“Admiral of the Ocean Sea 1942”, [21](#)  
Admiralty, [33](#), [41](#), [42](#), [47](#), [60](#)  
Adventures of the Far North, [31](#)  
Africa, [13](#), [17](#), [18](#), [25](#)  
Aids to Navigation, [63](#)  
Aklavik, [15](#)  
Alaska, [13](#), [17](#), [49](#)  
Alaska, History of, [3](#)  
Alaskan lodgement, [17](#)  
Alaskan Seas, [17](#)  
Albany, [26](#), [27](#), [29](#)  
Alberta, [15](#), [21](#), [50](#)  
“Alert,” The, [63](#)  
Aleutian transit, [17](#)  
Aleutian Islands, [13](#), [17](#)  
Aleuts, [17](#)  
Alexander, Pope, [47](#), [49](#)  
“Algerine,” The, [60](#)  
Algonquins, [26](#)  
“All about the ocean”, [18](#)  
“All Afloat 1914”, [22](#), [38](#)  
“All afloat chronicles of Canada 1913”,  
[55](#)  
Allan Line, [36](#), [39](#)  
All-Red Route, [62](#)  
America, [15](#), [17](#), [18](#), [19](#), [21](#), [22](#), [31](#),  
[32](#), [33](#), [41](#), [47](#), [49](#), [53](#), [61](#), [62](#), [63](#)  
America, Central, [17](#), [47](#)  
American Continent, [17](#)  
Jefferson, [49](#), [60](#)  
Jellicoe, Viscount, [60](#)  
“Journey About the Earth”, [18](#)  
Juan de Fuca Strait, [49](#)  
Kamchatka, [51](#)  
“Kate,” The, [55](#)  
Kayak, [17](#)  
Kenney, J. F., [29](#)  
“Kent,” The, [33](#)  
Khan of Tartary, [29](#), [49](#)  
King James, [29](#)  
King Louis, [29](#)  
King Olaf’s ship, [18](#)  
“Kingsford’s History of Canada”, [34](#)  
Kingston, [33](#), [55](#), [60](#)  
King William’s war, [29](#)  
King William, [29](#)  
King William Island, [30](#), [43](#), [44](#)  
Kitson, A., [47](#)  
La Barre, [27](#)  
Labrador, [12](#), [14](#), [18](#), [30](#), [36](#), [43](#)  
Lachine, [18](#), [26](#)  
Lachine Canal, [38](#), [56](#)  
Lady Aylmer, [38](#)  
Lafayette, [49](#)  
Lahontan, French baron, [17](#)  
Lake Erie, [14](#), [20](#), [26](#), [33](#), [34](#), [35](#), [61](#)  
La Guaira, [22](#)  
Lake Huron, [14](#), [23](#), [26](#), [33](#)  
Lake Michigan, [14](#), [26](#), [33](#)  
Lake Ontario, [14](#), [26](#), [27](#), [33](#), [34](#), [38](#),  
[55](#)  
Lake Ontario command, [26](#)

American Discovery, [21](#)  
American independence, [42](#)  
American markets, [57](#)  
America, North, [17](#), [47](#)  
“American Notes”, [38](#)  
American revolution, [33](#), [54](#)  
Americans, [17](#), [35](#), [60](#), [62](#)  
American Secretary of State, [35](#)  
America, South., [17](#), [47](#)  
Amherst’s Army, [33](#)  
Ampoletta, [21](#)  
Amundsen, Capt. Romuald, [42](#), [43](#)  
“Andrew Marvel,” The, [42](#)  
Annapolis, [55](#)  
Annapolis, naval college, [35](#)  
Antarctic, [42](#)  
Anthropologists, [17](#)  
Anticosti, [13](#), [16](#), [23](#)  
Anticosti currents, [23](#)  
Antipodes, [53](#)  
“Aquitania,” The, [62](#)  
“Arabia,” The (brig), [55](#)  
Archimides’ lever, [26](#)  
Arctic Archipelago, [13](#), [44](#), [63](#)  
Arctic coast, [36](#), [59](#), [62](#), [63](#)  
Arctic exit, [36](#)  
Arctic exploration, [44](#), [47](#), [63](#)  
Arctic Harbour, the, [15](#)  
Arctic Patrol, [63](#)  
Arctic Ocean, [13](#), [21](#), [42](#), [43](#), [63](#)  
Arctic Seas, [29](#)  
Argentina, [53](#)  
“Ariel,” The, [54](#)  
Armageddon, [59](#)  
Asia, [17](#), [23](#), [29](#), [41](#)  
Asiatic Kinship, [17](#)  
“Assiniboine,” The, [62](#)  
Lake ports, [61](#)  
Lakes, [22](#), [26](#), [27](#), [33](#), [34](#), [35](#), [54](#), [55](#),  
[56](#)  
“Lake Schooner, The”, [40](#)  
Lake shipping, [33](#)  
Lake St. Clair, [26](#)  
Lake St. Peter, [38](#)  
Lake Superior, [14](#), [26](#), [33](#)  
Lake Temiskaming, [29](#)  
Lake Winnipeg, [15](#), [41](#)  
“Landmarks of Toronto”, [34](#)  
La Pérouse, [31](#)  
La Salle and The Discovery of the Great  
West, [26](#)  
La Salle, Robert Cavelier de, [20](#), [25](#),  
[26](#), [27](#)  
La Salle’s Lachine, [21](#)  
Las Palmas, [22](#)  
Latin, [18](#)  
Latin American republics, [51](#)  
Lawrence, Capt., [35](#)  
“Lawrence” (frigate), [35](#)  
“Lawrence, W. D.,” The, [57](#)  
Leacock, Stephen, [31](#), [36](#), [61](#)  
League of Nations, [60](#)  
Leif Ericson, [14](#), [18](#)  
Le Moyne, Charles, [29](#)  
“Le Moyne,” The, [61](#)  
Lescarbot, [23](#)  
“Letter of W. S. Domergue”, [35](#)  
Liberal Government, [60](#)  
Liberal senate, [60](#)  
Lightning, [23](#)  
Lisbon, [22](#)  
“List of Lights”, [63](#)  
Liverpool, [42](#), [43](#), [50](#), [55](#), [56](#)  
Lloyd’s, [25](#)

Astarte, [31](#)  
Astoria, [48](#)  
Astor, John Jacob, [49](#)  
Ashanti War, [39](#)  
Athabaska Lake, [15](#), [48](#), [49](#)  
Athabaska River, [48](#)  
Atlantic base, [62](#)  
Atlantic Coast, [56](#)  
Atlantic Packet, the, [32](#)  
Atlantic Ocean, [13](#), [17](#), [18](#), [23](#), [35](#), [36](#),  
[38](#), [42](#), [44](#), [53](#), [55](#), [56](#), [60](#), [62](#)  
Atlas of Modern Geography, [49](#)  
Aurora Borealis, [29](#), [42](#)  
“Aurora,” The, [60](#)  
Australian emigration passes, [53](#)  
Australian Gold Rush, [53](#)  
Australasia, [62](#), [63](#)  
Australia, [13](#), [43](#), [47](#), [49](#)  
Austria, [31](#)  
Azores, [22](#)

