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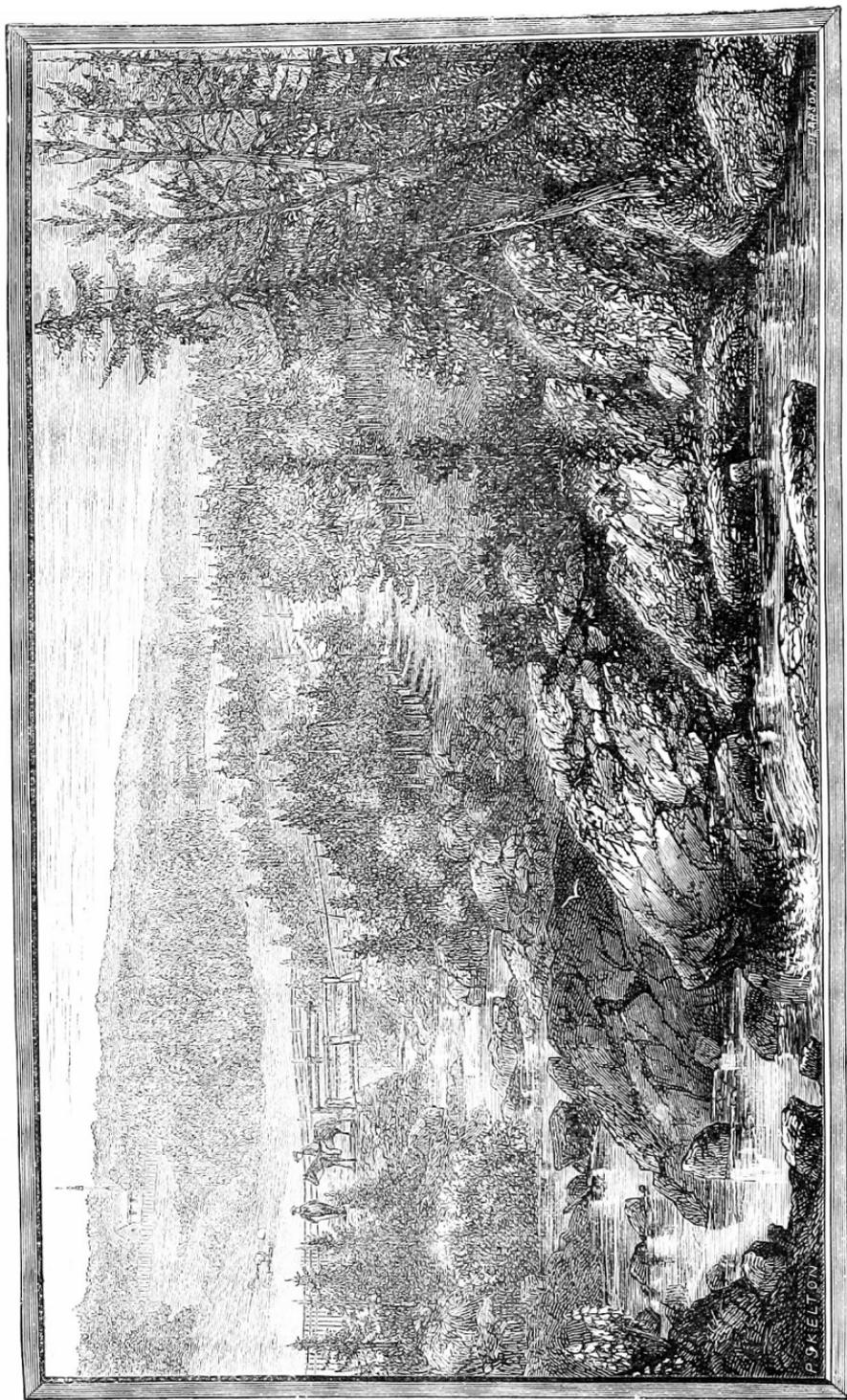
Newfoundland, the oldest Briti

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THE HISTORY OF NEWFOUNDLAND.



Frontispiece.

ABOVE WATERFORD BRIDGE—FOUR MILES FROM ST. JOHN'S.

PREFACE.

THE value of a history of the rise and progress of Newfoundland depends upon the qualifications which its authors possess for the treatment of the subject, the trustworthy character of the data upon which their treatise is founded, and the literary experience which they bring to bear upon the exposition of the materials they have collected.

As these are the first points that seem to challenge criticism, a few words of explanation, as to the character, purpose, and *raison d'être* of the present volume, will save time and may prevent misunderstandings.

Apart from the many varied sources of knowledge which have been examined in connection with the following pages, I would lay particular stress upon the capabilities of my collaborator. A scholar and a traveller, he has probably seen more of Newfoundland than any man who has contributed to the literature of its history. A resident in the Island for a quarter of a century, he has coasted round it, explored much of it, visited its ports and cities, studied its natural history, mixed in its social, religious, and political movements, and generally mastered the subject "Newfoundland" in all its bearings. A recognised local authority on all matters pertaining to the history of the country and its future possibilities, the Rev. M. Harvey is known to the learned societies of London and also to the general world of letters.*

It will, therefore, be hardly necessary for me to say that, in the literary partnership involved in this history of

* Mr. Harvey's contributions to natural history, especially in connection with the gigantic cephalopods, or cuttle fish, which he was the first to discover and describe, excited much interest in the scientific world a few years ago. He is the author of a popular volume of lectures on literary subjects. He has written the article "Labrador" in the new edition of the "Encyclopædia Britannica," and has in preparation for the same work a descriptive essay on Newfoundland.

Newfoundland, the Rev. M. Harvey contributes the largest share of authoritative work. For myself, I have brought into the collaboration a careful revision of facts and opinions, some special investigations of historical data, and such editorial skill, as is necessary, for the transformation of unsystematised MS. into the form and shape of a comprehensive and methodical record. I have to thank the courteous officials of the British Museum for their assistance in facilitating my examination of MSS., maps, and other documents that make up the curious chronicles of the discovery and early government of the oldest British colony. London is the centre of stored knowledge. In the production of this volume it has been found important to have one of its authors engaged within hail of the British Museum; while the other laboured amidst the scenes to be described, a living witness of many of the facts hereinafter narrated. On his side, by the courtesy of Sir William Whiteway, the Premier of Newfoundland, Mr. Harvey has had full access to the archives of the local government; on mine I have had London as a Library of Reference.

It encouraged me greatly, in regard to the necessity and profit of our joint labours, when the first results of my inquiries about Newfoundland proved to be of a very limited character. I found the Island almost a *terra incognita* to the majority of the persons whom I should have supposed to be best acquainted with it. The latest history was issued in 1863,* and this, though an excellent work in itself, neither dealt with the fisheries, the agriculture, nor the mineral resources of the country; nor did it attempt to cover the unoccupied ground of topography, physical geography, and other features of the Island, necessary to a comprehensive treatment of the subject.

I do not offer these remarks as any reflection upon an admirable work, but only to emphasise the fact that its scope was limited, and that, even as an historical record, the chronicle ended with 1860; while to the last decade belongs the most important advance which Newfoundland has

* The "History of Newfoundland," by the Rev. Charles Pedley. London: Longmans, 1863.

made during its long and singular existence as a dependency of the British Crown.

The story of Newfoundland is one of the most remarkable episodes in the history of the British Empire. It presents us at our worst and at our best. Strange instances of official tyranny blur the chronicles of the Island's rise and progress. On a smaller field Freedom has had almost as hard a battle in Newfoundland as that which was necessary to establish her supremacy at home. Not that the islanders fought and bled for the privileges they now enjoy. They did not win their liberties with pike and gun. The pomp and circumstance of war flung no halo of glory about their political achievements. Toiling and suffering, they bore their many ills with a patient loyalty to the Home Government that deserved the quick reward which it did not receive. To-day, however, no English ministry can look back upon the maladministration of the country, without a desire to redeem a past of cruelty and neglect, by a present conciliatory watchfulness over Newfoundland's future interests. The special grievances of the people, the unique position of the colony, the attempt to make it a mere fishing station and training ground for the Navy, the curious anomalies of the local and imperial laws under which the people laboured; all these subjects are considered and illustrated in the following pages.

In the active efforts that were made, for more than a century, to suppress the colonisation of Newfoundland, coercive laws were supplemented by libels on its climate and soil. The English merchants, who used it as a fishing station, published it abroad as a land given over to sterility and fog. Officials of the Home Government encouraged these reports. When, in spite of them, infatuated emigrants found their way thither, they were forbidden either to build on the land, or to obtain any proprietary rights in the soil. Every summer the Fishing Admirals took possession of the Island, with incontestable power to use or to destroy any huts, stages, or buildings, which the inhabitants might have erected near the coast. In the autumn the fishing fleets sailed away. On arriving in the English ports the captains

were punished if they did not bring home again as many men as they had taken out.

During the pleasant days of summer the Fishing Admirals and their crews made the country a howling wilderness. Winter found it a solitude and a desolation. Yet, strange to say, there were people who clung to its inhospitable shores. Such Law and Justice as existed there at all, went away every autumn, with the migratory merchants and admirals. The Freedom of Licence reigned one half the year, the Tyranny of Irresponsibility the other. Justice was held in greater respect, when Law was absent, than when ignorant and interested skippers administered it on the quarterdecks of their commercial ships.

Men flying from troubles at home, unfortunate traders, exiles for conscience sake, adventurers to whom settled government means chains and shackles; these and such like found shelter in Newfoundland. By degrees, as the laws relaxed in regard to settlement, and the tyranny of the Fishing Admirals waned, the population grew from a few hundred families to a few thousands. With the broadening of the opportunities of labour and enterprise, it increased, from eighty thousand in 1814, to something approaching, at the present time, two hundred thousand. Little better than a mere fishing village up to the end of the last century, Newfoundland is to-day a thriving community. The time is not far distant when it may rival, in wealth and status, the most important of England's colonial possessions.

Discovered three hundred years ago, Newfoundland has only, in these latter days, been explored. The result of scientific investigation proves that it is endowed with all the possibilities of mineral and agricultural wealth. The geological survey, conducted over a period of seventeen years, dissipates the libels of those conspirators of the past who wished to keep the Island as a mere curing stage for cod. Rich in useful minerals, Newfoundland has fertile belts second to none in the New World. Seventy years ago it was unlawful to build a house on the Island without Government permission. It is within quite a recent date that settling there and cultivating the soil have been

tolerated. Half a century ago there were no regularly constructed roads in the country, and hardly a house worthy of the name, from an English point of view. It is within a score of years that anything like commerce, outside the fish trade, has made a mark on the rising towns and cities; and it is little more than a year ago that, in a journalistic capacity, I had the satisfaction of cabling from New York to London the first news of the closing of a definite agreement for providing the Island with the one great factor of commerce which her organisation required.

At that time Newfoundland had no railway. As material on which to base prediction of future success, and as an example of the rapidity of modern progress, I am informed that at the date of these introductory words to an interesting historical record, forty-five miles of road are open and at work. Furthermore, it is probable that the time is not far distant when this hitherto neglected English colony will be the half-way house of ocean-travel between the Old World and the great industrial centres of the New. The resting-place of the first Atlantic cable, there is every reason to believe that it is destined to be the junction of sea-travel and land-transit between England and America, shortening the ocean voyage to four days, and discounting the present time between England and New York by forty-eight hours. Given these probabilities and the certainties which are already historical, it will be seen that the Newfoundlanders are on the high road to that good fortune which every intelligent traveller, uninfluenced by political interests, has promised them.

As a field of emigration, more particularly for investment of labour and money in agricultural pursuits, Newfoundland has advantages which are set forth on the authority of practical surveyors, mineral and agricultural, in succeeding pages. There is no doubt as to the excellence of the soil, in the interior, for the cultivation of agricultural products; while the value of the grazing lands, that are scattered here and there over thousands of acres of fertile valleys, is equally beyond question. All that is necessary to their development is the completion of the railway system now in course of construction, which will bring Newfoundland farms nearer, by

several days to the markets of England, than any other competing districts of the American continent. The mineral prospects of Newfoundland are not behind those of agriculture. It is already the fifth on the world's list of copper-exporting countries. Holding a foremost place among fishing industries, its coasts are the theatre of exciting adventures belonging to the garnering of the ocean harvests. Ardent sportsmen seek its forests and streams in pursuit of "fin and fur." The geologist is busy among its hills and valleys. Mining prospectors are examining the tracks of the Government surveyors. The first locomotives are running from the capital to the adjacent towns. A tide of emigration is evidently on the eve of setting in upon its shores. No complete survey of its history and condition, its physical geography, its fishing and other industries, its mineral and agricultural resources, its government, its laws, manners and customs in the past and present, its prospects in the future, has ever before been attempted. The book now presented to the reader is therefore a cultivation of hitherto unoccupied ground. The result may not be in all respects satisfactory. But as a pioneer volume it is entitled to friendly consideration. Apart from studies made for it upon the spot, almost every known work, printed or in manuscript, relating to Newfoundland has been consulted in the course of its preparation for the press. These have included Parliamentary papers and Government dispatches in the archives of the British Museum and Record Office, journals of the House of Assembly and Customs returns at St. John's, newspaper records, and private letters. No source of possible information has been overlooked. To gather the facts thus collected into an interesting shape, and within reasonable compass, has been no light task; with which suggestion of excuse for any shortcomings the authors present to the world this new history of England's oldest colony.

JOSEPH HATTON.

London, January, 1883.

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NEWFOUNDLAND.

THE OLDEST BRITISH COLONY.

Part I.

HISTORICAL RECORD.

CHAPTER I.

FROM THE DISCOVERY OF THE ISLAND TO THE
FIRST ATTEMPT AT SETTLEMENT.

[1497-1583.]

Discovery of Newfoundland—The Cabots and Columbus—Unrecorded adventures—Royal parsimony—Sebastian Cabot's last hours—Holbein's portrait of the great navigator—Sir Humphrey Gilbert's expedition—Taking possession of the island in the name of Elizabeth—Fatal conclusion of the enterprise—Loss of the *Squirrel* with Sir Humphrey Gilbert and all hands.

At daybreak on the 24th of June, 1497, the welcome cry of "Land ho!" from the masthead of *The Mathew* of Bristol proclaimed the discovery of what is to-day England's oldest colony. The warning of the look-out was responded to by a round of British cheers from the deck below. The tight little pioneer ship, not more than two hundred tons, was manned by West-Country sailors. Her com-

mander was John Cabot. His first officer was his worthy son Sebastian. At this period Amerigo Vespucci, whose name was to give a title to the New World, had not yet made his first voyage across the Atlantic. The importance of Cabot's discovery can hardly be overrated. It gave to England her claim to the sovereignty of a large portion of North America. It inspired her first impulse of colonisation. But for the Cabots Spain would no doubt have monopolised discovery in North as well as South America. It is worth while inquiring how they were led to this great achievement.

The close of the fifteenth century was marked by the grandest event of modern times—the discovery of the New World by Columbus. The news broke on men's minds with startling effect. The noblest and the most daring spirits of Europe were stirred to their depths. The impulse to explore the wonders and the mysteries of the land, the outer curtains of which Columbus had just raised, fired thousands of brave hearts. Among those who felt this kindling impulse most keenly were John Cabot and his son Sebastian. The father was born of Italian parents. Venice was probably his native city. There are those, however, who claim this honour for Bristol. At all events, he lived there for many years, and his son Sebastian was born and bred in that ancient port.* Of this great navigator, little

* "What countryman originally was John Cabot? As we have seen, he only becomes a Venetian citizen in 1476. Was old John Stow right in calling him a Genoese, or was he after all an Englishman, who for some service had this honour conferred upon him, even as William Gold had? For aught that appears to the contrary, he himself might have been born in Bristol; and not many years since we are assured there were several deeds in the muniment-chest of St. Thomas, in this city, of Henry VII.'s reign, which were attested by some of that name. Unfortunately, and though most diligent search has been made after them, it has been hitherto unsuccessful."
—*Life of Sebastian Cabot*, by J. F. Nicholls, City Librarian, Bristol.

is known beyond the fact that he was a thoughtful man. Ambition led him far beyond the mere routine of business. The maritime discoveries of the time engrossed his constant attention. His son Sebastian, who with his father was destined to achieve a fame second only to that of Columbus, inherited his father's predilections, and entered at an early age on a seafaring life. When the news of the famous Spaniard's great discovery flew from nation to nation, filling all Europe with wonder, it inspired the ambition of these two men with a desire to rival his achievements. Pondering the subject deeply they came to the conclusion that, by taking a north-west course, instead of following the track of the great navigator, which led him to San Salvador, they would discover new lands, and perhaps find a shorter passage to the Cathay of Marco Polo, one of the leading objects of maritime adventure in those romantic days. When the news of Columbus's discovery reached England, Henry VII. must have been sorely chagrined to find that he had missed the proffered honour of having his name transmitted to posterity, as the patron of the illustrious navigator, whose discovery would have entitled his Majesty to be proclaimed, as Spain was, master of a new world beyond the western seas. When, therefore, John Cabot and his son proposed to the king a voyage of discovery, from the port of Bristol, to regions far north of those which Columbus was then exploring, the English monarch lent a willing ear to the offer. The ambitious navigators were speedily granted "letters patent," sanctioning their undertaking. This legal instrument, however, shows that the parsimonious monarch left the whole expenses of the expedition to be borne by the Cabots and their Bristol connections.* Being competent to meet such a heavy

* The Sir Peter Thomson MSS. in the British Museum mention

expenditure is a proof that they were not only possessed of considerable wealth, but were ready to adventure it with their lives for the glory of their adopted country.

Early in the month of May, 1497, the Cabots took their departure from the port of Bristol, turning the prow of their vessel to the north-west and traversing seas before unfurrowed by European keels. Never, perhaps, was a voyage of discovery, the consequences of which were so far-reaching, entered upon with less pomp and circumstance. The voyage of Columbus has had thrown around it a glamour of poetry and romance. History has carefully gathered into her golden urn every incident connected with the great undertaking, and eloquent pens have told the thrilling story in every variety of picturesque detail. But of the voyage of Cabot, fraught with such vast consequences, we know almost nothing. No diary was kept on board *The Mathew*. The records of the enterprise which have come down to us were written long afterwards, and are of the most meagre and unsatisfactory description. "The English," says Carlyle, "are a dumb people. They can do great acts but not describe

a third son of John Cabot in connection with the first expedition. The terms of the entry are as follows :

"Anno 1495. IInd King Henry VII. Letters Patent were granted to John Cabot of Venice, to Lewis, Sebastian, and Sancius, sons of the said John, and to their heirs and deputies, to sail with five ships upon their own proper cost and charges to seek out, discover, and find whatsoever isles, countries, regions, or provinces of the heathen which before this time hath been unknown, to cause to set up our ensign there and reduce them to our jurisdiction." They were restricted to sail from Bristol and only to arrive at that port ("one-fifth part of the net profits of such voyage or voyages for the King's use"), while others were prohibited from attempting such discoveries on forfeiture of their ships and goods, and the King's subjects and officers were commanded to give good assistance to the said John Cabot and his sons as well on land as on sea.

them. Like the old Romans and some few others, their epic poem is written on the earth's surface: England, her mark." Without flourish of trumpets, Cabot and his English seamen sailed away into the unknown waste of waters. Of the difficulties and hardships which they encountered in crossing the Atlantic in much stormier latitudes than those through which Columbus's course lay, we know absolutely nothing. The commander gave to the world but little account of what took place beyond the bare results of his voyage. We do not know much more of it than may be set forth in the laconic record that on the 24th day of June following the departure from Bristol, the glad cry of "Land ho!" was heard, and that Cabot named the headland which he saw, "Prima Vista." A Bristol manuscript, which has survived the wrecks of time, chronicles the discovery in the following curt terms: "In the year 1497, the 24th of June, on St. John's Day, was Newfoundland found by Bristol men, in a ship called *The Mathew*." The ancient historian does not even mention Cabot. Such is fame among contemporaries! A new continent is discovered, and the chronicler of the day is careful to record the name of the ship in which the discovery was made, but of the commander, whose genius and courage directed the enterprise, he says nothing.