Back, Admiral Sir George, [42](#)  
Back or Great Fish River, [42](#)  
Back, Mr. Midshipman, [42](#)  
Back River, [30](#), [44](#)  
“Backwoods of Canada, The”, [53](#)  
Baffin, [22](#), [63](#)  
Baffin Bay, [14](#), [30](#), [43](#), [44](#)  
Baffin Island, [14](#), [15](#), [23](#), [30](#), [42](#), [43](#)  
Bagot Convention, [33](#)  
Bagot, Sir Charles, [35](#)  
Ballantyne, R. M., [41](#)  
Baltic Sea, [13](#), [38](#), [55](#)  
Bank’s Island, [43](#)  
Barbados, [22](#)  
Barclay, Capt., [35](#)  
Basques, [23](#)

London, [31](#), [33](#), [38](#), [41](#), [43](#), [54](#)  
Longfellow’s memorable verses, [22](#)  
Lords of Trade, [33](#)  
Louisburg, [31](#)  
Louisiana Purchase of 1803, [62](#)  
Low, Mr. A. P., [63](#)  
Loyalists, The, [38](#), [54](#)  
Lynch, David, [55](#)  
Lyon, Capt., [43](#)

Macaulay, [53](#), [56](#)  
Macbeth, [60](#)  
“Madison,” The, [34](#)  
Mackinaw, [26](#), [33](#)  
MacKay, D., [31](#), [56](#)  
Mackenzie, Alexander, [49](#)  
Mackenzie River, [15](#), [41](#), [42](#), [62](#)  
Madeira, [22](#)  
Maginot Line, [29](#), [31](#)  
Magnetic Pole, [43](#)  
Mahan, Capt. A. T., [34](#)  
Maitland, [57](#)  
Malay pirates, [41](#)  
Malin Head, [22](#)  
Manhattan, [26](#)  
Manila Bay, [62](#)  
Manitoba, [17](#), [41](#), [44](#), [63](#)  
Marco Polo, [29](#)  
Maribeau, [49](#)  
Maritime ships, [55](#)  
Maritime ports, [54](#)  
Maritime Ship Building, [25](#)  
Maritimes, the, [36](#), [38](#), [42](#), [45](#), [53](#), [54](#),  
[55](#), [57](#)  
Markham, Sir Clements, [18](#)  
Markland, [14](#)  
Marlborough, [31](#)

Bateaux of the St. Lawrence, [24](#)  
 Bathurst Street, [34](#)  
 Bay of Biscay, [23](#)  
 Bay of Fundy, [57](#)  
 "Beagle," The, [43](#)  
 Beaufort Sea, [43](#)  
 "Beaver," The, [33](#), [39](#), [51](#)  
 Belle Isle, [13](#), [15](#), [22](#)  
 Belle Isle, Strait of, [23](#)  
 "Benjamin Fairless," The, [61](#)  
 Beothuks, [17](#)  
 Bergen, [22](#)  
 Bering, Capt. Vitus, [41](#)  
 Bermuda, [22](#)  
 Bernier, Capt. Joseph Eleazar, [56](#), [63](#)  
 Berring Strait, [17](#), [38](#), [47](#), [48](#)  
 Black death, [19](#)  
 Black Sea, [13](#)  
 "Bluenose," The, [45](#)  
 Board of Montreal Harbour  
     Commissioners, [39](#)  
 Bohemia, [13](#)  
 "Book of Old Ships", [18](#)  
 Boothia Peer, [43](#)  
 Boston, [22](#), [25](#), [35](#), [38](#), [39](#)  
 Boston Public Library, [35](#)  
 Boulton's Voyage, 1612-13, [30](#)  
 Bourbon sovereigns, [49](#)  
 "Bout de L'Isle", [61](#)  
 Brant, [33](#)  
 Bras D'Or Lakes, [13](#)  
 Brest, [22](#)  
 Bridgetown, [22](#)  
 Bristol, [22](#), [43](#)  
 Britain, [18](#), [35](#), [38](#), [47](#), [53](#)  
 Britannia, [33](#)  
 British Admiralty, [60](#)  
 British Canada, [26](#)  
 "Marquise de Vaudreuil", [21](#)  
 Marquis of Lorne, [39](#)  
 Marseilles, [18](#), [22](#)  
 "Martin Chuzzlewit", [53](#)  
 "Mary Celeste," The, [57](#)  
 Massachusetts, [12](#)  
 "Matthew", [22](#)  
 McClintock, Capt. (Sir) Leopold, [44](#)  
 McClure, [43](#)  
 McKay, [56](#)  
 Meany, E. S., [49](#)  
 Mediterranean commerce, [16](#)  
 Mediterranean sailors, [18](#)  
 Mediterranean world, [63](#)  
 Melanesian Seas, [43](#)  
 Melville Island, [30](#)  
 Melville Peninsula, [30](#)  
 Mesopotamia, Bible lands of, [17](#)  
 Meteorological Services and Radio, [63](#)  
 Mexico, [23](#), [29](#)  
 Mexico City, [21](#)  
 Middle ages, [59](#)  
 Middleton, Capt., [41](#)  
 "Michigan," The, [33](#)  
 Michillimackinack, [26](#), [33](#)  
 Micmacs, [17](#)  
 Minas Basin, [57](#)  
 Minas Channel, [57](#)  
 Minnesota, [17](#)  
 Mississippi, [20](#), [23](#), [26](#), [62](#)  
 Mistassine, [15](#)  
 Mohicans, [25](#)  
 Molson, John, [36](#), [38](#)  
 Mongolian, [17](#)  
 Montreal, [15](#), [24](#), [25](#), [26](#), [29](#), [33](#), [36](#),  
     [38](#), [53](#), [55](#), [56](#), [61](#), [62](#)  
 Montreal Harbour, [36](#), [61](#)  
 Montreal Island, [26](#), [61](#)

British Canada, [20](#)  
British Channel, [23](#)  
British Columbia, [13](#), [36](#), [47](#), [49](#), [50](#),  
[51](#), [60](#), [62](#)  
“British Columbia 1928”, [47](#)  
British fleet, [59](#)  
British Fur Companies, [26](#)  
British Government, [33](#), [49](#), [54](#)  
British Imperial Garrisons, [59](#)  
British India routes, [56](#)  
British Isles, [18](#), [22](#), [36](#)  
British maritime commerce, [33](#)  
British market, [56](#)  
British Minister at Washington, [35](#)  
British Montreal, [36](#)  
British naval power, [33](#)  
British Navigation Acts, [33](#)  
British navy, [35](#)  
British North America, [38](#), [41](#), [43](#), [53](#),  
[54](#), [55](#)  
British power, [36](#)  
British régime, [36](#), [38](#), [55](#)  
British service, [35](#)  
British shores, [18](#)  
British, the, [34](#), [56](#)  
British trade, [33](#)  
British Upper Canada, [54](#)  
Broke, Capt., [35](#)  
Broke family, [35](#)  
Buckingham, Mr. Silk, [54](#), [55](#)  
Burwash, Major, [44](#)  
Butler, Dr., [49](#)  
Byrd, Admiral, [43](#)