An interesting inquiry here presents itself: What part of the New World was first seen by Cabot, and named by him "Prima Vista"? The common account is that it was some part of the island of Newfoundland, most probably Bonavista, now the northern cape of Trinity Bay, in latitude 48° 50' N., the name "Prima Vista" having been afterwards changed to "Bonavista." In confirmation of this view it is stated that there is a small rocky islet called Baccalieu off this part of the coast, and that Cabot, accord-

ing to Peter Martyr, called the countries adjacent to the fishing-grounds *Baccalaos*, from the local abundance of codfish, for which this was said to be the native term. This, however, is now known to have been a mistake. The aborigines called codfish *apagé*. *Baccalaos* was the name given to it by the Basques long afterwards. In the second chapter of "Don Quixote" the word occurs in the following sentences: "That day happened to be Friday, and there was nothing in the house but some fish of that kind which in Castile is called *abadexo*, in Andalusia *baccalao*, and in some parts *curadillo*." "The landlord produced some of his ill-soaked and worse-cooked *baccalao*." The old Basque name for dried cod was therefore in general use in the days of Cervantes. Another account is that the land seen by Cabot was part of the Labrador coast, and that "the island opposite to it," mentioned in an inscription on an old map, was that part of Newfoundland near the northern end of the Straits of Belle Isle. The doubt and difference of opinion regarding this point have arisen from the imperfect character of the contemporary records. Happily, however, for students of American history, all doubts on this subject have been removed by the discovery a few years since of a map made by or under the direction of Sebastian Cabot, and bearing the date of 1544. This valuable chart, as will be seen by the accompanying illustration of a section of it, places the "Prima Vista" near the eastern point of the present island of Cape Breton; and as the Gut of Canso had not then been discovered, the island on the map forms a part of the present Nova Scotia. As Sebastian Cabot was his father's companion and assistant on this voyage, and was famous for his skill in chart-making, this map must be considered as the most trustworthy of the earlier charts of the coasts. It is probable, from a letter of Lorenzo Pasqualio, a Venetian merchant then residing in

London, which contains the best account extant of Cabot's first voyage, that after passing "Prima Vista," the eastern point of Cape Breton, he steered in a north-westerly direction, passed through Northumberland Strait, round Prince Edward Island (which is laid down quite correctly in the map), sighting the coast near Miramachi, then turned his prow north-easterly till he fell in with the Labrador coast, passing to the north of Newfoundland, homeward through the Straits of Belle Isle. In this map, by Cabot, Newfoundland is laid down as a group of islands, possibly from imperfect sights of its high lands obtained in foggy weather, which would make it appear to a voyager a cluster of islands rather than a single one. The fact remains, however, that Cabot was the discoverer of the island on his first voyage; and also of the continent of America.

On the 3rd of February, 1498, the king granted a new patent to John Cabot, authorising him to sail with six ships "to the lande and isles of late found by the said John in oure name and by oure commandement;" and ordering "all and every oure officers, ministers, and subjects to succour the said John, his deputy," etc. This second patent does not seem to have been designed to supersede or revoke the former in any way, but merely to have been a supplementary commission. John Cabot did not go out on the second expedition, which was entrusted to Sebastian, then but twenty-three years of age, and who from this time took the place of his father as a discoverer. According to Peter Martyr, on this second voyage he sailed along the coast of Labrador, to the latitude of 60° N., where he says he found the longest day eighteen hours. Deterred by immense masses of floating ice and by the intense cold, Sebastian turned his course to the west, refitted at the Baccalaos, or Codlands, which embraced Newfoundland, Nova Scotia, and Cape Breton, and coasted south to the

38th degree, whence he returned to England. Thus, by right of discovery, this great man secured for England, on this voyage, "a claim to the whole coast of America from the burning sands of Florida to the ice-bound shores of Hudson's Bay." In a third expedition, he is said to have sailed as far south as Cuba. Columbus gave to Spain domains ten times greater than her own; but the voyages of the Cabots must be ranked as of equal value, as far as the interests of England were concerned.

It is curious to note how the news of these discoveries of the Cabots was received in England. On their return from the first voyage the king presented John Cabot with a gratuity of ten pounds. In order that posterity might not forget his liberality, he made an entry of it in the privy-purse accounts in the following brief words: "August 10th, 1497—To Hym that found the New Isle, 10*l.*" The most careful researches in the English archives have failed to bring to light any other official notice of the discovery. It is but fair to state that, in purchasing power, ten pounds were then equal to forty pounds in our day, though it must be allowed a continent was cheap even at that figure. In this confused world genius must usually be content with other rewards than fame or money. What renders Henry's stinginess more flagrant was the fact that in the patent he granted to the Cabots he stipulated that the enterprise should be carried out "upon their own proper costes and charges;" but that "the foresaid John and his sonnes and heirs be bounden of all the frutes, gaines, and commodities growing of such navigation, to pay unto us, in wares or money, the fifth part of the capital gaine so gotten."*

* Messrs. W. C. Bryant and S. H. Gay, in their excellent "History of the United States" (1876), take a more liberal view of this entry in the privy-purse expenses of the king than other historians; and,

If Henry knew how to drive a bargain, His Majesty's subjects seem to have properly appreciated Cabot's services. An old letter has been brought to light in Milan, written by Lorenzo Pasqualio from London on the 23rd of August, 1497, a few days after Cabot's return to his brothers in Venice, in which the writer says: "This



JOHN CABOT IN LONDON.

Venetian of ours, who went in a ship from Bristol, in quest of new islands, is returned, and says that 700 leagues hence he discovered *terra firma*, which is the territory of the Great Cham. The King is much pleased with this intelligence. He has also given him money where-

while we have followed the beaten track in this respect, we are inclined to think there is much justice in the opinion that it is probable the entry does not refer to Cabot; but that "it is quite likely the King should have sent or given with his own hand such a reward to the sailor who from his faithful watch at the masthead was the first to cry 'Land ho!' on the coast of North America."

with to amuse himself, and he is now in Bristol with his wife, who is a Venetian woman, and with his sons. His name is Zuan Cabot, and they call him the Great Admiral. Vast honour is paid him, and he dresses in silk; and these English run after him like mad people, so that he can enlist as many of them as he pleases."

There is no record of John Cabot after this period. It is probable that he did not long survive his first famous voyage. His son Sebastian remained for a number of years in England, but at length entered the service of the King of Spain, and again engaged in maritime discoveries. Exploring the Plata and Paraguay rivers, he discovered Brazil. When Edward VI. ascended the throne he returned to England, and was appointed chief pilot of the kingdom. For many years he was the life and soul of British maritime enterprise. In company with others he first opened up the trade with Russia. He died in his eightieth year in London, but no man knows where his dust reposes. The only record we have of his closing hours is by his friend Richard Eden, who tells us that when bound for that country where there is "no more sea," "the ruling passion" was in his case "strong in death." It would appear from Eden's narrative as if he had loved the sea so well, and played with its wild waves so long, that even in his last moments the music of the ocean was in his ears. In the wanderings of his fevered fancy he spoke of a divine revelation to him of a new and infallible method of finding the longitude, which he was not permitted to disclose to any mortal. The dying seaman was again, in imagination, on his beloved ocean, over whose billows his intrepid youth had opened a pathway, and on whose mysterious secrets he had pondered for threescore years. Then he entered the quiet haven where the storms are hushed for evermore.

No monument has ever been erected to perpetuate the memory of one of the noblest and bravest men who ever trod the deck of an English ship. He gave a continent to England; and in all that wide region there is not a cape, headland, or harbour called by his name, except one small island off the eastern shores of Newfoundland, which, a few years ago by an act of the local government, exchanged a very vulgar name for the honoured one of Cabot's Island. The navy and commerce of England received from him their



SEBASTIAN CABOT.

first onward impulse, but no one can point to the few feet of earth which, in return for all his services, England gave as a resting-place for his ashes. His maps and discoveries, never published to the world, were allowed to sink into oblivion. There is still in one of the private collections of England a portrait of Sebastian Cabot, painted for Edward VI. by Holbein. It was published some years ago by Mr. Nicholls, of the Bristol Library, in a tributary *brochure* to Cabot, and the accompanying engraving is a partial reproduction of it.

For almost a century no attempts were made by Englishmen to follow up the discoveries of their countrymen in Newfoundland. They did not even share in the harvests of the local seas. They were at that time engaged in a lucrative fishery on the coasts of Iceland. The Portuguese were the first to turn their attention to the northern regions discovered by Cabot. Gasper Cortoreal ranged the coast of North America in 1500, discovered and named Conception Bay and Portugal



JACQUES CARTIER.

Cove, in Newfoundland, and established the first regular fishery on its shores. Seven years after Cabot's discovery, the fishermen of Normandy, Brittany, and the Basque Provinces were engaged in the cod fishery, on the banks and along the coasts of Newfoundland. The Basque fishermen gave the name Cape Breton to the eastern promontory of the island, which afterwards extended to the whole. In 1517 forty sail of Portuguese, French, and Spaniards were engaged in the cod fishery. In 1527, John

Rut, an English captain, wrote a letter which is still extant, to Henry VIII., from the haven of St. John's, Newfoundland, in which he says that he found there eleven sail of Normans, one Breton, and two Portuguese barques. In 1534, Jacques Cartier, the celebrated French navigator, whose enterprize discovered and secured Canada for France, circumnavigated Newfoundland, explored the Bay of Chaleurs, unfurled the lilies of France at Gaspé, and in a second voyage ascended the St. Lawrence as far as Montreal. It was on this second voyage that he and Roberval, his assistant in the enterprize, met in the harbour of St. John's. In 1578, according to Hakluyt,* the number of vessels em-

* The Hakluyt MSS. in the British Museum contain the following interesting statement :

“ In the year 1536, 28th of K. Hen. the 8th, Master Hore and divers other gentlemen made a Voyage to Newfoundland their Names were as follows.

“ Master Wickes a Gentleman of the West Countrey of 500 marks by the year.

“ Master Tucke a Gentleman of Kent.

“ Master Tuckfeild

“ Master Thomas Buts the son of Sir Will^m Buts Kn^t of Norfolk w^{ch} is yet alive, (1589) and from whose mouth I wrote most of this relation.

“ Master Hardie

“ Master Biron

“ Master Carter

“ Master Wright

“ Master Rastall Serjant Rastall Brother

“ Master Ridley and divers others which all were in the Admiral called the Trinitie a ship of 140 Tons wherin Master Hore himself embarked.

“ In the other ship named the Minion went Master Armigil Wade a very learned Gentleman, Father to Master William Wade now clerk of the Privie Counsell.

“ Master Oliver Dawbeney merchant of London.

“ Master Joy afterwards Gentleman of the King's Chappell. with divers other of good account. The whole number that went in the above two ships, were about 120 persons, wherof 30 were gentlemen. they embarked from Graves End the End of April 1536. In about two

ployed in the cod fishery had increased to four hundred, of which only fifty were English, the remainder being French and Spanish.

Up to this time no attempt had been made to colonise Newfoundland or any of the neighbouring lands. The hardy fishermen of various nationalities, among whom Englishmen were now much more numerous than formerly, were in the habit of frequenting the shores of the island during the summer, and using the harbours and coves for the cure of their fish, returning home with the products of their toils on the approach of winter. Eighty-six years had passed away since Cabot's discovery, and we now arrive at the year 1583, a memorable date in the history of Newfoundland. On the 5th day of August in that year, there were lying in the harbour of St. John's thirty-six vessels belonging to various nations, Portuguese, Spanish,

months sailing they fell in with Cape Breton—from thence they sail'd N.E^t to Penguin Island w^{ch} is very full of Rockes and stones and great Birds white and gray colour as big as Geese. they took some of the Birds and killed some Bear's. this Island is in the Lat of 50 d. Master Oliver Dawbeney inform'd Master Richard Hakluyt the follow^s particulars. that after their arrival in Newfoundland and having bene there certain days at Anchor He saw a boat with Savages, rowing towards them to gase upon the ship and our people. they manned their ships boat in order to have taken them. but they fled to an Island in the Bay and escaped our men—they found a fire and a side of a Bear on a Wooden spit. also a Boot garnished on the Calf as it were with raw silk. also a great Warm Mitten. whilst they lay there they were in great want of provision and that there they found small reliefe. more than that they had from the Nest of an Osprey (or Eagle) that brought hourelly to her Young great plenty of divers sorts of fishes. But such was the famine amongst them that they were forced to eat raw herbs and Roots. which they sought for on the Maine: But the reliefe of herbs being not sufficient to satisfie their craving appetites. when in the deserts in search of herbage. the fellow killed his mate while hee stouped to take up a root, and cutting out peices of his Body whom he had murdered, broyled the same on the coals and greedily devoured them. by this means the company decreased, and the officers knew not what was

French, and English, all employed in fishing. In addition to these there were four English war-ships, which had arrived the day before. They were the *Delight*, the *Golden Hind*, the *Swallow*, and the *Squirrel*. Early on this morning boats were lowered from the English ships, and the commanders and officers went on shore. Soon a goodly company had assembled on the beach, then lined by a few rough wooden huts, and "flakes" or stages for drying cod. The rough inmates of these huts gathered round the company that had landed from the English ships; and the captains and officers of the other vessels were there by special summons. A very curious and motley group was that which

become of them—the reason wherof was at last discovered. Upon which the Captain made Notable Oration, containing how much these dealings offended the Almighty &c. &c. he exhorted them to repentance and besought all the Company to Pray. that it might please God to look on their present miserable state, and such was the mercie of God, that the same night there arrived a French ship in that port, well furnished with Vittaille, and such was the Policie of the English, that they became masters of the same, and changing ships and Vitaling them, they set saile for England. they saw many Islands of Ice and arrived at St Ives in Cornwall the latter End of October. from thence they departed to a castle belonging to Sir John Luttrell. where M. Thomas Butts and M. Rastall, and other Gentlemen of the voyage were very friendly intertain'd: after that they came to the Earle of Bathe, at Bathe. and thence to Bristol, so to London. M. Butts was so changed with hunger and misery that Sir William his Father and my Lady his mother did not know him. till they examined a Wart he had upon one of his knees, as he told me Richard Hakluyt of Oxford himself to whom I rode 200 miles to learn the Truth of his Voyage from his own mouth as being the only man alive that was in this discoverie.

"The French-men complain'd to K. Hen: the 8th in a few months after their arrival. of this affair. and the King hearing the great distresse his subjects were In. and the necessity there was to do as they did. paid the French-men full recompence out of his own purse. vide pa 519.

"King Edward the 6th for the great and acceptable service done and to be done, unto us by our beloved servant Sebastian Cabot. settled an Annuitie or yearly revenue of £160 13s. 4d. sterling on said Sebastian Cabot. dated the first of January in the 2nd year of his Reign 1548."

then stood on the beach of St. John's harbour—swarthy, bronzed sailors and fishermen of Spain, Portugal, and France, in the costumes of the sixteenth century. Soon a circle formed round one commanding figure—a man of noble presence, wearing the richly slashed and laced doublet, velvet cloak, trunk-hose, and gay hat and feather



SIR HUMPHREY GILBERT READING HIS COMMISSION.

which constituted the dress of gentlemen in the days of Queen Elizabeth. This was no other than Sir Humphrey Gilbert, one of the gallant knights of Devonshire. He unrolled a parchment scroll, and proceeded to read the royal patent authorising him to take possession of Newfoundland, on behalf of his royal mistress, and exercise

jurisdiction over it and all other possessions of the crown in the same quarter. Twig and sod were presented to him in feudal fashion, and in the name of Queen Elizabeth he solemnly annexed the island to the British Empire. The banner of England was then hoisted on a flagstaff, the royal arms, cut in lead, were affixed to a wooden pillar near the water's edge, and the ceremony was complete. The grant gave Sir Humphrey Gilbert jurisdiction for two hundred leagues in every direction, so that the limits included Nova Scotia, New Brunswick, part of Labrador, as well as the islands of Newfoundland, Cape Breton, and Prince Edward Island—a right royal principality.

This Sir Humphrey Gilbert, the first settler in Newfoundland, who, with some two hundred and fifty followers from Devonshire, had arrived with the view of making the western wilderness a home for Englishmen, was a son of Sir Otho Gilbert, of Compton Castle, Torbay. His mother was a Champernoun of purest Norman descent, and "could probably boast of having in her veins the blood of Courtney's Emperor of Byzant." Sir Otho had three sons by this lady, John, Humphrey, and Adrian, who all proved to be men of superior abilities. They were all three knighted by Elizabeth, a distinction which, coming from the hands of the great queen, marked its recipient as a gentleman and a brave warrior. Sir Otho died, and his widow married Walter Raleigh, a gentleman of ancient blood, but impoverished, and at the time living at Hayes, a farm in the parish of East Badleigh, Devonshire. To her second husband the fair Champernoun bore a son whose fame was destined to be world-wide; and who, in a period more prolific of great men and great events than any before or since, played a gallant part, and was also knighted, as Sir Walter Raleigh, by Queen Elizabeth. Not many women could boast of being the mother of four such sons. Thus

Sir Humphrey Gilbert and Sir Walter Raleigh were half-brothers. Raleigh was brought up at the farmhouse of Hayes, while Gilbert and his two brothers lived in Compton Castle, near Torbay, and were trained in the simple and manly yet high-bred ways of English gentlemen. When Humphrey Gilbert grew up he embraced the profession of arms, and won high distinction in continental and Irish wars. At length, in his mature manhood, he and his dis-



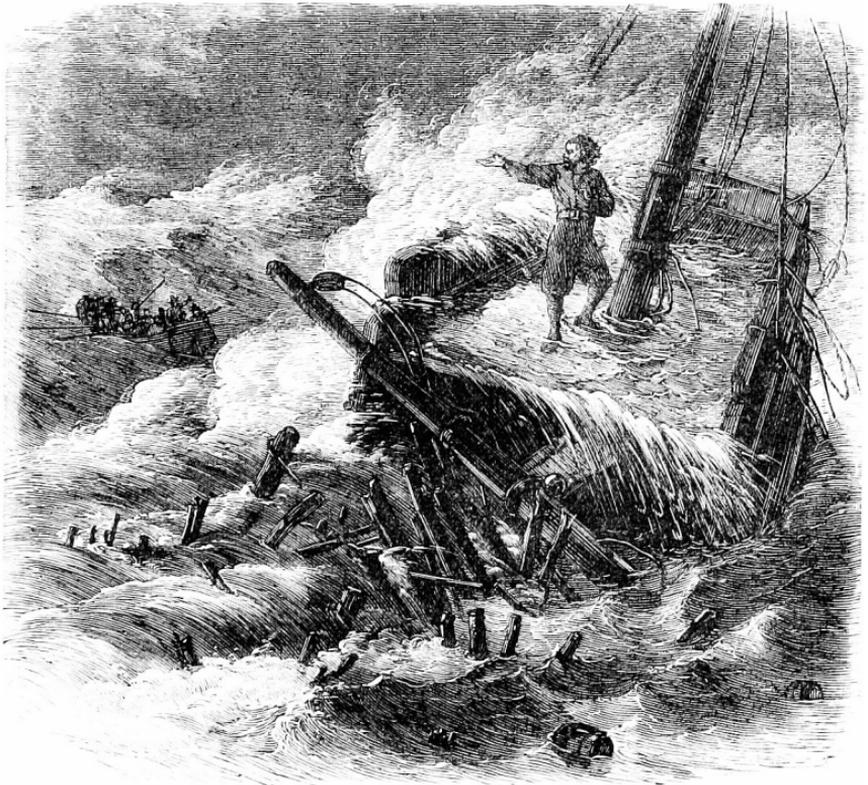
SIR HUMPHREY GILBERT.

tinguished half-brother, Sir Walter Raleigh, formed the design of first colonising Newfoundland, and then the neighbouring islands and continent. Hence we find him on the 5th of August, 1583, standing on the beach in the harbour of St. John's. Sir Walter Raleigh had embarked on the same expedition, but a contagious disease broke out on board his ship which compelled his return.