Cabot, [22](#), [23](#), [29](#)  
Cabot Strait, [15](#), [23](#)  
“Caldwell,” The, [33](#)  
“Caledonia” The, [55](#)

Montreal Island, [20](#), [61](#)  
“Montreal Seaport and City”, [36](#), [61](#)  
“Montreal,” The, [29](#), [64](#)  
Moose Factory, [30](#)  
Moose Fort, [29](#)  
Morison, S., [21](#), [33](#)  
Murray, General, [33](#)  
“Musquash,” The, [41](#)  
Mussolini, [18](#)

Nanaimo, [50](#), [51](#)  
“Nancy, Topsail, The”, [28](#), [34](#)  
Nansen, F., [18](#)  
Nantucket, [54](#)  
Nantucket sailors, [54](#)  
Napoleonic Wars, [32](#), [54](#)  
Nare, Sir George, [63](#)  
“Narrative, 1835”, [43](#)  
“Narrative 1823,” J. Franklin, [42](#)  
Nassau, [22](#)  
National Defence Act of 1922, [60](#)  
National Harbours Board, [61](#), [63](#)  
Nautical Services Division, [63](#)  
Navy Island, [33](#)  
Naval Service Act of 1910, [60](#)  
“Naval War of 1812”, [34](#)  
Near East, [54](#)  
Nelson, Lord, [22](#), [35](#)  
Nelson River, [30](#)  
Nelson’s “Victory”, [25](#)  
Neptune, [26](#)  
“Neptune,” The, [63](#)  
New Albion, [48](#), [49](#)  
New Brunswick, [53](#), [54](#), [55](#), [57](#)  
New Caledonia, [49](#)  
New England, [18](#), [25](#), [33](#), [42](#), [54](#)  
New England ports, [54](#)

California, [The](#), [22](#)  
California, [13](#), [49](#), [55](#)  
“California,” [The](#), [41](#)  
Calvin, D. D., [56](#), [57](#)  
Campbell, Hon. Alexander, [55](#)  
Canada, [13](#), [14](#), [16](#), [17](#), [18](#), [19](#), [21](#), [23](#),  
[26](#), [28](#), [31](#), [33](#), [36](#), [38](#), [39](#), [42](#), [47](#),  
[49](#), [51](#), [53](#), [54](#), [55](#), [56](#), [57](#), [59](#), [60](#),  
[62](#), [63](#)  
“Canada and its provinces”, [51](#)  
“Canada’s First Submarines 1943”, [60](#)  
“Canada, Nova Scotia, New  
Brunswick”, [54](#)  
Canada Steamship Co., [61](#)  
Canada Steamship Lines, [34](#)  
Canadian Arctic waters, [42](#)  
Canadian coast, [60](#)  
Canadian fleet, [60](#)  
“Canadian Geog. Journal Nov. ’42”, [59](#)  
Canadian Government, [60](#)  
Canadian history, [23](#), [24](#)  
“Canadian Marine, [The](#)”, [61](#)  
Canadian Nat. Exhibition, [34](#)  
“Canadian Naval Act of 1922”, [60](#)  
Canadian National Railway, [63](#)  
Canadian National Railways Co., [63](#)  
Canadian navy, [60](#), [61](#)  
Canadian northern seas, [43](#)  
Canadian Pacific fleet, [39](#)  
Canadian Pacific Lines, [39](#)  
Canadian Pacific Railway, [62](#)  
Canadian seas, [12](#), [18](#)  
Canadian waters, [19](#), [21](#), [22](#), [29](#), [43](#),  
[59](#)  
“Canot de Maître”, [26](#)  
Canton, [47](#), [62](#)  
Cape Breton Island, [13](#), [23](#)  
Cape Canso, [13](#)  
New England ports, [27](#)  
Newfoundland, [13](#), [17](#), [23](#), [42](#)  
Newfoundland, Grand Banks of, [23](#), [25](#)  
New France, [14](#), [23](#), [25](#), [29](#), [36](#)  
New Georgia, [49](#)  
New Hanover, [49](#)  
Newton, Isaac, [59](#)  
“New Isle”, [23](#)  
New Orleans, [55](#)  
Newton’s apple, [26](#)  
Newton’s mathematics, [21](#)  
New York, [22](#), [26](#), [38](#), [55](#), [62](#)  
New Zealand, [47](#), [49](#)  
Niagara, [33](#)  
Niagara Peninsula, [26](#)  
“Niagara,” [The](#), [26](#), [27](#), [33](#)  
Niger, [23](#)  
Nile, [23](#), [36](#)  
“Nina”, [22](#)  
Nineveh, [29](#)  
“Niobe,” [The](#), [60](#)  
Noah’s Ark, [17](#), [26](#)  
Nobile 1928, [43](#)  
Nome, [50](#)  
Nootka Sound, [47](#), [48](#), [49](#), [62](#)  
Nootka Sound Convention, [49](#)  
“Normandie,” [The](#), [62](#)  
Norsemen, [12](#), [18](#), [19](#), [21](#), [42](#)  
Norsemen’s Ships, [18](#)  
Norse sagas, [18](#)  
North America, [13](#), [18](#), [22](#), [25](#), [26](#), [35](#),  
[36](#), [42](#), [61](#)  
North American continent, [58](#)  
North American stations, [59](#)  
North Atlantic, [23](#), [54](#), [59](#), [62](#)  
“North Atlantic Steam Navigation,  
1896”, [39](#)  
Northern Hemisphere, [13](#)

Cape Cance, [19](#)  
Cape Horn, [21](#), [47](#), [62](#)  
Cape, The, [49](#)  
Cape Verde Islands, [22](#)  
Caracas, [22](#)  
Cardiff, [55](#), [62](#)  
“Career of H.M.C.S. Rainbow”, [60](#)  
Cariboo, [51](#)  
Carrothers, W. A., [53](#)  
Cartier, [14](#), [16](#), [17](#), [22](#), [23](#), [29](#), [61](#)  
Cartier’s, Jacques, ships, [21](#)  
“Carvels of Jacques Cartier”, [58](#)  
Casablanca, [22](#)  
“Caspar, Old”, [35](#)  
Catarraqui, [26](#), [27](#), [33](#)  
Cayuga Creek, [20](#), [26](#)  
Chambers, E.J., [61](#)  
Chambers, Mr. James, [55](#)  
Champlain, [13](#), [14](#), [21](#), [23](#), [25](#), [61](#)  
Channel Coast, [13](#), [25](#)  
Channel ports, [23](#)  
Charles II, [29](#)  
Chatham, [27](#)  
Chatterton, E. Keble, [21](#)  
Chauncey, Commodore, [34](#)  
Chauncey’s fleet, [34](#)  
Cherbourg, [62](#)  
“Chesapeake,” The, [35](#)  
Chesterfield Inlet, [63](#)  
Chevalier de Troyes, [29](#)  
Chicago, [21](#), [46](#), [62](#)  
Chicago museum, [19](#)  
Chilean coast, [60](#)  
Chilean navy, [60](#)  
Chili, [13](#)  
China, [26](#), [41](#), [47](#), [54](#), [63](#)  
China Clippers, [54](#)  
China Seas. [41](#). [47](#). [60](#)  
Northern Hemisphere, [19](#)  
Northern Mists, [18](#)  
Northern Seas, [47](#)  
North Pole, [41](#), [43](#), [47](#), [62](#)  
North Sea, [17](#), [18](#), [23](#), [42](#), [59](#)  
North Shore, [23](#)  
North Star, [21](#)  
North West Co., [26](#), [33](#), [49](#)  
North West Passage, [41](#), [42](#), [47](#), [62](#)  
North West, The, [41](#), [61](#)  
North West Territories, [15](#), [38](#), [43](#), [50](#),  
[59](#), [62](#)  
Norway, [18](#), [22](#), [42](#)  
Norway House, [41](#), [44](#), [49](#)  
Norwegians, The, [55](#)  
“Notices To Mariners”, [63](#)  
Nottawasaga River, [34](#)  
Nova Scotia, [12](#), [13](#), [15](#), [18](#), [54](#), [55](#), [57](#)  
“Nova Scotia Schooner, A”, [45](#)  
Ocean, [18](#)  
“Ocean Liner Off Quebec”, [58](#)  
Ohio Territory, [33](#)  
“Old Régime in Canada, The”, [25](#), [34](#),  
[38](#)  
Old World, [17](#)  
“Olympia,” The, [62](#)  
“Oneida,” The, [34](#)  
Ontario, [13](#), [17](#), [26](#), [27](#)  
“Ontario,” The, [27](#)  
Orange, [26](#)  
Oregon, [47](#), [49](#)  
Oregon Boundary treaty, [49](#)  
Orient, [47](#), [53](#), [54](#), [62](#), [63](#)  
Orwell, Mr. George, [35](#)  
Oskosh, [33](#)  
Oswego, [27](#), [34](#)  
Ottawa River. [21](#). [23](#). [29](#). [56](#)

Chincha Islands, [54](#)  
Chinese market, [47](#)  
Christian era, [18](#)  
Churchill, [29](#), [30](#), [60](#), [63](#)  
Churchill River, [29](#), [30](#)  
“Churchill,” The, [41](#)  
“City of Toronto, The”, [55](#)  
Civil Aviation Branch, [63](#)  
Civilized Europe, [22](#)  
Clark, H. W., [13](#)  
Cleveland, [61](#)  
“Clipper Ship, The”, [32](#), [54](#)  
“Clipper, The”, [64](#)  
Cobequid Bay, [57](#)  
Cobh, [22](#)  
“The Cod Fisheries 1940”, [23](#)  
Colbert, [25](#)  
Columbia, [47](#), [49](#), [51](#)  
Columbia River, [48](#), [49](#), [50](#)  
“Columbia, The” (barque), [55](#)  
Columbus’s Indies, [21](#)  
“Compagnie du Nord”, [29](#)  
Confederation, [39](#), [49](#), [63](#)  
Conservative Government, [60](#)  
“Conspiracy of Pontiac, The”, [33](#)  
“Constanz,” Danish sloop, [25](#)  
Cook, Capt. James, [25](#), [38](#), [47](#), [48](#), [49](#)  
Cooper, Fenimore, [27](#)  
Coppermine River, [31](#), [45](#)  
Coppermine, The, [42](#)  
Coronel, [60](#)  
Cornwall, [18](#)  
Cortez, [29](#)  
“Cosmo,” The, [56](#)  
Cowes, [38](#)  
Cradock’s fleet, [60](#)  
Crimean war, [38](#), [51](#)  
“Otter,” The, [33](#)  
Pacific base, [63](#)  
Pacific Coast, [15](#), [17](#), [38](#), [47](#), [48](#), [49](#)  
Pacific Fur Co., [49](#)  
Pacific Islands, [47](#)  
Pacific Ocean, [13](#), [41](#), [42](#), [44](#), [47](#), [49](#),  
[59](#), [60](#), [63](#)  
“Pacific,” The, [54](#)  
Panama, [50](#), [62](#)  
Panama Canal, [61](#), [62](#)  
Panhandle, [13](#)  
Paris, [49](#)  
“Parisian,” The, [39](#)  
Parkman, F., [25](#)  
Parkman, Francis, [26](#), [33](#)  
Parliament Buildings, [35](#)  
Parr, Governor, [54](#)  
Parry, Lieut. (Sir) Edward, [43](#)  
Patagonia, [17](#)  
“Pathfinder,” The, [27](#)  
“Patrician,” The, [60](#)  
“Patriot,” The, [60](#)  
Peace of 1815, [36](#)  
Peace of Ryswick, [29](#)  
Peace River, [48](#), [49](#)  
Peary, [43](#)  
“Pelican”, [29](#)  
Pendulums, [21](#)  
Pentland Firth, [42](#)  
Perez, [48](#)  
Persia, [17](#)  
Perry’s victory, [33](#), [35](#)  
Peru, [29](#), [55](#), [56](#)  
Petrovavlovski, [51](#)  
Peuchot, Memoirs of Late War  
Commander, [26](#)

Crozier, Capt., [44](#)  
Culver, H. B., [18](#)  
Cumberland House, [30](#)  
Cunard packet, [38](#)  
Cunard, Samuel, [54](#)  
Cunningham, W., [53](#)  
Cuthbertson, George A., [26](#), [33](#), [34](#), [35](#)  
“Cyprus,” The, [55](#)

Dakar, [22](#)  
Danes, [19](#)  
Danish sloop, [25](#)  
Darwin, Charles, [43](#)  
Dartmouth, [54](#)  
Davis, John, [22](#), [29](#), [30](#), [43](#)  
Davis Strait, [14](#), [30](#), [42](#), [43](#), [49](#)  
Dearborn, Gen., [34](#)  
Dearborn’s Sailors, Gen., [34](#)  
DeCasson, Dollier, [38](#)  
Degrasse, [49](#)  
Dekkan, [44](#)  
Delaware, [55](#)  
De Lesseps Canal, [62](#)  
Denonville, Governor, [27](#)  
Department of Marine, [63](#)  
Department of Marine and Fisheries, [63](#)  
Department of Militia and Defence, [60](#)  
Department of National Defence, [60](#), [63](#)  
Department of Naval Service and the  
Air, [60](#)  
Department of Railways and Canals, [63](#)  
Department of Transport, [63](#)  
“Department of Transport Act of Nov.  
1936”, [63](#)  
De Soto, Hernando, [23](#)  
Detroit, [33](#)  
Detroit River, [33](#)