The enterprise of Sir Humphrey Gilbert was worthy of a heroic and patriotic nobleman. It was nevertheless doomed to end in disaster and death. In prosecuting further explorations one of Sir Humphrey's vessels was wrecked and the whole crew perished. The little fleet had struggled with contrary winds for many days. Eventually the *Delight*, the largest vessel, drifted into the breakers on a lee shore and struck upon the rocks. She went rapidly to pieces. Seventeen of the crew got into the long boat, and, after seven days, fifteen of them reached port. But the captain, Morris Browne, refused to leave the ship. Mounting upon the highest deck, says the ancient chronicler, "he attended imminent death so unavoidable." The other vessels stood out to sea and saved themselves. As winter was approaching and provisions getting low, Sir Humphrey deemed it wise to steer for England. He had planted his flag on board the *Squirrel*, a little cockleshell of ten tons, and though earnestly entreated to go on board the larger vessel, the *Golden Hind*, he refused to abandon his brave comrades. A great storm overtook them near the Azores. The *Golden Hind* kept as near the *Squirrel* as possible, and when in the midst of the tempest the crew saw the gallant knight sitting calmly on deck with a book before him. They heard him cry to his companions, "Cheer up, lads, we are as near heaven at sea as on land!" When the curtain of night shrouded the little barque, she and her gallant crew disappeared beneath the dark billows of the Atlantic. Thus perished Sir Humphrey Gilbert, scholar, soldier, coloniser, philosopher; one of the noblest of those brave hearts that sought to extend the dominion of England in the New World.

To Newfoundland this sad loss was irreparable. Had Sir Humphrey lived to reach home, no doubt he and Sir Walter Raleigh would have renewed their efforts at

colonisation; and, profiting by past errors, would have settled in the island men of the right stamp. Sir Humphrey Gilbert's failure was the result of a succession of uncontrollable disasters. Fully appreciating the immense value of the fisheries of Newfoundland, he seems to have



WRECK OF THE "DELIGHT."

been thoroughly impressed with the idea that the right way of prosecuting those fisheries was to colonise the country, and conduct them on the spot, whereby he would have established a resident population, who would have combined fishing with the cultivation of the soil. It was

a departure from this policy, and a determination, at the behest of selfish monopolists, to make the island a mere fishing station, that postponed for many weary years the prosperity of the colony, blighting the national enterprise, and paralysing the energies of the people.

CHAPTER II.

EARLY STRUGGLES IN PEACE AND WAR.

[1583-1697.]

Famous adventures on sea and land—Raleigh and Drake—Lord Bacon declares the Fisheries to be “more valuable than all the mines of Peru”—“Whitbourne’s Discourse and Discovery of Newfoundland”—Lord Baltimore’s settlement—Curious association of a myth of the Middle Ages with the New World—Sir David Kirke clears the French out of Newfoundland and captures Quebec—“Settling” under difficulties—Barbaric laws—Struggles between the resident and floating populations—French and British rivalry—“Between two fires.”

UNDETERRED by Sir Humphrey Gilbert’s disaster, the indomitable Raleigh (who had only been prevented from sharing in his expedition by a contagious disease which broke out on board his ship and compelled his return) was soon at work with fresh undertakings.* In 1584 he obtained a patent from Queen Elizabeth very similar to that which had been granted to Gilbert, and, having fitted out two ships, he sailed for North America, where he planted a colony, called Virginia after the maiden queen. Some twenty-five years afterwards the Pilgrim Fathers landed on Plymouth Rock, and laid the foundation of the

* *Sermon by Canon Farrar on unveiling the Raleigh window presented to St. Margaret’s, Westminster, by American citizens, May 14, 1882.*

New England States. Thus was the work of colonisation, begun by Sir Humphrey Gilbert, energetically carried forward by those who followed in his footsteps. Massachusetts, Maryland, the Carolinas, Pennsylvania, New Hampshire, and Maine followed in due time as seats of colonisation. Let us see, meanwhile, how Fortune dealt with Newfoundland.

For twenty-seven years after the failure of the Gilbert expedition no fresh attempt was made to establish a colony in the island. During this interval fishermen of various nationalities continued to frequent its shores, attracted by the finny treasures of its surrounding seas. In 1584 the bold sea-rover, Sir Francis Drake, was despatched with a small squadron to Newfoundland, where he made prizes of a number of Portuguese vessels laden with fish and oil, and carried them to England. The attention of English adventurers in connection with the fisheries was once more directed to the island. There is a record of one Richard Strang, of Apsham, who in 1593 fitted out two vessels for the purpose of taking walruses on the south-west coast, where at that time these animals were met with in great numbers, though they have long since disappeared. In 1597, or exactly the centenary of Cabot's discovery, we find some London merchants fitting out two armed vessels, which, after fishing for awhile on the Banks, arrived at the island of Ramea on the southern shore. Encountering here several French and Spanish vessels, they fought and took them, and carried one of them to Gravesend with a valuable cargo of fish and oil. One of the English vessels was wrecked off Cape Breton.

While England was laying the foundations of the New England colonies, France was extending her sovereignty over Canada, together with the sea-bordering countries of Acadia (Nova Scotia) and Cape Breton. Newfoundland, lying in the immediate track of these French possessions,

and being the first land usually seen by vessels sailing thither, very early attracted the attention of the French, who made many attempts to plant settlements on its shores, although the sovereignty of the island rightfully belonged to Great Britain. The French were actively engaged in the prosecution of the fisheries in the neighbouring seas. Their success in this direction strengthened their desire to gain possession of Newfoundland. Hence it is that in the history of the country France



SIR WALTER RALEIGH.

has always been an important factor. Having from time to time held possession of various points of the land, England's persistent rival in these latitudes has given names to many towns, villages, creeks, and harbours. To this day Newfoundland has not completely shaken off French influence, as by virtue of ancient treaties they still enjoy certain fishery rights on part of its shores. French colonisation in North America began in the reign of Francis I., who gave a commission to Roberval. Sully, the able minister of Henry IV., saw the advantages likely to flow

from colonising Canada, and he renewed Roberval's commission in favour of the Marquis de la Roche, who was appointed the king's lieutenant-general in Canada, Newfoundland, Labrador, and the Bay and River of St. Lawrence. After him came Chauvin and Champlain, who in 1608 founded Quebec, the capital of "New France."

Two years later, in 1610, another attempt was made to plant a colony of Englishmen in Newfoundland. John Guy, a merchant, and afterwards mayor, of Bristol, published in 1609 a pamphlet on the advantages which would result to England from the establishment of a colony in the island. This publication made such a deep impression on the public mind that a company was formed to carry out the enterprise it suggested. The most illustrious name on the roll was that of Lord Bacon, the apostle of experimental philosophy, of whom Macaulay says, "turn where you will, the trophies of his mighty intellect are in view." The importance of Newfoundland, as a site for an English colony, did not escape the wide-ranging eye of Bacon. He pronounced its fisheries "more valuable than all the mines of Peru," a judgment which time has amply verified. With Bacon there were associated in this enterprise the Earl of Southampton (Lord Keeper), Sir Daniel Doun, Sir Percival Willoughby, and a number of other noblemen and gentlemen. To this company James I., by letters patent dated April, 1610, made a grant of all the part of Newfoundland which lies between Cape Bonavista in the north and Cape St. Mary. Mr. Guy was appointed governor, and with a number of colonists he landed at Mosquito Harbour, on the north side of Conception Bay, where he proceeded to erect huts. He behaved with so much kindness to the aborigines as to completely gain their confidence. We have no authentic account of this settlement, begun under such favourable auspices, but it proved unsuccessful from some unexplained cause. Guy and a number of the settlers

returned to England, the rest remaining to settle elsewhere in the New World.

Five years afterwards, in 1615, Captain Richard Whitbourne, mariner, of Exmouth, Devonshire, received a commission from the Admiralty of England to proceed to Newfoundland for the purpose of establishing order among the fishing population and remedying certain abuses which had grown up. Such an appointment clearly indicates that the trade and fisheries had now fallen chiefly into the hands of the English, as the Admiralty would not take cognisance of abuses and crimes committed by the subjects of another king. On his arrival in St. John's, Captain Whitbourne held a Court of Admiralty, and received the complaints of one hundred and seventy masters of English vessels of injuries committed in trade and navigation. This furnishes trustworthy evidence of the flourishing state of the English cod fishery at this early period. It was shown that there were upwards of two hundred and fifty English vessels, having a tonnage of fifteen hundred tons, engaged in the fisheries along the coast. Fixed habitations extended at intervals along the shore from St. John's to Cape Race. Paths cut through the woods enabled the people to communicate with the harbour of St. John's, where vessels from England supplied the people with provisions and other necessaries in exchange for the produce of the fisheries.

Captain Whitbourne is a noteworthy character in English maritime history. He was one of the race of seamen who, in the days of Elizabeth and James, laid the foundation of England's naval supremacy, and opened a way to those distant lands which are now the happy homes of millions of men and women of English descent. A brave man, he was just as ready and willing to fight as to sail a ship. When the Spanish Armada invaded England, he fitted out a vessel for the defence

of his native land at his own cost. He was one of Elizabeth's gallant band of Devon captains who dashed out of Torbay into the very midst of the Spanish galleons as they passed. He had spent forty years in trading to Newfoundland, and had formed an almost romantic attachment to the country. He was present at St. John's when Sir Humphrey Gilbert took possession of the island on behalf of his sovereign. Having done what he could during the active part of his life to promote its interests, on his return to England, in his advanced years, he wrote an account of the country, entitled, "A Discourse and Discovery of Newfoundland," with the view of inducing Englishmen to settle there. The shrewdness, honesty, and good sense of the writer are apparent on every page of this book. He was almost the first to say a kind word for Newfoundland, and to make known to Englishmen the natural capabilities of the island. His book made a great impression at the time, and gave a strong impulse in favour of settling in the country and working its fisheries by means of a resident population. So highly did King James think of the volume that he ordered a copy to be sent to every parish in the kingdom. The Archbishops of Canterbury and York issued a letter recommending it, with the view of encouraging emigration to Newfoundland. Thus two hundred and sixty years ago, Newfoundland was a name on the lips of Englishmen. The island loomed large and important in the eyes of statesmen. Whitbourne, in his little book, told the people of his day, very truly, that the soil of Newfoundland would grow abundantly "corn, cabbage, carrots, turnips, lettuce, and such like," when cultivated, and that it yielded spontaneously "fair strawberries and raspberries, and many other delicate berries," in great abundance. He further told them of the immense herds of deer that roamed over its hills and valleys; of hares,

beavers, foxes, otters, bears; of plump partridges and wild geese and ducks; but above all of the "penguin," as big as a goose, which, in vast flocks, covered many of the small islands and were met with in large numbers as far out as the Banks. The last reference is to the "great auk," now numbered among the extinct birds, but in Whitbourne's day it abounded in the Newfoundland waters. For the last eighty years not a single specimen of the great auk has been seen, and there are but a few skeletons of this singular bird in all the museums of the world. Of the abundance and excellence of the fish Whitbourne wrote in rapturous terms; and then waxing enthusiastic, he asks: "What can the world yield to the sustentation of man which is not to be gotten here! Desire you wholesome air, the very food of life? It is there. Shall any land pour in abundant heaps of nourishments and necessaries before you? There you have them. What seas so abounding with fish? What shores so replenished with fresh and sweet waters? How much is Spain, France, Portugal, Italy, and other places beholding to this noble part of the world for fish and other commodities. Let the Dutch report what sweetness they have sucked from thence by trade. The voices of them are as trumpets loud enough to make England fall more in love with such a sisterland. I am loath to weary thee, good reader, in acquainting thee of those famous, fair, and profitable rivers; and likewise those delightful, large, and inestimable woods; and also with those fruitful and enticing hills and delightful valleys, there to hawk and hunt, where is neither savage people nor ravenous beasts to hinder their sports."* The official circulation of Whit-

* It is only during recent years that a geological survey of the island has been made; and it is as curious as it is satisfactory to know that scientific investigation has substantially demonstrated the truth of Whitbourne's representations in regard to the natural resources of the country, which he gave to the world two hundred and sixty years ago. Only of late have people been convinced that

bourne's book made a deep impression on the public mind in England, and probably led to the next attempt at colonising the island.

A year after the departure of Whitbourne, in 1623, by far the most skilfully-organised effort to carry out the settlement of Newfoundland was made, under the guidance of Sir George Calvert, afterwards Lord Baltimore. He was a Roman Catholic gentleman of Yorkshire, educated at Oxford, and for many years a representative of his native county in Parliament. Advanced to the honours of knight-hood under James I., he discharged the duties of one of the Secretaries of State with universal approval. His capacity for business, his industry and fidelity, are acknowledged by all the historians of the period. He shared largely the popular enthusiasm of his countrymen in favour of "plantations" in America, and when Secretary of State he obtained a patent conveying to him the lordship of the whole southern peninsula of Newfoundland, together with all the islands lying within ten leagues of the eastern shores, as well as the right of fishing in the surrounding waters, all English subjects having, as before, free liberty of fishing. Being a Roman Catholic, Lord Baltimore had in view to provide an asylum for his co-religionists who were sufferers from the intolerant spirit of the times. The immense

the island contains fertile belts, noble pine-forests, extensive coal-fields, and vast mineral treasures. To take a single example, it was not till 1871, when Mr. Murray, the director of the geological survey, made it known, that the valley through which flows the largest river in the country, the Exploits, is capable of maintaining in comfort a population of seventy thousand. He describes it as being seventy miles in length, and from two to ten miles in breadth; almost free from swamps and boulders, having forests of pine, birch, and fir of the best quality, its soil, in most places, being equal to the best of Lower Canada. Mr. Murray may be said to have discovered this fine valley, through which the railway from St. John's to Hall's Bay is to pass, for previous to his description of it no one knew or cared anything about its capabilities.

tract thus granted to him extended from Trinity Bay to Placentia, and was named by him Avalon, from the ancient name of Glastonbury, where, it is believed, Christianity was first preached in Britain. It is curious to find in Newfoundland a trace of one of the myths of the Middle Ages. The tradition ran that Joseph of Arimathæa took refuge in Britain from the persecution of the Jews, carrying with him the Holy Grail, "the cup, the cup itself, from which our Lord drank at the last sad supper with his own," and that he arrived at Avalon, afterwards Glastonbury, in Somersetshire, and there founded a church, on the site of which the great abbey of St. Albans was subsequently erected. Here stood the ancient Roman town of Verulam. To perpetuate the memory of these traditionary events in the New World, Lord Baltimore called his Newfoundland province Avalon, and his first settlement Verulam. The latter name, in course of time, became corrupted into Ferulam, and then into the modern Ferryland. At this spot, on the eastern coast of Newfoundland, about forty miles north of Cape Race, Lord Baltimore planted his colony, and built a noble mansion, in which he resided with his family during many years. He also erected a fort for the protection of the settlers. The utmost care was taken in selecting emigrants, and in promoting among them habits of economy and industry. No expense was spared, £30,000, a large sum in those days, being spent in the settlement. But the high expectations thus awakened were doomed to disappointment. The soil around Ferryland was unfavourable for cultivation, and the settlement was incessantly harassed by the attacks of the French, who had now obtained a footing at several points in Newfoundland. Lord Baltimore, at length wearied out by these adverse circumstances, quitted the shores of the island, and returned to England. He speedily obtained from King

Charles a grant which led to the colonisation of Maryland, where he founded the city of Baltimore. The charter of this new colony, drawn up by himself, showed that in wisdom, liberality, and statesmanship he was far ahead of his age. The Catholic Lord Baltimore was the first to establish in Maryland a constitution which embodied the principle of complete liberty of conscience and the equality of all Christian sects, together with popular institutions on the broad basis of freedom. What is more, the colony actually did adhere strictly to these professed principles.



JAMES I.

Soon after the departure of Lord Baltimore, Viscount Falkland, Lord-Lieutenant of Ireland, hoping to permanently increase the scanty population of Newfoundland, sent out a number of emigrants from that country. At a later date, these were so largely reinforced by settlers from Ireland that the Celtic part of the population at this day is not far short of equality in numbers with the Saxon portion. In 1638, Sir David Kirke, one of Britain's bravest sea-captains, arrived in Newfoundland, and took up his abode at Ferryland, where Lord Baltimore had lived. Sir

David was armed with the powers of a Count Palatine over the island, having obtained from Charles I. a grant of the whole. He took with him about one hundred men, as the nucleus of a colony. Before leaving his native land, he formed a company to carry on fishing operations in his newly-acquired territory. Several patriotic noblemen personally shared in the work and aided him with money.

Sir David Kirke had previously won high honours in the service of his native country. At Gaspé Point he had, with a squadron of three ships only, captured twenty French vessels, under the command of the renowned De Roquement. In a second expedition he made a clean sweep of all the French settlements in Canada and Acadia, and took Quebec; yet, through the imbecility of Charles I., who reinstated the French in the possessions they had thus lost, England had to reconquer Canada at an immense expenditure of blood and treasure, and to capture once more the city of Quebec; this time with the loss of the gallant Wolfe. Kirke's reward for his bravery was knighthood and the grant of the whole island of Newfoundland. He governed wisely, and used every effort to promote the colonisation of the country. His settlement prospered greatly. The Civil War, however, broke out in England, and Kirke, being a staunch loyalist, all his possessions in Newfoundland were confiscated by the victorious Commonwealth. By the aid of Claypole, Cromwell's son-in-law, Kirke eventually got the sequestration removed, and, returning to Ferryland, died there in 1655, at the age of fifty-six.

At this time Newfoundland contained a population of three hundred and fifty families, or nearly two thousand inhabitants, distributed in fifteen small settlements along the eastern coast. These constituted the

resident population; but, in addition, there was a floating population of several thousands, who frequented the shores during the summer for the sake of the fisheries, which had now attained large dimensions. As early as 1626, one hundred and fifty vessels went annually to the island from Devonshire alone; and the French were even more active than the English in carrying on the fisheries. While the inexhaustible wealth of the adjacent seas added greatly to the importance of the country, in another way it proved to be locally injurious. It retarded for more than a century the settlement of the island, and gave rise to social disorder and flagrant misrule. The fisheries, as far as the English were concerned, were carried on by merchants, shipowners, and traders residing in the West of England. They sent out their ships and fishing crews early in the summer. The fish caught were salted and dried ashore. When winter approached the fishermen re-embarked for England, carrying with them the products of their labour. They considered it their interest to discourage the settlement of the country, as they wished to retain the harbours and fishing coves for the use of their servants while engaged in curing the fish. All settlers on the land were regarded as interlopers. The most strenuous efforts were made to keep the resident population within the narrowest possible limits. In this way there sprang up a strong antagonism between the merchants and traders resident in England, whose servants were sent out to prosecute the summer fisheries, and the few settlers who were striving to cultivate the soil. The struggle between these contending interests forms a dreary chapter in the history of Newfoundland. The wealthy merchants, having the ear of the home government, were able to secure the enactment of unjust and oppressive laws which effectually prevented the colonisation of the island, and preserved it as a mere station for the cure of

fish. Under the plea that the fisheries must be preserved as a nursery of seamen for the British Navy, the various successive governments, at the instigation of the fishing merchants and traders, promulgated laws prohibiting settlement within six miles of the shore, forbidding anyone to proceed to the country as a settler, and ordaining that all fishermen, at the close of the fishing season, should return to England. Masters of vessels were compelled to give bonds of 100*l.* to bring back such persons as they took out, and "all plantations in Newfoundland were to be discouraged." This oppressive policy went on for more than a century. Even so late as 1797, we find the governor for the time being sharply rebuking a sheriff for having, during his absence, permitted a resident to erect a fence, and ordering certain sheds, designed for the shelter of the inhabitants, to be removed, and prohibiting others to "erect chimneys to their sheds, or even light fires in them of any kind." With such laws in force, the wonder is, not that the colony did not advance, but that any resident population should have been found to occupy its shores. Progress, of course, was out of the question. The ill-used residents could not legally enclose or till a piece of ground, or repair a house without a licence, which was rarely granted. They were thus compelled to look to the stormy ocean as the sole source whence they could draw a scanty subsistence. Yet, in spite of all these difficulties and discouragements, the sturdy settlers clung to the soil, combated the "adventurers," as the merchants were called, increased in numbers, and eventually obtained freedom of settlement and a relief from oppression. In the teeth of unjust laws, designed to degrade a fine island larger than Ireland to a mere stage for the curing of fish, the population increased tenfold in ninety years. But if, as in the case of the neighbouring provinces, colonisation had been helped and encouraged from the outset, Newfoundland

would to-day be in the front rank of British colonies. Only seventy years have elapsed since the repeal of the oppressive enactments under which the country suffered, and the progress of the colony in that time has been most satisfactory. Still, the injury inflicted by the unhappy policy referred to, was felt long afterwards, and in many ways. A state of antagonism and embittered feeling between those desirous of permanent settlement, and the fishing merchants who wished to keep the country and the fisheries as a profitable monopoly in their own hands, was thus fomented during a long time. Misrule, anarchy, and turbulence, spread among the people who were outside the pale of law, and all attempts at civilisation were steadily discouraged. From self-interest, those who wished to prevent colonisation systematically misrepresented the natural resources of the country. They proclaimed to the world that it was a barren rock, fit only for fishermen's accommodation in drying their nets and curing their fish. Even to this day such an idea of the country is largely prevalent, and it is only of late that correct information has been obtained and diffused.

The policy of repression and discouragement began in 1633, its source being the notorious Star Chamber. To this court the merchants and ship-owners of the West of England, who wanted to keep the island as a preserve of their own, addressed a petition, requesting legal enactments to preserve order and repress crime. The Star Chamber proceeded to legislate, but their enactments were altogether one-sided, being directed to conserve the interests of the merchants and shipowners. Neither the personal nor the material received the smallest consideration. The code by which Newfoundland was to be governed, among other things, enacted that "if a man killed another, or stole to the value of forty shillings, the offender was to be brought to England, and the matter was to be tried by

the Earl Marshal, and if the fact was proved by two witnesses, he was to suffer death. No person was to deface or spoil any stage, cook-room, or other building. The ship that first entered a harbour was to be admiral of the same for the season. No person was to steal any fish, salt, or provisions belonging to the *fishing ships*, or rob the nets. The company were to assemble themselves on Sundays to hear divine service. The mayors of Southampton, Weymouth, and certain other towns were to take cognisance of all offences or crimes committed on the soil of Newfoundland." This last enactment is a curious specimen of the jurisprudence of those days, and shows how scanty was the amount of justice meted out to the resident population. In 1660 the same court confirmed the enactments of 1633, and made the following additional provision: "That no master or owner of any ship should transport any persons to Newfoundland who were not of the ship's company, or such as were to plant or settle there." In support of this provision the Lords of the Privy Council issued an order to the magistrates of the western ports to take care that no shipmasters carried any but the ship's company to Newfoundland, or those engaged in the fisheries.

Repeated efforts were made to have a governor appointed for the island. The merchants and shipowners vigorously resisted the proposal, and succeeded in preventing any such appointment. It suited them much better to have the control of the fisheries in their own hands without any interference. A governor might possibly side with the resident population, or disturb their pleasant monopoly. Petitions from the merchants and traders, and counter-petitions from the settlers, continued to be sent to the committee of trade on this and other subjects, but without any favourable result as far as the interests of the resident population were concerned. At length, in 1696, the Board

of Trade was constituted, and a fresh set of petitions were presented to the new authority. In answer the settlers were informed that "planters, in a moderate number, were at all times convenient for the preparation and preservation of boats, stages, and other things necessary for the fishery, but that they should not *exceed one thousand.*" Such was the utmost concession that this Board, in their wisdom, were prepared to grant. The existence of a resident population to the extent of a thousand was to be sanctioned, but only for the purpose of taking care of boats and fishing gear during those winter months when the true owners of the island were in England.

Another source of trouble to the resident population, and one which greatly retarded the prosperity of the country, was the presence and continual encroachments of the French. Their rule at this time extended over Nova Scotia (Acadia), Cape Breton, and Canada, and their ambitious commandants and governors in America boasted "that they would soon be able to drive the English colonists into the sea."

The struggle between England and France for dominion in North America now commenced in earnest. It soon became evident that one or other of the contending powers must be driven from the New World. The conquest of Newfoundland had long been a favourite object with French statesmen. Not only would the possession of that island have enabled the French to control the valuable fisheries, but it would have placed in their hands the key to their transatlantic possessions, as it commanded the narrow entrance to Canada, the most valuable of them. In 1635 the French obtained permission from the English to dry fish on the shores of Newfoundland on payment of a duty of five per cent. on the produce; and in 1660 they founded a colony at Placentia, an admirably-chosen site for such a purpose. They fortified the place with powerful

works, and they occupied other positions along the southern shore. With Cape Breton in their possession they commanded both sides of the Gulf of St. Lawrence. In 1675 Charles II. was induced by Louis XIV. to relinquish the duty of five per cent., which had been paid hitherto as an acknowledgment of the British sovereignty. From this date the encroachments of the French grew in boldness. Within a few years they had established their dominion over a territory of two hundred miles in extent, their head-quarters being at Placentia.

On the accession of William III. to the throne of England, hostilities broke out between the rival nations. In William's declaration of war against the French, Newfoundland holds a prominent place among the alleged causes which led to the rupture of pacific relations. The grievance was tersely set forth in the royal manifesto: "It was not long since the French took license from the Governor of Newfoundland to fish upon that coast, and paid a tribute for such licences as an acknowledgment of the sole right of the Crown of England to that island; but of late the encroachments of the French, and his Majesty's subjects trading and fishing there, had been more like the invasions of an enemy than becoming friends, who enjoyed the advantages of that trade only by permission."

Newfoundland now became the scene of military skirmishes, naval battles, and sieges by land and water. The first operation was an attack on Placentia, by an English squadron, under Commodore Williams, in 1692. The French were strong in numbers and fortifications, and the attack was unsuccessful. Four years later, in 1694, the Chevalier Nesmond was ordered, with a fleet of ten ships, to join the Rocheford squadron to proceed to Newfoundland. They were instructed to drive the English out of the island; and, having accomplished this part of their programme, they were to sail for Boston and destroy

it, together with the neighbouring settlements. Nesmond arrived at Placentia. From thence he made a descent on the harbour and town of St. John's. He was repulsed, and instead of going on to Boston he returned to France.

A more determined effort at conquest was made later in the same year. The new expedition was under the command of Ibberville and Brouillan, the former being at the head of a Canadian force. The garrison of St. John's was weak in numbers, and, in want of military stores, could only make a feeble resistance; capitulating on easy terms, they were shipped to England. The fort and town were burned to the ground, and the victors next proceeded to destroy all the other adjacent English settlements; Carbonier and Bona Vista alone proved too strong for them. The English Government at once commenced dispositions for dislodging the invaders; but before anything was attempted, the Treaty of Ryswick was signed in 1697. This treaty proved most unfortunate for Newfoundland. It revived in the island the same state of division between France and England which had existed at the beginning of the war. The enemy retired from the rivers of St. John's and the other settlements which they had forcibly occupied. Their claims upon Placentia and all the other positions on the south-west coast were, however, confirmed. The British inhabitants of Newfoundland were, therefore, once more left open to French attacks should hostilities be again renewed between the rival powers.

CHAPTER III.

TYRANNY BY ACT OF PARLIAMENT.

[1691-1728.]

A government of skippers—A colony regarded as a ship—The British Ministry advised to exclude women from the Island—The baneful Act of William III.—The first sea-captain arriving at the fisheries to be admiral—The population increases, in spite of unjust laws and venal judges—Interposition of commanders of the Royal Navy—Appointment of the first governor—French attacks on the country and capture of St. John's—The Treaty of Utrecht—Supremacy of England throughout Newfoundland—Fishing rights conceded to the French—Standing grievances.

THE thirty years which followed the Treaty of Ryswick constitute the darkest and dreariest period in the annals of Newfoundland. The difficulties and sufferings of the resident population were such that it seems marvellous they were not driven to settle in some more favourable region. Their miseries arose partly from the Government system of rule, and partly from the attacks of the French, who never ceased to harass their British neighbours in continuous acts of plunder and destruction. Before referring to the various skirmishes and naval engagements of which Newfoundland was the scene at this period, we propose to glance at the internal condition of the island, and endeavour to convey to the reader some idea of the social and political struggles which characterised this season of anarchy.

In the last chapter we touched upon the notable enactments of the Star Chamber in the reign of Charles I., by which it was ordained that if a person in Newfoundland killed another, or stole to the value of forty shillings, the offender was to be sent to England, and, on conviction of either offence, to be hanged. Another memorable enactment of this arbitrary tribunal was that the master of the first ship entering a harbour was to be admiral therein for the fishing season, and have judicial powers over the district. Groaning under the rule of these chance-appointed, ignorant skippers, who decided all questions regarding property and all other disputes, without any responsibility, and often for their own private benefit, the inhabitants petitioned the Home Government for the appointment of a governor and civil magistrates. The shipowners and merchants had, however, sufficient influence to prevent the passing of a measure which would have been a recognition of the island as a colony and a direct encouragement to settlers. Blinded by self-interest and a short-sighted policy, these men strenuously endeavoured to keep the country in the state of an unreclaimed wilderness; while the delusion (for such in the end it was discovered to be) of training seamen for the Navy by means of the Newfoundland fisheries, induced the rulers of Britain to repress colonisation by legal enactments, and to attempt to drive out by harsh and oppressive laws such as had obtained a footing in the country. Another method by which the shipowners sustained their monopoly was by representing the country, in regard to soil and climate, as incapable of successful cultivation. They described it as a barren rock fitted for nothing better than a depôt for curing fish.

In the graphic language of an Under Secretary, in his evidence before a committee of the House of Commons, at a later date: "The island of Newfoundland had been considered in all former times as a great English ship, moored

near the banks during the fishing season for the convenience of the English fishermen." The governor was regarded as the ship's captain, and all those concerned in the fishery business as his crew, and subject to naval discipline. To prevent the increase of inhabitants on the island, positive instructions were given to the governors not to make any grants of land, and to reduce the number of the people who were already settled there. A certain Major Elford, Lieutenant and Governor of St. John's, even many years after the period we are discussing, strongly recommended to the ministers of the day, "to allow no woman to land in the island, and that means should be adopted to remove those that were there." This was, indeed, going to the root of the matter. No more effectual method of averting colonisation could have entered into the fertile brain of the most rigid obstructionist.

In 1698, the British Parliament turned its attention to Newfoundland and its fisheries. The result was the passing of Acts 10 & 11 William III. c. 25. This Statute, memorable in the annals of the colony, was entitled, "An Act to encourage the trade to Newfoundland." It might, with better show of reason, have been entitled, "An Act to discourage Colonisation." All its provisions were directed to the maintenance of the island as a fishing-station. The baneful effects of this Statute of William III. were felt for nearly a century. It constituted the charter of the monopolists, on the authority of which they resisted every attempt to introduce any measure calculated to secure the rights and liberties of a resident population, or to grant them the same privileges as were enjoyed by other British colonists. Every improvement had to be fought out in the teeth of this Statute; every successive amelioration in the condition of the people was bitterly opposed as being inconsistent with the principles of this oppressive law. We have seen that, previous to this

time, the country was ruled by a set of regulations which rested on the questionable authority of orders in Council from the Star Chamber. The effect of the Statute of William was to give the force of law to these tyrannical regulations, under which the resident population had suffered so long, and to embody in an Act of Parliament (the Parliament of the Revolution), nearly the whole of the old barbarous code. No wonder that the monopolists, year after year, were loud in their praises of a Statute which secured for them complete ascendancy over the resident population, who had no choice but to submit to their hard fate.

The provisions of this Act seem to us almost incredible in the present day. The fishing admirals of Star Chamber origin were reinstated, and with almost unlimited powers. Not only was it enacted that the master of the first ship arriving at the fisheries from England should be admiral of the harbour in which he cast anchor, but the masters of the second and third following vessels were to be vice-admiral and rear-admiral, the first having the privilege of reserving to himself so much of the beach as he required for his own use. The arrangement was evidently based on the principle of ignoring a resident population, and providing merely for the fishermen who annually migrated from England. Each autumn, at the close of the fishery, the admirals, and all under their immediate charge, disappeared. The inhabitants were left without even the semblance of law or order to pass the winter as best they could. As a class, these masters of fishing vessels were rude and ignorant men, utterly unfitted to be the judges in matters so vitally affecting a large and important trade. Moreover, as servants of the merchants, they were themselves personally interested in the questions which arose regarding property. They were closely identified with the capitalists who carried on the fisheries from England, and were for this and other

reasons utterly unqualified to dispense justice between their employers and the people born or resident in the country. Inquiries, instituted afterwards, have shown what kind of justice was meted out to the poor inhabitants, who were regarded as interlopers by these rough sea-captains. Under their rule the most frightful abuses were perpetrated, and the most tyrannical practices were universal. The powers with which they were endowed enabled them to drive the inhabitants from their houses and fishing-grounds and gardens, to make room for themselves and their friends. In their eyes, the highest misdemeanour a resident could be guilty of was the cultivation of a portion of the soil. They had no hesitation in levelling the house of any resident, or appropriating it for "the use of the fishery," which meant for their own use. In a representation addressed to the Home Government in 1715, by a number of residents, the following language is used: "The admirals prove generally the greatest knaves, and do most prejudice, being generally judge and party in hearing suits for debt; and when they have served themselves, then they will do justice to others. So it will be requisite to have a civil government, and persons appointed to administer justice in the most frequented places, that we may be governed as Britons, and not live like banditti or forsaken people, without law or gospel."

In Chief Justice Reeves' excellent history of the government of Newfoundland, published in 1793, we have a striking picture of the condition of the country under the fishing admirals: "It has been too often stated in the course of this historical inquiry to need repetition that the admirals were the servants of the merchants; that justice was not to be expected from them; that a poor planter or inhabitant, who was considered little better than a law-breaker in being such, had but small chance of justice in opposition to any great West-Country merchant; that they

have been in the habit of seeing that species of wickedness and anarchy ever since Newfoundland was frequented, from father to son. It was favourable to their old impressions that Newfoundland was theirs, and that all the planters were to be spoiled at their pleasure." The same authority shows that the inhabitants were entirely at the mercy of the merchants and adventurers; that these were the importers of all articles of domestic necessity, as also such as were needed for the prosecution of the fishery, and that they sold their goods on their own terms on credit to the planters, well knowing that the products of the fishery would reimburse them. When any difficulty arose about the payment of debts, it was not unusual for the agents of the merchants to seize whatever fish they could lay hands on, leaving the unfortunate fishermen without wages or any means of support, "salt provisions and craft" being, according to existing regulations, payable before wages. The fishing admirals were not only overbearing, they were venal. Their judicial decisions were occasionally influenced by gifts. The inhabitants were, by the express terms of the Act, prohibited from taking up any beach or place until all the ships arriving from England were provided for. If any stage, cook-room, or beach had been taken possession of, they had to quit it forthwith for the use of the migratory fishermen. The light in which the unfortunate residents were regarded by the monopolists may be gathered from the cool reply of the latter to an invitation addressed to them by the Board of Trade to communicate their views regarding what could be done for the furtherance of the fishery. They suggested the appointment of justices of the peace to act in winter, during the absence of the admirals; but they added that the best interests of the country would be promoted if a resident population were wholly dispensed with. To secure this happy result they proposed, with disinterested benevolence, that the existing

settlers (about three thousand men, besides their wives and children) should be encouraged to emigrate to Nova Scotia, where inhabitants were wanted.

Notwithstanding these oppressive and unjust laws, the resident population continued to increase. This fact may be taken as illustrative of the singular attractiveness of the island from a colonist's point of view. The height of prosperity Newfoundland might have achieved under the fostering care of a wise and generous government may be easily imagined. Among the early settlers who fought and ultimately won the battle against enormous and cruel odds there must have been many men of great vigour of character and solid worth. We have proof of this in the fact that, finding there was no redress of their wrongs to be expected from the home authorities, the inhabitants of St. John's organised a local parliament, composed of the more intelligent and influential of their number, including the commanders of merchant-ships and some of the merchants. In this assembly, after long debates, continued through several sessions, sundry laws and regulations were passed "for the better discipline and good order of the people, and for correcting irregularities committed contrary to good laws." Fifteen articles were finally adopted by this voluntary assembly, which must have proved very serviceable in preserving order under the misrule of the fishing admirals. Doubtless, too, this attempt at local self-government was the germ of that reformatory movement which afterwards increased in volume, and finally gave to the island a settled government and just laws.

In the commodores and commanders of the royal ships who periodically visited the island, the oppressed inhabitants found their best friends and helpers. These officers were unprejudiced observers of the disorder and injustice which prevailed. From time to time they made representations on the subject to the Imperial authorities, and urged the

necessity of a new system of government. The monopolists, however, having the ear of the Board of Trade, possessed sufficient influence to counteract the efforts of the naval commanders. They too preferred complaints to this Board ; but all their petitions had reference to their own interests, taking no account of the inhabitants. They complained that New England men were allowed to import rum and tobacco into Newfoundland, to the detriment of their own traffic, and asked that "none should be allowed to retail these articles but to their own servants." They asked that the commodores should not be allowed to interfere with the decisions of the fishing admirals ; they demanded that the encroachments of the inhabitants on the harbours, to the detriment of the ships from England, should be checked ; and they suggested that the fishing admirals "should have power to inflict corporal punishment on all persons profaning the Lord's Day, and all common drunkards, swearers, and lewd persons ; and that a sufficient number of ministers should be sent and paid for by England to instruct the people." There was indeed no limit to the arrogance of the monopolists.

At length there came the dawn of better days for the resident population. In the year 1728 the commodore in charge of the station at Newfoundland was Lord Vere Beauclerk, a nobleman of considerable talent and weight of character. Strongly impressed with the evils of the system of rule in force in the island, he made such strong representations to the Board of Trade, that the Home Government were at length induced to send out a governor with a commission to establish some form of civil government. The appointment was conferred on Captain Henry Osborne, of his Majesty's ship *Squirrel*. Thus commenced the naval government of Newfoundland by captains and admirals of the British Navy, which was continued for many years. This was not only a social boon, but it was virtually a

recognition of Newfoundland as a colony of the British Empire. The change did not, it is true, for a lengthened period accomplish anything for the settlement and colonisation of the country, because the obnoxious "Statute of William III." was left unrepealed, and the governors were instructed to enforce its provisions; but the new form of government proved to be a great improvement on that of the fishing admirals. Although these officials were not abolished, their operations were under something like control. In the appointment of a governor the germ of local civil government was obtained, and, though its growth was slow, it eventually became a living power. More than sixty years elapsed from the seed being sown before the constitutional harvest was gathered. It came in the establishment of a Supreme Court of Judicature. Twenty years after that it was permissible to build houses without a special licence from the governor. So tenacious was the grasp of the monopolists on the country, and so pertinaciously did they oppose all efforts for its colonisation, that the good intentions of the Home Government in the appointment of a governor were for a long period rendered almost nugatory. This arose partly from the limited character of the powers conferred on the first governor and his successors. His commission, according to Reeves, gave him authority to administer the oaths to Government officials, and to appoint justices of the peace, with other necessary officers and ministers, for the better administration of justice and keeping the peace and quiet of the island. But neither he nor the justices were to do anything contrary to the Statute 10 & 11 William III., nor obstruct the powers therein conferred on the admirals of harbours or captains of the ships of war. The justices were required to be aiding and assisting the commodore or commanders of the ships of war and the fishing admirals in putting in execution the said statute. The governor was to erect a court-house and

prison. All officers, civil and military, were to aid and assist him in executing this commission. We shall see presently the evil effects of leaving the fishing admirals with unabated power to paralyse the action of the governors.