“P. G. Firm” (Pollock, Gilmour), [56](#)  
Philadelphia, [55](#)  
Phoenecian settlement of Marseilles, [18](#)  
Pictou, [38](#), [57](#)  
Pike, Gen., [34](#)  
“Pinta”, [21](#)  
Pitt, Wm., [49](#)  
Pizarro, [29](#)  
Plague, [19](#)  
Point Barrow, [17](#)  
Point Turnagain, [43](#)  
Polar Area, [63](#)  
“Polar and Tropical Worlds”, [43](#)  
Polar Seas, [17](#), [41](#)  
Polybius, [18](#)  
Pomona, [42](#)  
Pontiac, [33](#)  
Pontiac’s War, [33](#)  
Porcupine, [29](#)  
Port Arthur, [61](#)  
Port Colbourne, [63](#)  
Port of Churchill, [63](#)  
Porto Grande, [22](#)  
Port of London, [41](#)  
Port of Montreal, [36](#), [39](#), [55](#), [59](#), [61](#)  
Port of Quebec, [62](#)  
Port of Spain, [22](#)  
Port of Vancouver, [61](#), [62](#)  
Port Royal, [25](#)  
Port San Francisco, [48](#), [49](#)  
Portsmouth, [35](#)  
Portuguese commerce, [16](#)  
Portuguese pilots, [21](#)  
Pottawatommies, [26](#)  
Praia, [22](#)  
President of the United States, [49](#)  
Prescott, [63](#)

Detroit, the British, [35](#)  
De Troyes, [30](#)  
Devon, [23](#)  
Devon Island, [43](#)  
Dickens, Charles, [38](#), [53](#)  
Digge's Island, [42](#)  
Discovery, [21](#)  
"Dobb's Galley", [41](#), [42](#)  
Dobbs, Mr. Arthur, [41](#)  
Domergue, W. S., [35](#)  
Dominion Gov't., [62](#)  
Dominion naval services, [60](#)  
Dominion of Canada, [23](#), [36](#), [39](#), [56](#),  
[60](#), [61](#), [63](#)  
"Dominion Line, The", [39](#)  
Don River, [34](#)  
Douglas Bay, [44](#)  
Douglas, James, Gov., [49](#), [51](#)  
"Douglas, Selkirk, Simpson," Makers of  
Canada Series, [49](#)  
"Duke of Gloucester", [35](#)  
Duluth, [13](#), [46](#), [62](#)  
Dundee, [42](#)  
Dutch republic, [59](#)  
  
East Arctic patrol, [63](#)  
Eastern Arctic, [63](#)  
East India Co., [47](#), [53](#)  
East Indiamen, the, [53](#), [54](#)  
East Indies, [41](#)  
"Eddystone," The, [42](#)  
Edinburgh, [45](#)  
Egypt, [36](#)  
"Egyptians, The", [36](#)  
Ellesmere, [15](#)  
"Ellis," The, [55](#)  
Ellsworth, [43](#)  
  
"Press Notice, June 3rd, 1943", [61](#)  
"Price Current, Orillia, 1943", [56](#)  
Pride, Mr. John, [55](#)  
"Prince Albert," The, [42](#)  
Prince Edward Island, [13](#), [15](#)  
"Prince of Wales," The, [42](#)  
Prince of Wales Island, [43](#)  
Prince Rupert, [50](#)  
"Prince Rupert," The, [42](#)  
Princess Louise, [39](#)  
Prior, Mr. John, [35](#)  
"Province of Canada", [38](#)  
Provincial Marine, [28](#), [33](#), [34](#)  
Puerto Rico, [22](#)  
Puget Sound, [49](#)  
Pytheas, [17](#), [18](#), [29](#)  
"Pytheas Geog. Journal", [18](#)  
Pytheas's ship, [18](#)  
  
Quadra, [48](#)  
Quebec, [24](#), [25](#), [29](#), [33](#), [36](#), [38](#), [46](#), [53](#),  
[54](#), [55](#), [56](#), [57](#), [58](#), [61](#), [62](#), [63](#)  
Quebec, Province of, [14](#), [15](#)  
Queen Anne, [42](#)  
Queen Anne's War, [29](#)  
Queen Charlotte, [15](#)  
Queen Charlotte Islands, [48](#), [49](#), [50](#), [51](#)  
"Queen Charlotte," The, [35](#)  
Queen Elizabeth, [15](#), [23](#), [42](#)  
"Queen Mary", [62](#)  
"Queen of Inland Navigation", [46](#)  
Queen Victoria, [49](#)  
"Quiet Corner, A", [56](#)  
  
Radisson, [14](#), [29](#)  
"Rainbow," The, [60](#)  
Raleigh, [15](#)

“Emigration from the British Isles”, [53](#)  
Empire, [53](#)  
“Empress of Britain”, [62](#)  
“Engageante”, [31](#)  
England, [13](#), [29](#), [33](#), [38](#), [42](#), [43](#), [44](#), [49](#),  
[51](#), [53](#)  
English fleet, [23](#)  
English, the, [29](#), [33](#), [45](#), [49](#)  
English mining syndicate, [33](#)  
“Erebus”, The, [44](#)  
Eric the Red, [18](#)  
Erie, [33](#)  
Eskimos, [17](#), [19](#), [44](#), [63](#)  
Esquimalt, [49](#), [51](#), [59](#), [60](#), [61](#)  
Ethiopia, [18](#)  
Ethiopians, [59](#)  
Euclid, [18](#)  
Europe, [17](#), [18](#), [19](#), [21](#), [23](#), [31](#), [35](#), [49](#),  
[53](#), [54](#), [55](#), [60](#), [62](#), [63](#)  
European arms, [33](#)  
European nations, [51](#)  
Europeans, [26](#)  
European war, [60](#)  
Exploration, [21](#)  
  
Falkland Islands, [60](#)  
Falmouth, [49](#)  
“Family Compact, The”, [49](#)  
Fareham, Hants, [35](#)  
Farrow, Lieut. John, [59](#)  
Fayal, [22](#)  
Fisher, Admiral, [60](#)  
“Flatheads”, [49](#)  
Florida, [23](#)  
Foochow, [54](#)  
Fort Albany, [29](#), [30](#), [31](#)  
Fort Astoria, [49](#)  
“Rattlesnake”, [43](#)  
Red Indians, [17](#)  
Red River, [41](#), [62](#)  
Regiment, 32nd, [38](#)  
Reindeer Lake, [15](#)  
Resolution Island, [42](#)  
Revolution of the Massacres, [49](#)  
Revolution of the Terrors, [49](#)  
Reykjavik, [22](#)  
Rio de Janeiro, [55](#)  
River of Canada, [23](#)  
Riviera, [36](#)  
R.M.S. “Nascopie”, [63](#)  
Robertson, J. Ross, [34](#)  
Rochelle, Port of, [23](#)  
“Rock Terrace,” The, [55](#)  
Rocky Mountains, [36](#), [49](#), [62](#)  
Rodney, [35](#), [50](#)  
Romans, [18](#)  
Rome, [22](#)  
Roosevelt, Theodore, [34](#)  
Rosco’s Hotel, [38](#)  
Ross, Capt. Sir John, [43](#)  
Ross, Commander James, [43](#), [56](#)  
Royal Canadian Mounted Police, [42](#), [63](#)  
Royal Canadian Naval College, [60](#)  
Royal Canadian Navy, [59](#), [60](#), [61](#)  
“Royal Canadian Navy, The, 1908-  
1940”, [59](#)  
Royal Mountain, [39](#)  
Royal Naval air service, [60](#)  
Royal Navy, the, [28](#), [51](#), [60](#), [61](#)  
“Royal William,” The, [36](#), [38](#)  
Rupert House, [30](#)  
Rupert River, [30](#)  
Rupertsland, [14](#), [30](#), [31](#), [43](#)  
“Rush-Bagot agreement of 1818”, [27](#),