Before closing this chapter we must revert briefly to the troubles through which Newfoundland had to pass during this period, owing to the encroachments of the French and their ceaseless endeavours to obtain entire possession of the island. We have seen that the Treaty of Ryswick, in 1697, left the French in possession of Placentia and various other places along the southern shore. From these points of vantage they carried on an extensive and lucrative fishery in the Gulf of St. Lawrence and around the northern shores of Newfoundland. When war between England and France broke out afresh in 1702, a squadron was sent out under Captain Leake, with orders to drive the French out of Newfoundland. The attack was partially successful, as various French settlements on the southern shore were destroyed, and the fortifications on the island of St. Pierre were dismantled; but the French were still left in possession of their chief stronghold in Placentia. An unsuccessful attempt was made to reduce this fortified position in the following year. Then in their turn the French again became the aggressors. With a strong force they marched on St. John's. They were victoriously repulsed. Turning their backs on St. John's, however, they fell upon the other English settlements along the coast, destroying many of them and carrying off a large number of the inhabitants into captivity. At a later date, in 1708, the French again assailed the capital. The garrison was taken by surprise, and the enemy obtained possession of the place. They at once proceeded to dismantle the fortifications and destroy most of the houses. Carbonièr alone was again able to resist the French, and for several years this was the only town on the island where the flag

of England was not hauled down. Newfoundland for a time was lost to the British Empire. In the glories of our military and naval triumphs in other parts of the world the loss was easily forgotten. At length Louis XIV., who in the greater conflicts of the time had seen his territories gradually diminished and his strongholds flying hostile banners, was glad to accept terms of peace. The well-known Treaty of Utrecht was concluded in 1713. Certain of its provisions mark a great era in the history of Newfoundland. The whole country, with the adjacent islands, was declared to be the possession of Great Britain. Placentia and all other places were ordered to be surrendered. Thus the exclusive sovereignty of the entire island was secured to England. A very important reservation was, however, made in favour of the French, which was destined to be a source of trouble for more than a century and a half, and which prevented the British subjects of Newfoundland from settling and colonising more than half the island, and this by far the better half in regard to soil, climate, and natural capabilities. By the Treaty of Utrecht, though the French were excluded from all territorial rights in Newfoundland, they were secured in the privilege of fishing, concurrently with the English, along more than half the coast, and also permitted to use the shore of this portion of the island, so far as it was needed for the prosecution of their fisheries. This unfortunate concession led to endless disputes. The French persistently contended that the provisions of the treaty gave them, not a concurrent, but an exclusive right of fishing on this part of the coast, and also that the use of the shore for fishery purposes forbade the settlement of this region by British subjects. Both these interpretations were repudiated by the people of Newfoundland, and were never admitted as being correct by the Imperial authorities. Nevertheless, successive English Governments left the matter undecided, and refused to place this portion of the

coast under the jurisdiction of the local government, or to sanction its settlement, so sensitive were they in guarding the treaty rights of the French. The consequence has been that, practically, the inhabitants of Newfoundland have been excluded from half their own territory, which is still, to a great extent, a mere wilderness; and that a population of "squatters," without any title to their possessions, and living outside the pale of law, was allowed to grow up there without any civilising influences. This was a standing grievance generation after generation; and so slow has been the march of civilisation in these latitudes, that "the squatter" has only been brought within the pale of law and order during the past few years. It was not until the year 1878 that a magistrate was appointed, with the concurrence of the home authorities, to have jurisdiction in the forlorn district just described; and it was only as late as 1881 that the local government was empowered to issue grants of land and mining licences for this same locality.

CHAPTER IV.

THE FISHERY RIGHTS OF FRANCE.

[1728-1793.]

Fifty years of agitation—The pioneers hold their ground—Establishment of a Court of Oyer and Terminer—Warlike operations against the French in North America—End of the Seven Years' War—Social disorders and religious persecution—British and French concurrent rights of fishing—The condition of Labrador—The war between England and America and its influence on Newfoundland—The Peace of 1782—Chief Justice Reeves—Disputes over the Treaty of Versailles—Land grants and mining licences.

THE history of Newfoundland during the next fifty years presents a series of constant conflicts between the new order of things introduced by the appointment of a governor, together with the rudiments of a local civil government, on the one side, and the old *régime* on the other. For many years the governors found themselves almost powerless to introduce any ameliorations owing to the notorious statute of William III., which was still in force, and the determination of the monopolists and the fishing admirals not to recognise the newly-created authority, or to abate the exercise of their arbitrary powers. The appointment of a governor and justices of the peace alarmed the monopolists, whose most strenuous efforts were now directed to prevent any lawful authority from taking root

in the island. The conflict between these opposing forces lasted for more than half a century. Happily the British Governments were now firm in their determination not to withdraw the small measure of civil government which had been granted to the colony, though the adherents of the old system never ceased their hostile representations regarding it, and their petitions to the home authorities to have it altered or extinguished. Slowly the right prevailed; step by step improvements came. Meantime, the suffering people had to suffer on, under a cruel and flagrant misrule. Life was hard and bitter for the poor "toilers of the sea," struggling to obtain a footing in the new land. Existing on sufferance, forbidden to cultivate the soil, prevented even from erecting a stage for handling their fish, until their lords and masters from England had been accommodated, they were obliged to mortgage their industry for advances of the necessaries of life, and bend their backs to a burden of debt. Still these sturdy pioneers held their ground and increased in numbers. At the close of each fishing season, some who had come out from England were sure to remain behind, in spite of the utmost vigilance of the captains of the fishing vessels. How the women were smuggled into the country remains a mystery. The very hardships of a Newfoundland career had possibly attractions for some of these early colonists. There was a spice of adventure in the work of the time, and no restraints of civilisation. The sense of freedom, the rich treasures from the encompassing seas from which occasionally vast prizes were drawn, the bracing climate, even the dangers which they had constantly to confront in their avocations, followed by the season of idleness and rough enjoyment in winter when their toils were ended, were romantic attractions in the eyes of many a hardy fellow in those early days of travel and adventure.

Captain Osborn, on his arrival, set to work vigorously

to carry out his instructions. He divided the island into districts, and appointed in each of them justices of the peace and constables, selected from the best classes of the people. To defray the cost of building a prison at St. John's and at Ferryland, he ordered a rate to be collected, which was assessed on the boats and ship-rooms. He erected several pair of stocks as a terror to the more turbulent and disorderly of the population. This was the work of one season. At its close the governor returned to England to spend the winter, a practice which was followed till the year 1818 by these naval authorities, who generally arrived in July or August, and left in the latter end of October. The presence of a governor only during two or three months annually was a serious drawback to the proper working of the new system. The magistrates, who were in many instances ignorant men, and all of them new to such duties as they had undertaken, were found to be obedient to the orders given them only so long as a superior was at hand. It was also speedily found that the captains of the fishing ships, the fishing admirals, and the traders were fiercely opposed to the exercise of authority by the justices, whom they regarded as usurpers of their own offices. They used their utmost efforts to bring the magistrates into contempt, and to impress the people with the idea that their appointment was illegal. The justices of St. John's presented a memorial to the Governor, complaining that they were obstructed in their duty by the fishing admirals, who, taking upon them the whole power and authority of the justices, even disputed the Governor's authority in appointing them. In this conflict, which went on for years, the West-Country merchants and captains supported the fishing admirals, and the Governor stood by the justices. A fatal mistake had been made by the introduction of the new system, through "an Order of the King in Council," instead of obtaining for it the sanction of an Act

of Parliament. The fishing admirals pointed to the Statute of William as the source of their authority; whereas they alleged the justices were merely the creation of an Order in Council. The home authorities being appealed to by both parties, the law officers of the Crown were called on for a decision. The opinion of the Attorney-General of the day was that the whole authority granted to the admirals was restrained to seeing the rules and orders contained in the statute, concerning the regulation of the fisheries, duly executed; whereas the authority of the justices extended only to breaches of the peace; so that there was no interference with the powers given by the Act to the admirals, by those which the commission conferred on the justices. Thus there was assigned to each a separate sphere of action. The difficulty was to define the bounds of each jurisdiction. The contest went on for a long period. At length the monopolists and the admirals became convinced that the limited civil government granted to the inhabitants would not be withdrawn, and their clamour and opposition in a great measure ceased. From this time henceforth the fishing admirals gradually gave up the contest, and eventually their claims of authority fell into well-merited contempt.

The year 1750 witnessed another important step in the extension of civil government. Various governors had represented to the Board of Trade the great inconvenience resulting from sending over to England for trial all persons charged with having committed capital felonies. "In such cases," says Reeves, "the witnesses were glad to keep out of the way. The felon was sent to England, without any person to prove his guilt; a great expense was incurred; justice was disappointed; or, if the fact was proved, the poor witnesses were left to get back as they could, with the expense of their voyage and residence, and the certain loss of one season's fishing." The representations of successive governors on this subject at length resulted in a change

for the better ; and the commission given to Captain Francis William Drake, in 1750, contained a clause empowering him to appoint Commissioners of Oyer and Terminer, before whom felons might be tried within the bounds of the colony. With what a sparing hand this measure of justice was dealt out may be estimated from the restrictions attached to the exercise of it. The Governor was prohibited from holding more than one Court of Oyer and Terminer in a year, and that only when he was resident in the island ; and from executing any sentence till report of it was made to the King. Further, the power of trying or pardoning treason was not entrusted to the Governor, or any court appointed by him. Notwithstanding these restrictions the court was regarded as a great advance, and it proved a valuable boon. The first of a series of important reforms, it inaugurated a new era of civil progress, a progress which came slowly but surely.

In 1754, Lord Baltimore presented a claim to be put in possession of the southern portion of the island, known as the province of Avalon, together with all the royal jurisdictions and prerogatives belonging to it, as secured by the original grant of 1623. The claim was disallowed by the law officers of the Crown, on the ground that there had been no actual possession of the province by the Baltimore family since 1638, and that subsequent legislation was inconsistent with the claim now set up. The somewhat ridiculous demands of Lord Baltimore, thus disposed of, were never renewed.

During these years war had been raging between England and France, and at length the tide rolled near Newfoundland. The commanding genius of Pitt discerned the vast importance of striking a blow at the power of France in North America. The famous expedition of 1758 against Louisberg, then the capital of Cape Breton, and a strong fortress held by France, was completely successful,

and the island was yielded to England. In this operation, Wolfe was second in command, and greatly distinguished himself for skill and courage. In the following year, an expedition for the conquest of Canada was organised, and the supreme command given to Wolfe. There is no brighter page in the military annals of England than that which records the capture of Quebec and the heroic death of the English general. The power of France in the New World was now entirely broken. The whole of North America passed into the possession of the British Crown.

Though the conquest of Canada was now complete, France still clung to the idea of seizing and retaining Newfoundland. The commercial value of its fisheries, and the opportunities it afforded as a training school for seamen, were fully understood by the French authorities. It was in the year 1762 that France made another determined effort to gain possession of the island. A naval expedition, fitted out at Brest, succeeded in eluding the British cruisers, and a strong force was landed at the Bay of Bulls, twenty miles south of St. John's. Thence, by a march overland, the enemy surprised and overpowered the garrison. They then proceeded to strengthen the fortifications of the city, and to secure themselves in their possessions. The Governor was absent during this victorious adventure of the French. On his return voyage to the island he was met by a sloop, carrying information of what had happened. By this sloop he sent despatches to the commander at Halifax, Lord Colville, who immediately sailed with a strong naval force to St. John's, and blockaded the harbour where the French fleet lay. Meantime the Governor, Captain Graves, landed at Placentia, and put the fortifications there in a proper condition of defence. Lord Colville was speedily joined by Colonel Amherst, at the head of eight hundred men, most of them Highlanders. These gallant troops were landed at Torbay, seven miles north of

St. John's, and had to fight their way through a very rugged country in order to assail the French garrison who held the capital. But nothing could withstand the ardour of the Highlanders. Signal Hill, which overlooks and commands the city, was carried by assault. The French fleet were shut in the harbour by Colville's blockading force. A storm, however, arose, which drove off the English ships. Favoured by a fog, the French fleet put to sea and escaped. The garrison, after a brief struggle, surrendered, on condition that they should be conveyed to France. The French were thus for the last time summarily expelled from Newfoundland.

The same year which saw the French both triumphant and defeated at St. John's, inaugurated negotiations for peace between the two Great Powers, and on February 10th, 1763, the Seven Years' War came to an end with the famous Treaty of Paris.

An opportunity was now offered for terminating the fishery privileges conceded to the French, on a portion of the Newfoundland coast, by the Treaty of Utrecht; but unfortunately, instead of securing the island to Great Britain, free from any use of its shores by the French, the Treaty of Paris confirmed and extended the rights of the French granted by former treaties. The islands of St. Pierre and Miquelon, on the coast of Newfoundland, were transferred to France, as a shelter for her fishermen, on condition that no fortifications were to be erected, and that only a guard of fifty men, for police purposes, should be maintained there. This perpetuated much of the old mischief, and strengthened the hold of the French on the island, in connection with their fisheries.

It is worth recording here that on board one of the vessels of Lord Colville's fleet, when it came to recapture Newfoundland from the French, was the afterwards famous Captain James Cook, who was destined to become one of

England's greatest sailors. He had entered the Navy as a common sailor, and had, at this time, risen to be master of the *Northumberland*. Captain Graves, then Governor of Newfoundland, formed a high opinion of Cook, and secured for him the conduct of a naval survey of Newfoundland. This appointment was confirmed, in 1764, under Governor Sir Hugh Palliser. As marine surveyor of Newfoundland and Labrador, Captain Cook spent three years in making charts of the coasts and the surrounding seas. These charts are found to be marvellously accurate, even when the work is done over again with the improved instruments of the present day. In this arduous service Cook won his first laurels, and proved himself an able mathematician. He left Newfoundland in 1767 to take charge of an expedition to the South Seas. His subsequent career as a courageous and skilful navigator and explorer is well known.

By the treaty of 1763, Great Britain acquired a totality of empire in North America extending from Hudson's Bay to the mouths of the Mississippi. In order to establish a free fishery, open to British subjects, upon the coast of Labrador, the whole of that coast, from the River St. John's to Hudson's Straits, was placed under the care of the Governor of Newfoundland, whose title henceforth was to be, "Governor and Commander-in-Chief in and over the island of Newfoundland, in North America, and of all the coast of Labrador, from the entrance of Hudson's Straits to the River St. John's." This addition conferred increased importance on the government of the colony.

A census was taken at the close of the year 1763, from which it appeared that the total population of the island was 13,112, including women and children. Of these 7,500 were constant residents in the island, and 4,795 of them were Roman Catholics, most of whom had come from Ireland. The increase in the resident population, in spite of all discouragements, was very marked. The cod fishery

was in a thriving condition, 386,274 quintals of cod having been made in that year, of which two-thirds had been caught and cured by the resident inhabitants of the island. Besides, 694 tierces of salmon and 1598 tons of train-oil were exported. Four hundred sail of vessels carried on the trade with the mother country and British America. The intercourse with Ireland at this time was considerable, and large quantities of fish were sent to Belfast, Cork, and Waterford. A whale and walrus fishery was carried on in the Gulf of St. Lawrence, and upon the coast of Labrador.

While the resident population was thus increasing, the civil government received some very important additions calculated to strengthen the colony. In 1764, on the representation of the Board of Trade, a collector and controller of the customs of Newfoundland was appointed; and in the following year the navigation laws were extended to the island, and it was now formally declared to be one of His Majesty's "plantations," or colonies. This was a fatal blow to the old system, by which it was kept merely as a fishing station, for the use of the fishery monopolists. Those interested in sustaining the old order of affairs made a stout resistance to this innovation, questioning its legality on the ground that it did not rest on the authority of an Act of Parliament, and was opposed to the Statute of 10 & 11 William III., which made it a free fishery. Petitions and memorials were poured in by the merchants against the payment of custom-house duties; but the Home Government was firm, and their clamour had no effect, though it was kept up for many years. The establishment of a custom-house, and the enforcement of the navigation laws, proved to be two important pillars added to the civil government of the island.

The social condition of the resident population at this period, though somewhat modified for the better by late enactments, was still deplorable, and calculated to retard

settlement in the country. The administration of justice, especially in the outlying places, was characterised by gross partiality, the resident magistrates being, in many cases, incompetent men, and too often open to bribery. The fishermen obtained advances in supplies of necessary articles of food and clothing at the commencement of each fishing season, the charges being so high that at the close little remained of their wages to carry them through the winter. Another source of demoralisation was that employers freely supplied their own servants with intoxicating liquors, at a high price, taking care to reimburse themselves out of their wages for these articles, as well as for neglect of duty which such practices rendered extremely frequent. When accounts were balanced between masters and servants, at the close of the fishing season, the latter too often found themselves in debt to the former. Being without employment and utterly destitute, many took advantage of trading vessels from New England, to leave the island for the continent of America; whilst those who remained were often tempted by want to commit thefts or acts of violence, or obliged, if they could find masters, to hire themselves on any terms for the ensuing season, in order to obtain the means of subsistence. It was a common practice at this time to attach or stop the servants' wages in their masters' hands, at any time during the fishing season, for debts contracted to the publicans, or for balances claimed by their former employers.

To these social disorders was added the bitter ingredient of religious persecution, directed against those who held the Roman Catholic faith, and who now formed a very considerable proportion of the population. The intercourse with Ireland had led to the settlement in Newfoundland of numbers of Irish, who had fled from the oppression of the penal laws. To the shame and disgrace of Protestantism these exiles arrived in Newfoundland only to find that the spirit

of persecution was rampant even in that distant colony. All Government officials, before being installed, were obliged to sign a declaration in which they abjured the distinctive tenets of Catholicism. In 1755, Governor Darrell, finding that numbers of people still continued to arrive from Ireland, issued a proclamation commanding all masters of vessels, who brought out Irish passengers, to carry them back at the close of the fishing season. A special tax was levied on Roman Catholics, and the celebration of the mass was made a penal offence. A few disguised priests had come out in fishing vessels to minister in secret among their co-religionists; but, owing to the strict surveillance of the local government, they had no fixed abode, and could not safely remain. The severity which Roman Catholics experienced at the hands of the authorities will best be understood by a reference to some of the legal records of the period. A Court was held at Harbour Main, September 25th, 1755, at which an order was issued to the magistrates, commanding that a certain individual who had permitted a Roman Catholic priest to celebrate mass in one of his "fish-rooms or store-houses, he being present himself, which is contrary to law, and against our sovereign lord the King, should be fined in the sum of 50*l.*, and that the fish-room in which mass was said should be demolished, and that the owner should sell all his possessions and quit the harbour." Another who was present at the same celebration was fined in the sum of 20*l.*, and had his house and stage burned to the ground. Others who, though not present at mass in Harbour Main, avowed themselves Roman Catholics, were fined 10*l.* each and ordered to leave the settlement. The same penalties were inflicted elsewhere, and wherever it was known that a mass had been celebrated the place was ordered to be burned or demolished, as though a curse clung to the very walls. We need not be surprised at these manifestations of

the spirit of religious persecution, when we remember how little the principles of religious freedom were understood or practised in Great Britain at the same period; and how, under the penal laws in Ireland, Roman Catholics were prohibited from educating their children, or acquiring freehold property, and were excluded from all the liberal professions; while, if the son of a Catholic became a Protestant, he could dispossess his father of the fee-simple of his estate as a reward for his conversion. Persecution was the vice of the age, and was practised by all parties in turn when the opportunity offered. This licensed hostility towards Catholics in Newfoundland continued for nearly half a century, and was at length ended by a royal proclamation in 1784, whereby liberty of conscience was granted, and the free exercise of modes of religious worship. But the spirit of religious intolerance did not die out at once. Six years after this proclamation, in 1790, we find Governor Milbanke making the following reply to the Rev. D. O'Donnell, who applied for leave to build a Roman Catholic chapel in an outport: "The Governor acquaints Mr. O'Donnell that, so far from being disposed to allow of an increase of places of religious worship for the Roman Catholics of the island, he very seriously intends next year to lay those established already under particular restrictions. Mr. O'Donnell must be aware that it is not the interest of Great Britain to encourage people to winter in Newfoundland, and he cannot be ignorant that many of the lower order who would now stay, would, if it were not for the convenience with which they obtain absolution here, go home for it, at least once in two or three years; and the Governor has been misinformed if Mr. O'Donnell, instead of advising his hearers to return to Ireland, does not rather encourage them to winter in this country.—On board the *Salisbury*, St. John's, November 2nd, 1790." Such was the condition of society in New-

foundland only ninety-two years ago! Settlers were still regarded in the light of intruders, religious toleration was only beginning to dawn. The stormy ocean alone was free to the people, and on its precarious harvests they had to subsist. The wealth which their toil won from the deep did not remain in the island, but went to enrich other countries. We cannot but admire the energy of a people who, amid these discouragements and tyrannies, continued to cling to the soil, bravely pioneering the way for happier generations to come.