Fort Bourbon, [29](#), [30](#)  
Fort Charles, [29](#)  
Fort Chipewayan, [42](#), [48](#), [49](#)  
“Fort Frontenac, The”, [27](#)  
Fort Nelson, [29](#)  
Fort Niagara, [27](#)  
Fort Prince of Wales, [29](#), [30](#), [31](#)  
Fort Rouillé, old French, [34](#)  
Fort Rupert, [29](#)  
Fort Severn, [30](#)  
Fort Smith, [15](#)  
“Fort, The Old”, [34](#)  
Fort Vancouver, [49](#)  
Fort Victoria, [47](#), [48](#), [49](#)  
Fort William, [15](#), [61](#), [62](#)  
Fort York, [29](#), [34](#)  
Founding of Churchill, [29](#)  
Fox Channel, [54](#)  
Foxye, [30](#)  
Foxye Basin, [30](#), [43](#)  
France, [25](#), [26](#), [28](#), [29](#), [33](#), [35](#), [49](#), [54](#)  
“Frances Lawson, The”, [55](#)  
Francis I, [29](#)  
Franklin, Capt. (Sir) John, [41](#), [42](#), [43](#),  
[44](#)  
Franklin, Lady, [44](#)  
Franklin’s expedition, [44](#)  
Fraser River, [48](#), [49](#), [51](#)  
Fraser, Simon, [49](#)  
French Acadians, [54](#)  
French Canada, [25](#), [29](#), [51](#)  
French Gov’t, [29](#)  
French revolution, [49](#)  
“French, The”, [25](#), [26](#), [27](#), [29](#), [31](#), [33](#),  
[41](#), [53](#), [55](#)  
French war, [41](#)  
French West Indies, [25](#)  
[35](#)  
Rush, Richard, [35](#)  
Russian America, [49](#)  
Russian American Coast, [48](#)  
Russian explorers, [47](#)  
Russian whaling fleets, [47](#)  
Sable Island, [13](#), [63](#), [65](#)  
Saga of Olaf Trygg-yason, [18](#)  
“Saguenay” (destroyer), [60](#)  
Sailing Craft, [34](#)  
Sam Slick, [35](#)  
Sanders, Admiral, [25](#)  
Sandwich Islands, [47](#), [49](#), [51](#)  
San Francisco, [49](#), [50](#), [51](#), [55](#)  
San Juan, [22](#)  
“Santa Maria”, [21](#), [22](#), [23](#), [27](#)  
“Sarmatian,” The, [39](#)  
Saskatchewan, [13](#), [15](#)  
Saskatchewan, River, the, [62](#)  
Sault Ste. Marie, [26](#), [63](#)  
Savannah, [13](#)  
“Savannah,” The, [38](#)  
Scandinavian hillsides, [18](#)  
“Sceptre”, [31](#)  
“Scharnhorst,” The, [60](#)  
Schmidt 1937, [43](#)  
Scotland, [41](#), [42](#), [55](#)  
Sealer “Neptune”, [63](#)  
“Sea Power in its Relations to the War  
of 1812”, [34](#)  
Seattle, [50](#), [60](#)  
Selkirk, Lord, [41](#)  
Seneca Indians, [26](#), [27](#)  
Seven Years’ War, [27](#), [31](#), [33](#)  
Severn River, [30](#)  
“Seward’s Alaska Icebox of 1867”, [62](#)  
Shakespeare, [13](#)

“Freshwater”, [26](#), [33](#), [34](#), [35](#)  
Frobisher, Martin, [15](#), [22](#), [29](#), [43](#)  
Frontenac, [27](#)  
Fry, Henry, [39](#)  
Funchal, [22](#)  
Fundy, Bay of, [13](#)  
“Fury,” The, [43](#)  
  
Galileo, [59](#)  
Galileo’s telescopes, [21](#)  
“Galiote”, [25](#)  
Galleot, [26](#)  
Garden Island, [55](#)  
Gaspé Peninsula, [36](#)  
“Gasoline buggy”, [36](#)  
Genesis, [43](#)  
“Geneva,” The, [38](#)  
Georgetown, [22](#)  
German Monarchies, [53](#)  
Georgia, [13](#)  
Georgian Bay, [15](#), [26](#)  
Germans, The, [60](#)  
Germany, [17](#), [60](#)  
Gibraltar, [22](#), [47](#)  
Gilbert, Sir Humphrey, [23](#)  
“Gjöa,” The, [42](#)  
Glasgow, [56](#)  
“Glorious Shannon’s Blue Duster, The”,  
[35](#)  
“Gneisenau,” The, [60](#)  
God, [23](#)  
Goloven, [43](#)  
Gordon, Lieut. A. R., [63](#)  
Government of Canada, [63](#)  
Governor-General of Canada, [33](#), [39](#),  
[60](#)  
Governor of New Brunswick, [54](#)  
“Governor of New Brunswick”, [54](#)

“Shannon,” The, [35](#)  
“Shearwater,” The, [60](#)  
“Ships and Ways of other Days 1913”,  
[21](#)  
Shirley, [27](#)  
Shubenacadie River, [57](#)  
Siberia, [17](#), [51](#), [63](#)  
Sieur d’Iberville, [29](#)  
“Signet,” The (barque), [56](#)  
Sillery Cove, [53](#), [56](#)  
Sitting Bull, [33](#)  
Simcoe, Governor, [34](#)  
Singapore, [62](#)  
Sitka, [50](#)  
Skagway, [50](#)  
“Skeena” (destroyer), [60](#)  
Snake River, [50](#)  
Snider, C. H. D., [34](#), [35](#)  
Somerset Island, [43](#)  
Soo, The, [33](#)  
Southampton, [22](#), [60](#), [62](#)  
Southampton Island, [30](#), [43](#)  
South Dakota, [23](#)  
Southern Ocean, [41](#)  
Southern Sea, [25](#)  
South Pacific, [54](#)  
South Seas, [54](#), [55](#)  
“Sovereign of The Seas”, [56](#)  
Soviet Russia, [13](#)  
Spain, [22](#), [31](#), [47](#), [49](#)  
Spaniards, [23](#), [47](#)  
Spanish commerce, [16](#)  
Spanish missions, [47](#)  
Spanish pilots, [21](#)  
Spanish sailors, [22](#)  
Spanish, The, [49](#)  
Spanish war vessel, [38](#)  
“Spanish war vessel”, [38](#)