The years following the Treaty of Paris in 1763 were marked by a decided increase in the products of the Newfoundland fisheries, which in 1765 amounted to 493,654 quintals, being an increase in two years of 145,360 quintals of codfish. In 1764, Newfoundland was fortunate enough to have appointed to the governorship, Captain, better known as Sir Hugh Palliser, who presided over its affairs for four years. A man of capacity and conscientiousness, he devoted himself earnestly to a study of the fisheries and the condition of the inhabitants. He soon recognised the sufferings to which the resident population were subjected, and his humanity led him patiently to investigate the causes and to devise remedies for them. His first care was to regulate the relations which existed between British and French subjects, who had a concurrent right of fishing in the waters of the same coast, the sovereignty of which belonged to Britain. While he secured the French in the exercise of all the rights and privileges acquired by the Treaties of Utrecht and Paris, and ordered that they were to be allowed to prosecute the fishery, within the limits assigned them, without molestation, he also clearly recognised that within these limits they had no superiority over British fishermen, and no exclusive right whatever. He successfully regulated the salmon fishery, which subsequently increased greatly in extent and value. The condition of Labrador

also engaged his attention. A number of Europeans had taken up their abode in a part of this territory, and by wantonly injuring had alienated the natives; while at the same time, much confusion had arisen from some Canadians who claimed to have vested rights over certain tracts of land. He personally surveyed the district, and by various wise measures he greatly modified these local troubles, and received the thanks of the merchants and their agents on the coast of Labrador. So many, however, were the difficulties and disputes arising from the former connection of the country with Canada, that in 1773 it was deemed advisable to restore Labrador to the jurisdiction of that province. Previous to this step, Governor Palliser, who took a warm interest in the Esquimaux of Labrador, issued a passport to four of the brethren of the *Unitas Fratrum*, or Moravians, who wished to establish missions among these savages, with a view to their conversion to Christianity. All His Majesty's subjects were commanded to render every aid and friendly assistance to these excellent men, whose labours have been attended with a great amount of Christian good amongst the Esquimaux of Labrador.

Governor Palliser's interest in Newfoundland did not terminate with the expiration of his term of office. He was succeeded by the Hon. Captain John Byron, who in his turn was followed by Commodore Mullineaux, afterwards Lord Shuldham. But on Palliser's return to England, he was called upon to aid in drawing up an Act, now loudly called for, to remedy some of the more crying evils of the old system. This new Act was passed by the British Parliament in 1775. It is entitled Statute 15 George III. c. 31. In the island it is known as Palliser's Act. Its design was not to abolish the obnoxious Statute 10 & 11 William III., but to remedy some of its defects, and enforce its provisions under special penalties. It still aimed at keeping alive the principle of a ship fishery,

carried on from England. In order to secure the return of the fishermen to England, it empowered the masters to detain forty shillings out of their wages for paying their passage home. It forbade masters to suffer seamen to take up more than half their wages in articles of supply, and obliged them to pay the other half in cash or good bills on England or Ireland. It gave the fishermen a lien on the fish and oil for their wages, and provided bounties for the encouragement of industry in the taking of fish. These were undoubtedly great improvements, and helped to terminate the contentions between masters and servants, securing to the latter their wages at the close of the fishing season.

The records of this period show that the resident population went on steadily augmenting. In addition to the natural increase, Ireland continued to send emigrants to Newfoundland in considerable numbers, notwithstanding the disabilities under which the adherents of Catholicism still laboured. Harsh regulations against the Irish were enforced by successive governors. One of these was that not more than two Roman Catholic men should dwell in one house during the winter, except such as had Protestant masters; and another that all Roman Catholic children, born in the country, should be baptized according to law. These stringent regulations, however, failed to deter Irish emigration from the old country. Not only men, and women under the protection of their husbands, but even women by themselves arrived at St. John's every summer.

In spite of these new-comers, it must be noted that whatever improvements had hitherto taken place, the country was still regarded by the Government in the light of a mere Fishery. There was as yet no legal provision for the acquisition of property in the soil. Only the temporary use of portions of the shore for fishery purposes was

allowed. No one could lawfully own any portion of the land for the purposes of cultivation. It was nevertheless found to be altogether impracticable to try and stop some of the settlers from enclosing plots of ground for gardens or pasture. Not a few favoured individuals eventually succeeded in obtaining a recognition of their right of property, in such enclosures, from the governors. After a time, a conflict arose between these so-called private rights and those of the masters of fishing vessels, in regard to their respective boundaries. The result was an order from Governor Palliser, disallowing any titles to land, and declaring that "no Governor or other person having been empowered to parcel out and divide lands, or to pass patents or grants for lands in this country, the whole must be deemed, according to the Fishing Act, a public common, and free to all persons to cut wood for the uses of the fishery, for fuel, etc., or to turn cattle upon, or to cut grass." Further, it was ordered that "if any person hereinafter shall presume to fence or to enclose any lands, contrary to this order, all persons are at liberty to take down such fences or enclosures."

A new source of trouble now presented itself, entailing severe sufferings upon the whole population in connection with the war between Great Britain and her revolted colonies in North America. This war which, raging for seven years, terminated in 1782 with England's recognition of the independence of the United States, was seriously detrimental to the interests of Newfoundland. The first Congress passed a decree on the 5th of September, 1774, forbidding all exports to the British possessions. This blow fell with special severity upon the resident inhabitants of Newfoundland, as well as on those who carried on the fishery from England, as for a lengthened period they had been accustomed to obtain their necessary supplies from the New England States. A sudden arrest of this com-

mercial intercourse threatened the colony with absolute famine. To meet the difficulty, vessels were at once detached from the fishery and sent to Ireland, in ballast, to procure provisions. Gloom and despondency prevailed throughout the island, coupled for a time with scarcity and want. American privateers appeared off the coasts, and, entering the harbours, destroyed a great deal of valuable property. They were eventually held in check by the English cruisers, which captured or burnt not a few of them; but the war nevertheless inflicted great hardship and inconvenience upon Newfoundland. To add to the trials of the people, in 1755 one of the most severe storms ever known in those latitudes swept over the island. Hundreds of fishing-boats were destroyed, many great ships went by the board, and not fewer than three hundred men perished. The sea suddenly rose twenty feet above its usual level, causing immense destruction on land, as well as in the harbours. To this distress, arising from natural causes, were added sufferings from the want of supplies which had been cut off by the war.

The attention of successive governors was mainly taken up in providing for the safety of the capital, and the protection of the country generally. In this they were loyally aided and supported by the great majority of the people. At various points which were specially exposed, they constructed batteries, mounted guns and manned them. The defences of St. John's were greatly strengthened. A new fort, called Fort Townshend, was erected on a height commanding the harbour from its north-western side. The garrison consisted of 459 regular soldiers and 200 volunteers, and 1,500 stand of arms were sent out from England, and distributed in the various harbours, so as to enable the people to defend themselves. Ships of war were kept constantly cruising around the coast. When,

in 1778, France joined the United States, and agreed to support them in their struggle for independence, Rear-Admiral Montague, then Governor of Newfoundland, captured the islands of St. Pierre and Miquelon, and sent 1,932 of the French inhabitants home to their native country.

The unhappy war between England and her North American colonies terminated in the peace of 1782, and the acknowledgment of the independence of the United States. This introduced a change for the better in Newfoundland. Its trade and industries revived. The population were no longer harassed by privateers and the dread of invasion. Vice-Admiral John Campbell was appointed Governor. He proved to be a man of an enlightened and of a liberal spirit. To him the people were indebted for terminating religious intolerance and persecution. In 1784, he issued an order, addressed to the magistrates throughout the island, which left no room for doubt or cavil. "Pursuant to the King's instructions to me," ran this manifesto, "you are to allow all persons inhabiting this island to have full liberty of conscience, and the free exercise of all such modes of religious worship as are not prohibited by law, provided they be content with a quiet and peaceable enjoyment of the same, not giving offence or scandal to Government." The year which saw this happy change, brought the Rev. Dr. O'Donnell, a Roman Catholic clergyman, to the island, with full liberty to perform all the rites and ceremonies of his Church. For a number of years he was the only Prefect Apostolic, that is, a priest exercising episcopal jurisdiction in Newfoundland; and it was not till 1796 that Dr. O'Donnell was consecrated Vicar Apostolic of the island and Bishop of Thyatira *in partibus*. He was the first regular authorised Roman Catholic missionary in the island after it became a purely British settlement.

In 1786, Rear-Admiral Elliot was appointed Governor of the island, and in the same year His Royal Highness Prince William Henry, afterwards King William IV., visited Newfoundland in His Majesty's ship *Pegasus*, of which he was captain, and which lay for some time in the harbour of Placentia. The expenses of the civil government of the island at this time were very moderate, amounting to no more than 1182*l.* per annum, of which 500*l.* was appropriated as the Governor's salary. The fisheries meantime were increasing, the return for 1785. showing that 591,276 quintals of dried codfish were shipped to foreign markets. Commercial intercourse with the United States of America was resumed at this time, and an Act was passed permitting the importation of bread, corn, and live stock from the States, but only in British vessels.

We have seen how the authority of the fishing admirals gradually came to an end; the commanders of the King's ships, who visited the island in summer, assuming the administration of justice, and holding courts in which all causes of complaints were determined. The Governor gave to these commanders the title of Surrogates, their office implying that they had been legally deputed by the Governor to act as his deputies. Under this character the authority of the Governor was beneficially exercised. The Courts of Session, composed of the justices of the peace for the several districts, administered justice in the absence of the commanders during the winter season. The Vice-Admiralty Court, established in 1765, had been gradually extending its jurisdiction, till it assumed the right to adjudicate in matters of debt and others of a civil nature. A new Act was now passed (26 George III. c. 26), continuing the bounties on the fisheries for ten years, and abridging the powers of the Court of Vice-Admiralty. To the latter arrangement a bold and pertinacious resistance was made; and at length it was found necessary to put an

end to the whole of the judicature of Surrogates, Courts of Session, and Vice-Admiralty, which rested on very weak foundations. After a variety of imperfect attempts, an Act was passed in 1792, creating a Supreme Court of Judicature of the Island of Newfoundland, with full power to hold plea of all crimes and misdemeanours, and to determine suits and complaints of a civil nature, according to the law of England, as far as it was applicable. This Court was to be under a Chief Justice appointed by His Majesty. Power was also given by the same Act to the Governor to constitute Courts of civil jurisdiction, to be called Surrogate Courts, in other parts of the island. Chief Justice Reeves, a man of sound legal knowledge and extensive acquirements, was sent out to open the Supreme Court. He was instructed to report to the British Government on the condition of the country, so as to furnish facts and figures which might be useful in future legislation. He published a work under the title of "A History of the Government of Newfoundland," which is, as far as it goes, the ablest and most trustworthy book on the country. The outcome of his reports was another Act of Parliament, passed in 1793, by which the Supreme Court was established, and in 1809 was made perpetual, together with the Courts of Judicature instituted under it. The constitution of a Supreme Court marked a new era in Newfoundland, and terminated that confusion and continual contention which had previously marked the administration of justice, and been productive of innumerable evils. Among the benefactors of Newfoundland, Chief Justice Reeves deserves to hold a foremost place. In his masterly history of the Government he faithfully and fearlessly laid bare the causes of the evils which afflicted the country. He proved, with conclusive logic and apt illustrations, that the ascendancy so long maintained by a mercantile monopoly, for narrow and selfish purposes,

had prevented the settlement of the country, the development of its resources, and the establishment of a proper system for the administration of justice. No other British colony had ever been dealt with on the cruel lines laid down for Newfoundland. Chief Justice Reeves exhibited that fact in strong colours. He showed also that the administration of its internal affairs had been of the most inefficient description, because the merchant adventurers wished to keep all power in their own hands, and to exclude all competition from without or within. The changes Chief Justice Reeves effected in the administration of justice were most beneficial; but custom is so difficult to change that it was not till 1824 that an Act was passed, completely abolishing the old anomalous Surrogate and Sessions Courts, and appointing two judges to assist the Chief Justice. The island was then divided into three districts, in each of which a Court was appointed to be held every year.

Before passing on from this period it is important to recall the fact that the Treaty of Versailles, concluded in 1783, effected an important change in the boundaries of that portion of the coast of Newfoundland on which the French possessed certain fishery privileges, by virtue of the Treaty of Utrecht. All the stipulations of the latter agreement were confirmed with one exception, namely, that the King of France renounced the right of fishing from Cape Bonavista to Cape St. John, granted him by the Treaty of Utrecht, so as to prevent quarrels which had hitherto arisen between the two nations of France and England; and agreed that henceforth the French fishery should commence at the said Cape St. John, situated on the eastern coast of Newfoundland, in about fifty degrees of north latitude, and going round to the north, and down the western coast of Newfoundland, should have for boundary the place called Cape Ray, situated in forty-seven degrees

fifteen minutes of north latitude. By the same treaty permission was given to the citizens of the United States to fish on the coasts of Newfoundland, on the former footing; but they were allowed to cure and dry only "in the unsettled bays, harbours, and creeks of Nova Scotia, the Magdalen Islands, and Labrador." So far as Newfoundland was concerned, the Treaty of Versailles, by clearly defining the limits within which the French were to exercise their privileges, removed a source of contention arising from uncertainty of boundaries, and ended the incessant quarrels which had been going on regarding this point. Unfortunately, however, the ambiguity of the language used in another part of the treaty gave rise to even more serious misunderstandings, which continue to this very hour, and have been the source of constant contentions between the French and Newfoundlanders. The stipulation referred to ran as follows: "And that the fishermen of the two nations may not give cause for daily quarrels, His Britannic Majesty was pleased to engage that he would take the most positive measures for preventing his subjects from interrupting in any manner, by their competition, the fishing of the French during the temporary exercise thereof, which is granted to them upon the coasts of the Island of Newfoundland, and that he would for that purpose cause the permanent settlements which should be formed there to be removed, and that he would give orders that the French fishermen should not be incommoded in the cutting of wood necessary for the repair of their scaffolds, huts, and fishing-boats."

This is the celebrated section of the Treaty of Versailles, over which volumes of diplomatic correspondence have been written, and countless battles fought without any satisfactory result. The French hold that, from the phraseology employed, the treaty gave them an extension of their former privileges, by securing to them an

exclusive right over the coasts and waters in question. But neither by any British Government, nor by any government or legislature in Newfoundland, has this claim been allowed. The Crown law officers of England, when the matter was referred to them, declared as their interpretation of the language of the treaty, "that if there be room in these districts for the fishermen of both nations to fish, without interfering with each other, this country is not bound to prevent her subjects fishing there." The French have clung to their treaty rights with deathlike pertinacity. England, while maintaining that her subjects have a right to fish concurrently with the French in these waters, has always held this right in abeyance, and discouraged the exercise of it; and, until 1881, refused to recognise settlers on that portion of the coast as subjects entitled to the protection of law and representation in the local legislature. Happily this policy is now reversed. Territorial jurisdiction over the whole island is conceded to the Government of Newfoundland; the power of making land grants and issuing mining licences is accorded, and representation of the inhabitants in the local Parliament is secured, the French fishery rights being, of course, strictly recognised. It now remains for diplomacy to close, in an equally satisfactory manner, the conflicting claims to exclusive and concurrent rights of fishing.

In 1785 the estimated resident population of Newfoundland was 10,244, of whom about 1,600 were resident in St. John's. This shows an increase of 2,744 over the previous twenty-two years.

In 1787 a bishop of the Church of England was appointed for Nova Scotia, and Newfoundland was attached to his see.

The administration at this time was of so primitive a character that the Governor regulated the price of food, and fixed it by proclamation. The trader who disregarded

the official tariff was liable to the infliction of a heavy fine. Newfoundland, even when it had power to act otherwise, elected to pass through many of the curious stages which the mother country had traversed during her own slow but glorious march of constitutional liberty.

CHAPTER V.

“THROUGH THE FIRE.”

[1793-1861.]

The last French attack on the island—Newfoundlanders not allowed to acquire land or build houses—Strange examples of the rigour of the law of William III.—Refugees from Ireland—Roman Catholic disabilities—Mutiny of the Royal Newfoundland Regiment—A landmark of improvement—Houses built without Imperial permission—The first newspaper—The Red Indians—A tragical expedition—Governor Duckworth’s enlightened administration—The rise of St. John’s—A period of inflation—The Treaty of Paris—The great fire of 1816—Proposals of depopulation—Agitation for local legislative power—Expansion of popular ideas—Representative government conferred on the island in 1832—Hostility between the two Chambers—Religious and political rancour—The fire of 1846—Twelve thousand people homeless—The proposed Anglo-French Convention of 1857—Riot and tumult—Peace and progress.

THE French Revolution culminating in a declaration of war against England, made the year 1793 one of especial importance to Newfoundland. Preparations were again active in anticipation of a descent upon the island. Admiral Wallace, the newly-appointed Governor, maintained the small force under his command at St. John’s in the highest state of efficiency. The forts were strengthened, the batteries made ready for action. Volunteers flocked to the national standard. A spirit of loyalty manifested itself on all hands. In addition to the forma-

tion of a volunteer force, the Governor was authorised to raise a Newfoundland corps of six hundred men, a step which was attended with great success. In September, 1796, a French squadron appeared off the harbour of St. John's. The fortifications were manned, the gunners at their posts awaited the expected assault, the British flag flew defiantly over the town. More than once in its previous history St. John's had proved to the French a difficult nut to crack. On this last occasion of their hostile survey of the place they passed on without even challenging a shot. The settlement at Bay of Bulls, a short distance south of the capital, however, felt the power of the enemy. They burnt the defenceless place and plundered the vessels that lay at anchor off the coast. Satisfied with this small exploit, the squadron put to sea and disappeared. Notwithstanding the gigantic struggle between the mother country and France, that went on for many years after this incident, Newfoundland was left at peace ever afterwards. No other force hostile to England has since these exciting days fired the warlike ardour of the isle, or threatened the repose of its rising settlements.

Admiral Waldegrave became Governor in 1796. He proved to be a very humane and enlightened ruler. Finding many of the people in very poor circumstances, he organised a plan for relieving their wants by means of a voluntary annual subscription among the wealthier inhabitants. There was a turbulent spirit as well as much undeserved poverty in the island, the result of a lax government, which was more particularly weak during the winter months. An order was therefore obtained for the Chief Justice to winter in the island. With the Governor, this high functionary was in the habit of spending the winter in England. The times were everywhere troublous, and the Governor felt the necessity of vigilance on the part of the civil power in the proper administration of justice and the

preservation of order. At the same time he showed a keen sympathy for the local fishermen, whose condition was at this time very deplorable. In one of his despatches he speaks of the conduct of the merchants at Burin, who had complained to him of the emigration of some of the inhabitants to Nova Scotia, in terms which demonstrate only too clearly the social state of the people. "One point seems clear," he says, "and this is, that unless these poor wretches emigrate they must starve; for how can it be otherwise while the merchant has the power of setting his own price on the supplies issued to the fishermen, and on the fish which these people catch for him? Thus we see a set of unfortunate beings worked like slaves and hazarding their lives, when at the expiration of their term (however successful their exertions) they find themselves not only without gain, but so deeply indebted as forces them to emigrate, or drives them to despair." He further relates how the merchants refused to allow a tax of sixpence per gallon on rum, to help to defray administrative expenses; and he describes them as "opposed to every measure of government which a Governor may think proper to propose for the general benefit of the island."