“Grand Hermine”, [16](#), [22](#)  
“Grand Old Man of the Sea”, [56](#)  
“Grand Manon”, [13](#)  
Grant, Captain, [51](#)  
“Graveyard of the Atlantic, The”, [63](#)  
Gravé, Pont, [25](#)  
Gravesend, [42](#)  
Great Bear Lake, [15](#), [48](#)  
Great Britain, [18](#), [28](#), [29](#), [38](#), [41](#), [51](#),  
[55](#), [56](#), [57](#), [59](#)  
“Great Company, The”, [29](#), [41](#)  
Great Lakes, [15](#), [26](#), [27](#), [28](#), [29](#), [40](#),  
[49](#), [60](#), [61](#)  
“Great Lakes Freighter, The”, [52](#)  
Great Peace of 1815, [42](#), [53](#)  
Great Slave Lake, [15](#), [48](#)  
Great southern continent, [47](#)  
“Great War of 1914-18”, [25](#), [59](#), [60](#)  
“Great War of 1939”, [19](#), [61](#)  
Greece, [22](#)  
Greek, [18](#)  
Greek galleys, [18](#)  
Green Bay, [26](#)  
Greenland, [12](#), [14](#), [17](#), [18](#), [19](#), [22](#), [30](#),  
[42](#)  
“Greenland” 1942, [19](#)  
Greenland glacier, [19](#)  
Greenwich, [21](#)  
Greenwich time, [21](#)  
“Griffon,” LaSalle’s, [20](#), [25](#), [26](#), [27](#)  
“Griper,” The, [43](#)  
Groseillers, [29](#)  
“Growth of English Industry and  
Commerce”, [53](#)  
Guam, [55](#)  
Guinea, [15](#)  
“Gulf”, [23](#)  
Gulf of Georgia, [40](#)  
Spencer’s Island, [51](#)  
Spitzbergen, [42](#), [43](#)  
St. Anthony of Padua, [26](#)  
Stars and Stripes, [35](#), [63](#)  
“Steam Boat”, [36](#)  
Stefansson, Vilhjalmur, [19](#), [44](#)  
St. Helen’s Island, [61](#)  
St. Jean, [14](#)  
St. John, Harbour of, [23](#)  
St. John’s, [22](#), [54](#), [55](#)  
St. Lawrence, [15](#), [16](#), [18](#), [23](#), [24](#), [25](#),  
[29](#), [33](#), [35](#), [36](#), [38](#), [39](#), [47](#), [55](#), [56](#),  
[59](#), [61](#), [62](#)  
St. Lawrence canals, [36](#)  
St. Lawrence, Gulf of, [13](#), [17](#), [23](#)  
St. Lawrence route, [38](#), [58](#), [61](#)  
St. Lawrence Sea Way Project, [61](#), [63](#)  
St. Lawrence Waterway, [54](#), [61](#)  
St. Mary’s current, [36](#), [38](#), [61](#)  
Stornoway, [42](#)  
Stromness, [42](#)  
Stuart times, [23](#)  
Sussex, [17](#)  
Sweden, [22](#)  
Sydney, [50](#)  
Sydney of New South Wales, [62](#)  
Talon, Jean, [25](#)  
“Taeping,” The, [54](#)  
Tarama, [55](#)  
Tatamagouche, [55](#)  
Tecumseh, [33](#)  
Temiskaming portage, [29](#)  
Tennyson, [26](#)  
“Terre Neuve”, [23](#)  
“Terror,” The, [44](#)  
Thermopylae, [59](#)  
Thlinait Indians, [17](#)

Gulf of Georgia, [47](#)  
 Gulf ports, [56](#)  
  
 Haklyt, Richard, [15](#)  
 Haliburton, Judge, [35](#)  
 Halifax, [22](#), [35](#), [38](#), [54](#), [59](#), [60](#), [61](#), [63](#)  
 Halifax harbour, [35](#)  
 Hamilton, [22](#)  
 Hampshire village, [35](#)  
 Hampshire Gazeteer, [35](#)  
 Hanna, Capt., [47](#)  
 Hants County [57](#)  
 Harbour Bridge [61](#)  
 Harbour Commission, [61](#), [63](#)  
 Harbour Corporation, [39](#)  
 Hartwig, G., [43](#)  
 Hawkins, John, [15](#)  
 Hawthorne, David, [54](#)  
 Hayes River, [29](#), [30](#), [41](#)  
 Head, Sir Edmund, [54](#)  
 Hearn's Inland Journey, [30](#), [31](#)  
 Hearne, Samuel, [31](#)  
 Hearn's Coppermine R. Discovery,  
     1771-2, [31](#), [43](#)  
 Heaven, [23](#)  
 "Hecla," The, [43](#)  
 Helluland, [14](#)  
 Hewet, Mr. John, [65](#)  
 Henley House, [29](#)  
 Henry, Alexander, [33](#)  
 "Hercules," The, [37](#)  
 Herodotus, [29](#)  
 History of Canada, [38](#)  
 "History of the United States", [33](#)  
 HMS "New Zealand", [60](#)  
 Hochelaga, [14](#), [23](#)  
 Holmes, Mr., [35](#)  
 Hollinger, [70](#)  
 Imitigai Indians, [17](#)  
 Thompson, David, [49](#)  
 Thompson, Wm. & Co., [55](#)  
 Three Rivers, [26](#)  
 Tierra del Fuego, [17](#)  
 Toledo, [61](#)  
 Tombs, L., [36](#)  
 "Tonquin," The, [49](#)  
 Toronto, [14](#), [34](#), [35](#), [38](#), [55](#), [61](#), [62](#)  
 Toronto Bay, [21](#), [22](#)  
 "Toronto," schooner, [34](#)  
 Toulon, [27](#)  
 Trafalgar, [42](#)  
 Trafalgar ships, [57](#)  
 Traill, Mrs. C. P., [53](#)  
 Transcontinental Ry., [62](#)  
 Trans-Isthmian Trade, [61](#)  
 Transit of Venus, [47](#)  
 Trans-Pacific Trade, [61](#)  
 Treaty of Utrecht, [29](#)  
 Trinidad, [22](#)  
 Troop firm, [55](#)  
 "Troop, The", [55](#)  
 Tucker, G. N., [60](#)  
 Tudors, [22](#)  
 Two Harbours, [61](#)  
  
 Ultima Thule, [18](#)  
 Ungava, [17](#), [36](#)  
 Ungava Bay, [43](#)  
 Union Jack, [34](#)  
 United Province of 1841, [38](#)  
 United States, [13](#), [36](#), [38](#), [49](#), [53](#), [54](#),  
     [55](#), [61](#)  
 Unsolved mysteries of the Arctic, [44](#)  
 Upper California, [50](#)  
 Upper Canada, [34](#), [38](#), [51](#), [57](#)  
 Upper Canada settlers, [77](#)

Hongkong, [41](#)  
Hollywood, [13](#)  
Hong Kong, [62](#)  
“Honourable Co., The”, [31](#)  
Hood, Mr. Midshipman, [42](#)  
Horace, [18](#)  
Horn, The, [49](#), [51](#), [55](#)  
House of Commons, [60](#)  
Howay, F. W., [47](#)  
Hoy, [42](#)  
Hudson, [14](#), [30](#)  
Hudson Bay, [13](#), [14](#), [17](#), [29](#), [30](#), [31](#),  
[41](#), [42](#), [43](#), [63](#)  
Hudson Bay Ry., [63](#)  
Hudson Bay Territory, [29](#)  
Hudson, Henry, [22](#), [29](#), [30](#), [43](#)  
“Hudson’s Bay” 1848, [42](#)  
Hudson’s Bay Co., [26](#), [29](#), [33](#), [41](#), [42](#),  
[44](#), [49](#), [63](#)  
Hudson Strait, [13](#), [30](#), [41](#), [42](#), [43](#), [63](#)  
Hudson, The, [26](#), [27](#), [36](#)  
Hull, [22](#), [42](#), [43](#)  
Humber beaches, [34](#)  
“Humboldt, Alexander, 1802”, [54](#)  
“Hurault”, [27](#)  
“Huron,” The, [33](#)  
Huxley, [43](#)  
Hydrographic Survey, [13](#)  
  
Iberville, [29](#), [30](#)  
Iceland, [12](#), [18](#), [22](#), [23](#)  
Iloilo, [55](#)  
“Imperial Conference of 1911”, [60](#)  
Imperial Government, [60](#), [61](#)  
Imperial navy history, [35](#)  
“Imperial Naval Services”, [60](#)  
“Imperial World”, [62](#)  
India [41](#) [47](#) [53](#) [56](#)  
  
Upper Canada settlers, [41](#)  
Upper Lakes, [20](#), [25](#), [27](#), [33](#), [52](#)  
  
Valparaiso, [51](#), [54](#)  
Vancouver, [15](#), [38](#), [47](#), [48](#), [50](#), [54](#), [59](#),  
[61](#), [62](#)  
Vancouver, Capt. George, [49](#)  
“Vancouver’s Discovery of Puget  
Sound”, [49](#)  
Vancouver Dutch Harbour, [50](#)  
Vancouver Island, [47](#), [48](#), [49](#), [62](#)  
Verrazano, [14](#)  
Vérendrye’s Indians of the Assiniboine,  
[23](#)  
Verkhoyansk, [17](#)  
Vicar of Fareham, [35](#)  
Victoria, [15](#), [50](#), [51](#), [56](#), [62](#)  
Victoria Bridge, [63](#)  
Victoria Island, [30](#)  
“Victorian,” The, [39](#)  
Victoria, Queen, [25](#)  
“Victory,” The, [43](#)  
Viking Boats, [19](#)  
Vikings, [17](#)  
Viking Ship, [18](#)  
“Viking Ship, The”, [12](#)  
Vinland, [14](#), [18](#)  
“Virginian,” The, [39](#)  
Von Spee, Admiral, [60](#)  
  
Wales, [13](#)  
Wallace, Frederick Wm., [54](#), [55](#)  
Wallace, Mr. John, [55](#)  
War effort of Canada, [63](#)  
Warner, [56](#)  
“War of 1812”, [33](#), [34](#), [35](#), [36](#)  
War of American Independence, [31](#)  
War of Austrian Succession [31](#)

Indiamen, the, [53](#), [54](#), [56](#), [62](#)  
“Indiamen, The Old East”, [53](#)  
Indian Continent, [23](#)  
Indian factor, [33](#)  
Indian, North American, [26](#)  
Indian Ocean, [47](#), [49](#)  
Indian power, [33](#)  
Indians, [17](#), [23](#), [25](#), [26](#), [31](#), [33](#)  
Indians, French, [27](#)  
Indian savages, [33](#)  
Indians, South Dakota, [23](#)  
Indian treachery, [33](#)  
“Inland Navigation Act of 1788”, [33](#)  
Innes, H. A., [23](#)  
“In the Wake of Windships”, [55](#)  
Ireland, [34](#), [55](#)  
Iroquois, [27](#), [33](#)  
“Isabel the Second,” The, [38](#)  
Isthmus of Suez, [62](#)  
Isthmus, the, [51](#)  
Italians, [59](#)

Jackson Park, [21](#), [22](#)  
Jacobite Rebellion, [41](#)  
Jacques Cartier bridge, [61](#)  
James Bay, [13](#), [29](#), [30](#), [36](#), [41](#)  
“James,” The (barque), [55](#)  
Japan, [21](#), [55](#), [60](#), [62](#), [63](#)  
Java, [17](#)  
Jay, Chief Justice, [35](#)

Washington, [49](#)  
Waterloo, [53](#)  
Wayne, Gen. Anthony, [33](#)  
“Wear,” The, [42](#)  
Welland Canal, [61](#)  
West India Stations, [59](#)  
West Indies, [21](#), [25](#), [54](#), [61](#)  
“Whites, The”, [33](#)  
Whitby, [42](#)  
Wickham, [35](#)  
“Wildwood,” The, [55](#)  
Wilmington, [22](#)  
Wilson, B., [41](#)  
Wilson, Beckles, [29](#)  
Wolfe’s expedition, [25](#), [47](#)  
“Wooden Ships and Iron Men”, [54](#)  
Wood, Wm., [22](#), [38](#), [55](#)

“Yachting on Lake Ontario”, [34](#)  
Yarmouth, [42](#), [53](#), [54](#), [57](#)  
Year Book, [15](#)  
Yerba Buena, [48](#)  
Yokohama, [50](#), [62](#)  
York Factory, [30](#), [42](#)  
York Flats, [42](#)  
York (town), [34](#), [35](#)  
Young Pretender, [41](#)  
Yukon, [50](#)  
Yukon Ry. Bill, 1898, [60](#)

*Transcriber's Note:*

Pages 67 through 148 of this book are advertisements by the various companies in support of the war effort. In a textual format, these advertisements will not reproduce well, and have been omitted.

## TRANSCRIBER NOTES

Mis-spelled words and printer errors have been fixed.

Inconsistency in hyphenation has been retained.

Inconsistency in accents has been fixed.

Illustrations have been relocated due to using a non-page layout.

Some photographs have been enhanced to be more legible.

The original book was laid out in two columns, with footnotes in the margins.

[The end of *Canada's War at Sea: Volume 1: Canada and the Sea* by Stephen Leacock]