It seems strange that it did not occur to the governors that the right way to relieve the fishermen from their poverty and serfdom, was to encourage the resident population to cultivate the soil, as a means of adding to their comforts, and securing their independence. It must be remembered, however, that the governors were naval men, who were inclined naturally to sustain the old theory, that the island was to be preserved as a fishing-station and training-port for seamen, not as a home for a civilised community. Even under Waldegrave all grants of land were sternly refused. The shores were declared to be for the use of the migratory fishermen who

came from England, and no local appropriations could therefore be allowed. This policy, enforced by law, and cordially approved by the merchant class, was carried out by successive naval governors, with the sternest quarterdeck discipline. Two instances may be quoted by way of illustration. In 1790 Governor Milbanke discovered that a certain Alexander Long had, without permission, erected a house. He immediately wrote to the magistrate declaring that "it must and shall come down." In vain did the builder plead that "it was only a covering for his potato cellar." The sharp-eyed Governor surveyed the structure, and found, he declares, that "it had a complete chimney, if not two, and lodging for at least six or eight dieters;" so that it was clearly intended for a human habitation, and must be pulled down by the sheriff. To remove all doubt upon the matter, he announced, in the same letter, that if in future any building should be erected, except for the salting and curing of fish, "it must unavoidably be taken down and removed." He added: "It may not be amiss at the same time to inform you I am also directed not to allow any possession as private property to be taken of, or any right of private property whatever to be acknowledged in, any land whatever, which is not actually employed in the fishery, in terms of the aforementioned Act, 10 & 11 William III., whether possessed by pretended grants from former governors, or from any other (no matter what) unwarrantable pretences. The sheriff will have directions about the removal of the house above-mentioned, which you will no doubt assist him in executing."

No less rigorous was Admiral Waldegrave, who was Governor for three years ending 1799. He had issued orders to the sheriff prohibiting any erections during his absence in the winter. Finding on his return that a Mrs. Gill had audaciously erected a fence, on the plea that she

had received a grant from a former governor of a piece of ground, and that two other individuals had built "sheds," he sharply rebuked the sheriff, and ordered the sheds to be taken down; and at the same time he prohibited chimneys, or even the lighting of fires in sheds, and threatened the sheriff with dismissal if such deeds were repeated. When about to take his departure, he put on record, for the benefit of his successor, that he had made no promise of any grant of land, save one to the officer commanding the troops, which was not to be held by any other person.

These restrictions pressed so hardly on the people, now considerably increased in numbers, that even the merchants began at last to see that it would be for their advantage to have a resident population, instead of bringing out fishermen from Britain each year. They petitioned Governor Waldegrave for a relaxation of the rule requiring the departure of all fishermen at the end of each season. They even went so far as to suggest that, in some cases, the inclosure of portions of unoccupied land might be permitted with advantage. The Governor did not respond to their representations. It is evident, however, that new ideas were fermenting in the minds of men, when such sweeping changes and daring innovations were advocated by the conservative class. The memory of Governor Waldegrave, in spite of his eccentricities, was long deservedly respected. The first to institute charitable societies, he fostered education, and secured the erection of a new church in St. John's. Notwithstanding the conflict raging between England and France, Newfoundland went on increasing in population and wealth. All competitors in the fisheries were swept from the seas. The fish markets of Europe were exclusively in the hands of the merchants of this country, so that fish rose to an unprecedented price. When Governor

Waldegrave took his departure in 1799, there were four hundred vessels engaged in the trade of the country, and about two thousand boats. The export of codfish reached half a million of quintals. The capital invested in the fishery of cod, salmon, and seals was not less than a million and a half pounds sterling. This degree of prosperity was reached, although settlement was prohibited, and those who remained in winter were chiefly persons connected with the trade of the country, or those who were too poor to make the annual voyage home. The vast wealth realised by the fisheries all went to enrich other lands. None of it was spent in the improvement of Newfoundland, or in the promotion of civilisation among the resident population.

When the social disadvantages under which the population was gradually forming are taken into account, it is not wonderful that disorder, immorality, and crime should have prevailed more or less. Indeed, all things considered, the wonder is to find such a degree of order and respect for law, and for the rules of morality, among a people for whom so little was done in the way of education and religious instruction. In many of the smaller and more remote settlements, successive generations lived and died without education or religious teaching of any kind. The lives of the people were rendered hard and often miserable for the express purpose of driving them away. The governors of those days considered that loyalty to England rendered it imperative on them to depopulate Newfoundland.

In the face of all these severe discouragements the settlers held their ground, increased in numbers, and improved their social condition. However slow their progress, that they advanced at all furnishes abundant proof that among these hardy pioneers there were men of the right stamp for building up a new community, men of moral worth and force of character, who saw, in the midst of

their rough surroundings, that here was a spot which might one day be made into a desirable home for themselves and their children. No doubt, along with this robust element there was a baser intermixture of people from the old land—spendthrifts and criminals flying from the consequences of their misdeeds to a country where they were safe from the arm of the law. Debt, want, and oppression drove many to emigrate in those troubled times. They carried with them the embittered memories of their wrongs. Many from Ireland, especially after the troubles of 1798, found a refuge among their kindred or countrymen on the shores of Newfoundland. The Saxon strength of the settlements was supplied from England, numbers of those who came out to prosecute the fishery remaining behind at the close of each fishing season. The advancing prosperity of the colony, and the increased value of the fishery products, tended to attract other classes of emigrants.

As population increased the attention of the Churches was drawn to the spiritual destitution of the people. The Church of England, acting through the Society for the Propagation of the Gospel, endeavoured to provide for the wants of her scattered children. Clergymen left the old country, and laboured faithfully in St. John's, Harbour Grace, Trinity, and other places. As early as 1786 Wesleyan Methodism was introduced, and gradually attained a vigorous growth. Religious toleration being proclaimed, many priests of the Church of Rome appeared in the island. They toiled with commendable devotion among their flocks, loyally battling with hardships and privations. Secular and Sunday schools were opened for the education of the young, in connection with the different churches. These influences gradually effected a change for the better among this long-neglected people.

Such was the condition of things when, in the year 1800, a serious alarm was created by the discovery of a mutinous plot among the soldiers stationed in St. John's, composing the Royal Newfoundland Regiment, which had been enlisted chiefly from among the populace. The conspirators appear to have had sympathisers and adherents among the more turbulent and ignorant of the lower classes, who were prepared to act in concert with the mutineers. It was believed that a secret society was at the root of the mischief. The plan of the mutineers was to desert with their arms, and, being joined by their friends outside, to plunder St. John's, and afterwards escape to the United States. Had the conspiracy not been detected in time serious results must have followed, involving robbery and assassination, not alone in St. John's but throughout the island, wherever disaffection spread. The discovery of the plot was made by the Roman Catholic bishop, Dr. O'Donnell, who promptly informed the commanding officer, Major-General Skerret, of the impending peril. This loyal prelate had already exerted his influence among his own flock to counteract the evil influences that had been at work, and to prevent an outbreak. The commanding officer acted with great promptitude and decision in dealing with the soldiers, some of whom were tried by court-martial and executed. The regiment was relieved by another from Halifax, and the alarm speedily subsided. All classes felt and acknowledged the debt of gratitude due to Bishop O'Donnell for his conduct on this occasion. During the whole time of his residence in Newfoundland this excellent man laboured to advance the best interests of the people, to promote harmony and kindly feeling between Protestants and Catholics, and to counteract sectarian animosities.

To mark their sense of his patriotic services the British Government bestowed on Bishop O'Donnell a pension of

50*l.* per annum—a more munificent gift than that bestowed by James on "him that found the island," it is true, but inadequate as a reward for distinguished service, and hardly worthy of the dignity of a British Government.

Admiral Gambier was appointed Governor in 1802. At this date the population of St. John's was 3,420, of whom 1,139 were Protestants and 2,281 Catholics. Governor Gambier endeared himself to the colony through his benevolent efforts to ameliorate the condition of the people, by the introduction of sanitary arrangements in St. John's, and the promotion of charitable institutions for the relief of the poor. He worked hard to increase the number of the clergy, and the establishment of charity schools. During his administration, for the first time one of the native Indians was brought to St. John's. This was an Indian woman who had been captured by a fisherman. She is described as having been of a copper colour, with black eyes, and hair like that of a European. After spending a winter in St. John's, and being treated with great kindness, she was sent back to her tribe in charge of her captor, with conciliatory presents of various kinds; but nothing more was heard of her. It appears from a proclamation issued in 1769 that great cruelties had been practised on the aborigines by the rude fishermen of those days, who often destroyed them without provocation or excuse. A proclamation denounced these barbarities, and threatened heavy penalties on any who should be guilty of such crimes. Strenuous efforts were made afterwards to open communications with the natives, but without result.

It is significant, regarding the system which still prevailed, to find that on his return to England Governor Gambier had to ask indemnity for granting a lease of eighty acres of waste ground for pasturage for sheep and cattle for the convenience of the people of St. John's. He was

succeeded in 1804 by Sir Erasmus Gower, during whose administration a most important work was carried out. He found that the waterside premises in the harbour of St. John's, designated ships' fishing-rooms, to the distance of two hundred yards from high-water mark, were nominally reserved for fishery purposes, but that the principal buildings of the town had literally been huddled into this space; there being no permission to erect permanent houses elsewhere. He succeeded in obtaining the consent of the British ministry to a new arrangement, by which the ground contiguous to the water was reserved for the purposes of a mercantile port, and the land higher up was sold in small lots for the erection of houses. A new road was laid down parallel with the harbour, at a distance of two hundred yards. It was not, however, until seven years afterwards, in 1811, that ships' fishing-rooms, now utterly disused for the original purposes, were finally abolished, and let for building purposes.

The annual rent of the ground thus disposed of by public auction, on leases of thirty years, amounted to 1,600*l.*—a proof of the increasing wealth of St. John's. Thus the old system of prohibiting the erection of houses without a written permission from the governor at last received its death-blow.

The improvement of the town dates from this event. Previously, owing to the instructions against building, and the irregularity in erecting some kind of shelter for the rapidly increasing population, the wooden huts were huddled together in such a way as to present a continual danger of fire. With the exception of one house the town was built entirely of wood. The principal thoroughfare was in one place not more than six feet wide. All the streets were narrow, unpaved, and unlighted. It is noteworthy to find the merchants of St. John's, in a memorial presented to His Royal Highness the Prince Regent, expressing their

great "surprise" that "an Act had been passed for taking away the public use of certain ships'-rooms in the town of St. John's," complaining of "the exorbitant" terms of the leases, and asking that the rents should be appropriated to the improvement of the town and harbour; a request which was not complied with.

In 1804 the resident population of Newfoundland was found to be 20,380, to which may be added 4,000 employed in the fisheries, who returned to the United Kingdom at the close of the season. Of the resident population 12,345 were returned as Protestants, and 8,035 as Roman Catholics. The quantity of codfish taken was 609,684 quintals. The seal fishery had now attained considerable dimensions, 106,739 seals having been killed in 1804. The salmon fishery yielded 1,197 tierces. Three years later, in 1807, the population of St. John's had risen to 5,057. The immigration from Ireland had added considerably to the number of the inhabitants.

A very serious grievance, connected mainly with the out-port population, was brought under the notice of Governor Gower by a petition from the inhabitants of Fogo Island, in which they complained that "through the imposition of the merchants or their agents in Fogo by their exorbitant prices on shop goods and provisions, they were from year to year held in debt, so as not daring to find fault, fearing they might starve at the approach of every winter." They further stated "that the said merchants arrogate to themselves a power not warranted by any law, in selling to us every article of theirs at any price they think fit, and taking from your petitioners the produce of the whole year at whatsoever price they think fit to give. In short, let it suffice to inform your Excellency that they take on themselves to price their own goods and ours also, as they think most convenient to them." This petition accentuates the evils of the system of credit at this time universal in the colony, by

which the supplying merchant made advances in goods to the fishermen at the commencement of the season, taking payment at the close in the products of the fishing. The Governor endeavoured to mitigate this cruel abuse of power by a proclamation "requiring the merchants to make known to their dealers before the 15th. day of August in every year, or at the time of delivery, the prices of provisions and other commodities sold by them, and the prices they will give for fish and oil, and to fix a schedule thereof in some conspicuous part of their respective stores." It is to be feared this well-meant regulation had but little effect.

The partial removal of the old restrictions on settlement, and the subsequent improvement in the social condition of the people, gave the settlers new hope and fresh courage. They began to feel that brighter days were in store for them. They were not misled. From this time may be dated the commencement of an era of progress. The advance was slow, no doubt, because of the numerous obstacles that stood in the way, but it was a firm onward movement that has never halted. The years 1805 and 1806 witnessed the introduction into Newfoundland of two of the great resources of civilisation, a post-office and a newspaper. Previously letters were sent by any casual conveyance; now a postmaster was appointed, but as yet he had no backing of subsidised mail-steamers. Merchant vessels carried the letter-bags. The first newspaper was *The Royal Gazette*. It was published by John Ryan, and is still in existence. The liberty of the press was rather restricted in those days. The publisher was bound under heavy penalties to submit, prior to publication, the contents of each number of his paper to the magistrates in the Court of Sessions, and "not to insert in the said paper any matter which in their opinion, or in the opinion of the Governor, may tend to disturb the peace of His Majesty's subjects." With such a curb to wear it is likely that *The*

Royal Gazette proved a very mild and harmless journal. It was the precursor, however, of a long array of newspapers, which appeared in due time and claimed and exercised sufficient "freedom of the press." Another hopeful symptom was the formation of the Benevolent Irish Society, its object being to relieve the wants and distresses of Irishmen. In due time the other nationalities represented in the population followed with the St. George's Society, the St. Andrew's Society, and the British Society, all existing to-day, well managed and useful institutions.

Admiral Holloway was the next Governor. He arrived in 1807, and one of his first acts was to tighten the reins on *The Royal Gazette*, one of the conditions on which he permitted its publication being, that nothing should appear in its columns "indicating anything inflammatory against the Government of Great Britain or its dependencies; and never to give or suffer any opinion to be given upon the policy of other nations, but to confine the paper solely for what was to the benefit of commerce, and the inhabitants of this Government and others trading with it." Some of the most noteworthy events during the administration of Governor Holloway were the reannexation of Labrador to the Government of Newfoundland in 1809, and the permanent establishment of the judicial system which had already been in operation for some years, and which had been found to work well.

When, in 1810, Sir John Thomas Duckworth became Governor, his commission appointed him Governor and Commander-in-Chief over the Island of Newfoundland and the islands adjacent, including the Islands of St. Pierre and Miquelon, and all the coast of Labrador, from the river St. John's to Hudson's Straits, the Island of Anticosti, and others adjacent. Governor Duckworth proved to be a ruler possessed of activity and intelligence. In order to make himself acquainted with the condition and wants of the

people he made a voyage, which extended to the principal northern settlements and also to Labrador. When in the latter region, he addressed a proclamation to the Micmacs, Esquimaux, and others, assuring them of the protection of the king, and his readiness to redress their grievances, and do them any service in his power. He further exhorted them to live peaceably together, and avoid all causes of violence and bloodshed. He took a great interest in the Red Indians of Newfoundland, and sent a party under Lieutenant Buchan, R.N., to open communications with a tribe on the river Exploits. The expedition had a tragical termination. Buchan met with the Indians after a march of one hundred and thirty miles into the interior. Having succeeded in calming their fears, he induced four of them to return with him to his camp in order to receive presents, leaving two marines with the tribe as hostages and pledges of good intentions. On returning with the presents to the Indian camp he found the bodies of the two marines lying on the ground, pierced with arrows and headless. Their treacherous murderers had fled.

During Governor Duckworth's administration an hospital was erected for the benefit of the labouring classes in times of sickness, partly by voluntary subscriptions among the wealthy classes, which the working people aided by a voluntary assessment of one penny in the pound on each servant's wages, and a shilling annually from each seaman coming into the port. It is needless to say that the hospital, which has since been enlarged from time to time, has proved an inestimable boon to the poor of the city and its suburbs. Governor Duckworth was also instrumental in carrying out the great improvement already referred to—the leasing of the ground around the harbour for wharves and sites for mercantile premises. During his administration, in 1812, the United States declared war against Great

Britain, and the Governor met with a ready response to his appeal to form a volunteer force for the protection of the island. Old forts were repaired and guns and ammunition supplied; but happily no enemy appeared, the powerful squadron then cruising in the surrounding waters rendering any attack hopeless.

In the report which Governor Duckworth presented to the Imperial authorities on the close of his term of office, he faithfully pointed out the fact that the circumstances of the colony had now completely changed, rendering an alteration in the administration of the laws imperative. The resident population, he stated, had increased so largely that the fisheries were mainly carried on by them, and it was now vain to attempt lessening their numbers or checking the increase. He therefore suggested that the antiquated statutes should be abrogated; that the ships' fishing-rooms reserved for the use of fishing vessels from England, should now be thrown open to the inhabitants; and that all impediments to the cultivation of the soil should be removed, so that the increasing numbers of the population might provide for their wants by agricultural pursuits, as well as by the fisheries. Like several of his predecessors, he had to complain of the conduct of the merchants, who strongly opposed a duty of sixpence per gallon which he imposed on rum, and one shilling and sixpence on other spirits. On this subject he said: "The merchants of St. John's have formed themselves into a society, and are making continual efforts for the acquisition of a power which ought not, in my opinion, to be vested in them."

These honest and enlightened representations were not without their effect. When the next Governor, Sir Richard Keats, was appointed in 1813, he was authorised to make grants of small portions of land to industrious persons. The traces of the old policy which doomed the island to

perpetual sterility did not, however, soon disappear; and the influence of the merchant class was long felt in retarding the cultivation of the soil by absurd restrictions, prompted by a fear that the people would be drawn off from the fishing industries, the source of their own wealth. From the earliest period their traditional policy had been to represent to the parent Government that the severity of the climate and the sterility of the soil presented insurmountable obstacles to cultivation. Even in these present days similar representations have been repeated, to the injury of the country. So strong was the feeling against Newfoundland at the date referred to, that permission to cultivate the soil, for which the people had long been begging, was at first granted reluctantly, and accompanied with such restrictions, that it was impossible for agriculture to make any great advances. There were no roads, nor any prospect of any being constructed; and only small plots of ground, four acres in extent, were granted on leases of twenty or thirty years, and subject to a quit-rent of from two shillings and sixpence per acre to ten and even twenty shillings per annum. Despite these unfavourable conditions, the number of applications for land was greater than could be met. In contrast to this hard usage was the policy pursued, at the very same time, by the British Government, in promoting the settlement of the neighbouring provinces of Nova Scotia, New Brunswick, and Canada. Millions of money were lavished by Government in promoting the settlement of these colonies. Large grants of land were offered free of charge; settlers were advertised for; their expenses were paid; means were provided for their subsistence till the land made returns; hundreds of miles of road were constructed; canals were made, and harbours were improved and fortified. On the other hand, not only was there no help given to Newfoundland, but a heavy rent was

charged for small patches of land, let on short leases. Every improvement was accomplished by the hard toil of the poor settlers themselves, not only without assistance, but in opposition to the wretched policy of the Government. Their labour rendered the lands valuable, and in return they were obliged to pay a rent, and were liable to be dispossessed of the soil reclaimed by their industry, at the termination of their leases, which could only be renewed on payment of a heavy fine. This cruelly obstructive policy was continued for many years, notwithstanding the representations of successive governors, and was only effectually ended when the colony obtained a legislature and the privilege of local self-government. Governor Keats, in one of his despatches, told the parent Government that St. John's had now grown into a large commercial town of ten thousand inhabitants; that the operations of the farmer and gardener were greatly needed, and were extending in spite of all restraints; that a thousand acres around the town were under cultivation, and many more inclosed, and that crops of hay, potatoes, and vegetables of all kinds were raised. "The environs of the town," he added, "the natural beauties of which are very striking, present to view several neat, well-cultivated, and productive little farms."

Another delusion that had long possessed the minds of British statesmen received at this time a complete extinction. The old theory, on which the preservation of the island as a fishing station had been urged, was that these fisheries were an invaluable nursery for British seamen. Now it was discovered that, in the case of ships of war visiting the island, the desertions of the seamen were more numerous than at any other place; and at the same time the immunity from impressment was a temptation to men in the United Kingdom, who dreaded such a measure, to transfer themselves to Newfoundland, where they were safe. Thus, so far

from being a nursery for men to take service in the royal navy, the island was discovered to be a refuge for those who were unwilling to serve.

While these changes were slowly working their way, and these improvements taking root, Newfoundland was enjoying a period of unexampled prosperity. During the long wars which followed the French Revolution, the Newfoundland merchants were relieved—first from the competition of the French, and then from that of the Americans. One after another the Continental markets opened to them a complete monopoly. The fishing seasons, too, were generally favourable. At the same time fish rose to three times its usual price, reaching at length forty-five shillings per quintal. The wages of the fishermen increased, and in consequence large numbers of emigrants, many of them from Ireland, sought a home in Newfoundland. In 1814 seven thousand arrived, and in the following year, when a crash was impending, there came four thousand more. From 1812 to 1816 St. John's doubled its population, though there was not a proportionate increase of houses for the accommodation of the new inhabitants. Princely fortunes were made by the capitalists engaged in the fisheries, some of them securing from 20,000*l.* to 40,000*l.* profits in a year. The value of the exports rose to 2,900,000*l.* per annum. But if wages were high the necessaries of life reached an enormous price. Flour was 8*l.* per barrel and pork 12*l.* per barrel. The fishermen spent their earnings lavishly at the stores of the merchants, never dreaming that the good times were near their close. Of all the great accumulation of capital at this time no part went to the permanent improvement of the country. When the capitalists had realised their fortunes they retired to enjoy them in other lands, and the country was no richer than before. No effort was made to open up roads or extend agriculture. Everybody was striving to

make money out of the fisheries. A large population had accumulated in a few years, and these were wholly dependent on an industry which now enjoyed an exceptional and artificial prosperity. All these circumstances prepared the way for the collapse which followed the termination of the war, and for two or three years of disaster and suffering through which the colony had now to pass.

The Treaty of Paris, 1814, which ended the long European conflict, followed by a treaty of peace with America, brought to an abrupt termination the abnormal prosperity which had attended the prosecution of the Newfoundland fisheries. By one of the provisions of that treaty, the French right of fishery on the banks of Newfoundland and on the coast of the island was replaced upon the footing on which it stood in 1792. Even greater privileges of fishing in British waters were conceded to the Americans. Thoroughly impressed with the importance of the fisheries, both the French and Americans at once established a system of bounties for their encouragement, and at the same time secured to their own fishermen a monopoly of their markets, by a prohibitory duty on the import of foreign fish. The result was a rapid development of the French and American fisheries on the Banks, and on the part of the coast conceded to them. Those who had been reaping rich harvests year after year now found themselves competing, on unequal terms, with foreigners who were sustained by bounties, and whose products met theirs in all fish-consuming countries. No provision had been made in prospect of such a change during the prosperous years which preceded it. The crash came at the close of 1815, bringing ruin and bankruptcy to a large proportion of the merchants and planters. The price of fish fell from forty-five to twelve shillings per quintal. Numbers of large mercantile firms became hopelessly involved. Others realised whatever property

remained and retired from the country. Only a few managed to weather the storm. The system of credit on which business was conducted added to the disaster. No less than nine hundred cases arising out of extensive failures came before the civil courts. It was estimated that bills to the value of a million sterling were returned protested in the disastrous years of 1815 and 1817, occasioned by the insolvency of houses engaged in the fisheries. The working and middle classes suffered with the rest. Supplies for the fisheries were suddenly cut off or curtailed. Multitudes were thus deprived of the means of earning their bread; while many, by the insolvency of their employers, failed to receive the wages earned during the summer. Nor was this all. The planters and fishermen had been in the habit of leaving their savings, during prosperous years, in the hands of the merchants. The greater part of this hardly-won money was swept away by the insolvency of their bankers.

It is estimated that the working class lost a sum little short of 400,000*l.* sterling. The large population, attracted by the exceptional prosperity of previous years, could not now, in their present depressed condition, be sustained by the fisheries. Large numbers were left unemployed, dependent on the charity of their neighbours. It became absolutely necessary to remove some of them. At the public expense many of the most destitute were shipped to Ireland, and over a thousand were sent to Halifax. Had the policy of colonisation been followed in preceding years, and a portion of the vast profits realised from the fisheries spent on the encouragement of agriculture, the disasters would have been greatly mitigated. The bitter fruits of the old restrictive system were now to be gathered, and the innocent had to suffer with the guilty.

One calamity now followed close on another. In February, 1816, a terrible fire broke out in St. John's, which destroyed one hundred and twenty houses, and left fifteen hundred persons without a home. The loss of property was estimated at 100,000*l.* The distress occasioned by this disaster was augmented by the inclement season in which it occurred. The fishery of the following summer was very poor, and the price of fish low. The spring seal fishery of 1817 was a failure, and the summer one of the gloomiest ever known, as regarded the business of the country. In November of the same year came what seemed to be the crowning calamities of the colony. On the 7th of that month another terrible fire in St. John's swept away one hundred and thirty houses, besides stores and wharves, destroying property to the value of half a million pounds sterling. This was followed by a third great fire on the 21st November, which destroyed a considerable part of the business portion of the city spared by the former conflagrations, and seemed to complete the misery of the inhabitants. Scenes of heartrending distress followed. Two thousand persons were left without a home, many of them having lost all they possessed. An appeal for help met with a liberal response. Provisions were dispatched from Halifax to save the inhabitants from starvation. The people of Boston loaded a vessel with a large cargo of food of various kinds, an act of generosity which is still gratefully remembered in Newfoundland. The British Government sent prompt and liberal aid. The Governor, the merchants, and the wealthier classes exerted themselves to the utmost to relieve the wants of the inhabitants. Though there were some disturbances caused by want and misery during this trying season, yet, on the whole, the people met their calamities with fortitude and patience. It was not long before the dark hour passed away. The year 1818 witnessed the commencement of a reviving prosperity. The fisheries

were remarkably successful, and the prices of fish in foreign markets were considerably enhanced. A favourable change was experienced all over the commercial world. The courage of the Newfoundlanders revived, and industrial activity was everywhere visible. St. John's was speedily rebuilt on an improved plan, and precautions were taken to prevent a recurrence of fire. The streets were widened, and solid and substantial buildings replaced the crowded wooden erections which had furnished fuel to former conflagrations.

Admiral Pickmore had been Governor during these calamitous years. He was the first resident Governor; the practice formerly being that the governors arrived in July or August, and left for England in October or November. Henceforward they were required to reside constantly in the island. Governor Pickmore died in St. John's, in February, 1818, and his remains were sent to England. He was succeeded, in July of the same year, by Sir Charles Hamilton.

During the darkest year of this period of distress the merchants applied for aid to the British Government; and through their earnest solicitations a Select Committee of the House of Commons was appointed to "inquire into the state of trade in Newfoundland and into the situation of that settlement." The Committee met in June, 1817. The merchants proposed two modes by which aid might be given. One was the granting of a bounty, to enable them to compete with the French and Americans, who were sustained by bounties; the other was the transportation of the principal part of the inhabitants, now numbering 70,000, to the neighbouring colonies of Nova Scotia, New Brunswick, or Canada. True to their traditions, the merchants attributed the present depressed state of the fisheries mainly to the increase of the population and the settlement of the country. This was not the first time they had pro-

posed the deportation of the inhabitants. In 1670, "the merchants, owners, and masters of ships, and the inhabitants of the western part of the kingdom, adventurers to Newfoundland, petitioned the king (Charles II.) that the resident inhabitants and their families, then amounting to 3,171, should be removed to Jamaica, St. Christopher, or some other of His Majesty's plantations." Now, in 1817, the population being 70,000, they actually proposed their removal as the means of their own relief. Their traditional attachment to their old monopoly blinded them to all other considerations. The Committee of the House of Commons, naturally enough, inquired whether, as the fisheries were insufficient for their support, a portion of the inhabitants could not find profitable occupation in the cultivation of the soil. The reply made by witness after witness was that the agricultural improvement of Newfoundland was utterly impracticable, and only one merchant urged encouragement of agriculture as a remedy for the poverty of the people. The result was that no effort was made to open the country for agricultural settlements, and things were left to right themselves as best they could. It is satisfactory, however, to find that the merchants failed to obtain bounties—the thing they were really aiming at. At the very time that they were thus trying to depopulate the country, the local authorities in Massachusetts were giving a bounty for each Newfoundland fisherman brought into the State. How utterly unfounded were their representations regarding the sterility of the soil and the severity of the climate appears from the fact that eighteen years afterwards, in 1836, notwithstanding the restrictions on the cultivation of the soil, the census gave the value of the annual produce at 191,234*l.* for the land then under cultivation. In the census of 1845 the estimated value of land in cultivation and of agricultural stock is given at 677,040*l.* In fact, wherever ordinary skill and industry

have been exercised in the clearance and cultivation of the soil, it has never failed to repay the labour expended on it. The agricultural populations of Newfoundland are more comfortable and independent than those exclusively engaged in the fisheries.

Though the colony had begun to recover from the severe blows inflicted on its prosperity by the events referred to, yet the effects of those three years of adversity were felt long afterwards. The heavy losses sustained by the working classes impoverished large numbers of them, and the precarious returns of the fisheries kept them in a state of poverty. During each winter season many were dependent on charity. The evil, however, did not fail to spread, until many had fallen into a state of chronic pauperism, needing relief every recurring winter. The recklessness and improvidence, generated by dependence on public charity among this class, proved to be one of the greatest difficulties that the governing powers had to contend with. It is not wonderful, however, that such a condition of things should exist, when we remember how an artificial prosperity had attracted emigrants in large numbers, and that a sudden collapse plunged the country into almost universal bankruptcy, disarranging its entire business from one end of the island to the other. This was followed, as we have already seen, by destructive fires, which devastated the capital. The pauperism created by these calamities was long a heavy burden on the resources of the country. It is impossible indeed to withhold our admiration at the fortitude and patience with which such severe sufferings were borne by the people, and at the energy and spirit they displayed in surmounting the difficulties they had to encounter.

• The grievances which still pressed on the colonists, and the imperfect administration of the laws, began at length to suggest to them the necessity of seeking for the acquisition of institutions for the self-government of the country. An

agitation for local legislative power was commenced in 1821, but it took more than ten years to wring from the British Government the concession of a representative government. The reply to petitions from the inhabitants was that the colony was not yet ripe for it; that the revenue was insufficient; that trouble and disorder were likely to arise by the outcome of the changes that were asked for. The supporters of the old despotic system, as a matter of course, were on the side of the English ministers; and it was only when the pressure of public opinion became overwhelming that the much-needed legislative power was granted to the colony.

The year 1824 witnessed the introduction of a very important measure for the better administration of justice in the island, the defects of the existing incongruous system being very great. Disorderly practices had crept into the courts, and loud complaints of the decisions of the surrogates especially were made. To remedy this an Act was passed by the British Parliament providing that the Supreme Court should be held by the chief judge and two assistant-judges, and that the colony should be divided into three districts, in each of which a Circuit Court should be held annually by one of the three judges, an appeal from the decisions of which was permitted to the Supreme Court. The same Act gave the Governor power to institute a Court of Civil Jurisdiction on the coast of Labrador. This Act, with the royal charter issued in consequence of it, has formed the basis of an excellent system of jurisprudence in the colony, and secured for the people the greatest of blessings—the pure administration of justice, on the principles of English law.

The commission given to Sir Thomas Cochrane as Governor, in 1825, ordered that a Council should divide with him the responsibility of his government, former governors having been autocrats, acting on their own

discretion. This Council, nominated by the Crown, consisted of the Chief Justice, the two assistant-judges, and the commander of the troops stationed in St. John's. It may be regarded as the first step towards a representative government. Sir Thomas Cochrane proved to be an energetic governor, deeply interested in promoting improvements, and specially anxious to encourage the cultivation of the soil. He was much more liberal in making grants of land than his predecessors, though even his leases were still clogged with unwise restrictions. He saw the necessity of roads, if agriculture was to make progress, and his government was rendered for ever memorable by the construction of the first roads ever made in the island. One of these extended to Portugal Cove, nine miles distant from the capital; another to Torbay; and another to Waterford Bridge. Along these highways settlements and cultivation crept steadily, and neat farmhouses were erected. A foundation was thus laid for future improvements. Up to this date, though the country had been inhabited for centuries, the construction of roads had never been attempted, as it was considered that for fishing stations the sea furnished sufficient means of intercommunication, and the settlement of the country was not contemplated. Governor Cochrane also commenced and completed the erection of a new Government House, on such a grand scale that it cost the British Government 30,000*l*. The ideas of the people began to expand, and the desire for representative institutions now extended to all classes. Public meetings were held; petitions to the Imperial Parliament poured in, and at length the pressure became irresistible. In 1832 the great boon of representative government was conferred on Newfoundland. The island was divided into nine electoral districts, each of which was to have one or more representatives, according to the population; and every man twenty-one years of age, who

had occupied a dwelling-house for one year immediately preceding the day of election, was entitled to a vote. The first local legislature was opened, with all due pomp and ceremony, by the Governor, on the first day of the year 1833, which marked a new era in the history of the colony. The people had now obtained the power of regulating their own affairs, expending the revenue, making all internal arrangements, and enacting laws. Their destiny was in their own hands, and such a power, once conferred, could never be permanently withdrawn. It was certain ultimately to secure responsible government, with all its rights and privileges.

Sixteen years had now elapsed since the troubles and losses of 1816-17 had brought down the fortunes of the colony. These dark days were now forgotten. Trade was once more in a flourishing condition. Nothing is more striking in regard to the business of the country than its elasticity. In 1834 the value of the exports was 826,659*l.*; the value of the imports was 618,757*l.* No less than 888 British vessels, carrying 105,570 tons, and 20 Spanish and American vessels, carrying 2,979 tons, were employed in the trade. The spring seal fishery had now attained large dimensions, and employed nearly 3,000 men from the port of St. John's alone, and 125 vessels. Conception Bay sent out 218 ships, manned by 4,894 men; and many other out-harbours sent large contingents to this lucrative though dangerous industry. The population of the island was now about 75,000, and that of St. John's 15,000. The years which followed the introduction of representative government were anything but halcyon days. Political conflicts arose, and were carried on with much virulence for many years. In the heat of party passion men forgot the ordinary courtesies and amenities of life. Rancour, hatred, and all the selfish passions had full swing, and the press teemed with fierce and unscrupulous manifestoes. Unhappily,

religious animosities mingled in the strife, and added the bitterest ingredient to the contest.

From the very first the legislative machinery was found to be defective, as there was no arrangement for securing a harmonious co-operation between the two Chambers. The House of Assembly was composed of representatives of the people, who naturally supported popular rights, and claimed to exercise the same functions as those of the British House of Commons. The Council was composed of nominees of the Crown, selected exclusively from the merchant class, who exercised all executive functions, and held the principal offices of emolument among themselves. The House of Assembly, in which the executive was not represented, found themselves to possess powers of debating, passing measures, and voting moneys; but the Council could throw out all their measures, and were irresponsible to the people. Assembly and Council were at once found to be in antagonism, the one passing bills, the other swamping them; so that the new constitution was out of gear from the first. Harmonious action under such an arrangement was almost impossible.

To these elements of discord were now unhappily added animosities arising from religious and sectarian divisions, which ushered in a dark and troubled period in the history of the colony. When the religious element is allowed to mingle in political strife it is sure to take a rancorous form, and bring countless evils in its train. The population at this time was composed of one-half Protestants and the other Roman Catholics, the latter being Irish or of Irish descent. Hitherto they had lived in harmony and mutual good-will. The Catholics had at one time been harshly persecuted, but perfect freedom of worship had been conceded in 1784, and in 1829 they were finally relieved of all civil disabilities. The introduction of representative government proved to be the apple of

discord among the Churches. Old jealousies and distrusts were revived. The memory of ancient wrongs and grievances awoke. Each sect dreaded the political ascendancy of the other, and strove to gain the controlling power. Protestants and Catholics were arrayed against one another in the political arena. The press stimulated the strife by violent and vituperative attacks on individuals. The worst passions were evoked. Politics destroyed even the peace of social and commercial life. In two instances outrages of a revolting character were perpetrated, which added fuel to the flame. Violent scenes at elections were common, and popular commotions had to be held in check by the troops. The agitation extended all over the country, and continued, though in a mitigated form, for some years. Over this period of political and religious rancour it is best to draw a veil, and to consign the memory of it to oblivion. It produced only evil results, which retarded the improvement of the colony, and wasted energies which should have been devoted to the social interests of the people. Happily the strife has long since ended, and both parties have learned the bitter but wholesome lesson that there is no good, and may be much harm, in bringing purely religious questions into political conflicts.

The height to which the political fever ran will be understood when it is seen that even the Chief Justice became involved in party conflicts. Chief Justice Boulton was charged before the Privy Council by the House of Assembly with being a political partisan, a corrupter of justice, and a magistrate who endangered the constitution and peace of the community. The Privy Council acquitted him of these charges, but recommended his removal for having indiscreetly permitted himself "so much to participate in the strong feelings which appeared unfortunately to have influenced the different parties in the colony."

Notwithstanding the antagonism between the House of Assembly and the Council, the benefits of self-government soon became apparent in the passing of many exceedingly useful measures such as were impossible under the old *régime*. Acts were passed for the erection of lighthouses at various points along the coast. An Education Bill sanctioned an annual vote of money for the promotion of education. Boards were appointed to carry out its provisions in each district. Another measure provided for the establishment of an academy in St. John's for the promotion of higher education. Sir Thomas Cochrane was succeeded, in 1834, by Captain Prescott as Governor. He made liberal grants of land to hundreds of poor families, and encouraged agriculture so effectually that during his term of office large quantities of land were reclaimed from the wilderness. The House of Assembly appropriated 30,000*l.* for roads and bridges, and wherever these roads were opened persons were soon found to settle upon the adjacent lands.

In 1841 Sir John Harvey assumed the government. Having resided long in the neighbouring colonies, he had a perfect knowledge of their soil and climate. Setting himself the task of acquiring accurate information regarding the agricultural capabilities of Newfoundland, he was soon able to pronounce the local soil and climate not inferior to those of Nova Scotia, New Brunswick, or Canada. He used the most strenuous efforts to improve and extend agriculture and promote the settlement of the country. He founded an agricultural society, and opened its proceedings with a speech which went far to dispel existing prejudices. In his speech before the legislature, after having resided a year in the country, he said: "Both as respects climate and agricultural capabilities Newfoundland, in many respects, need not shrink from a comparison with the most favoured provinces of British North America. Its summers, though short, enjoy an extraordinary degree of vegetative power,

which only requires to be duly taken advantage of; its winters are neither unusually long nor severe; and its autumnal seasons are as open and fine as those of any of the surrounding colonies. In point of rich natural grasses no part of British North America produces greater abundance. Newfoundland, in fact, appears to me to be calculated to become essentially a rich grazing country, and its varied agricultural resources appear only to require roads and settlements to force them into highly remunerative development." He also urged the construction of highways into the fertile belts of the interior, in order to promote settlement. In response to his recommendation the legislature voted 40,000*l.* for roads and bridges, a proof of the wonderful revolution men's ideas had undergone in regard to the character of the country. The value of land rapidly increased under Sir John Harvey's administration, particularly in the neighbourhood of the capital and around other populous settlements. A most important measure was passed during his government, by which it was enacted that all Crown lands should be sold by auction at a moderate upset price, in lots of not more than a hundred acres, and the proceeds applied to the internal improvement of the island. This was one of the greatest boons yet obtained for the settlement of the colony.

In consequence of the discord which still prevailed between the two Chambers, the Imperial Parliament, in 1842, passed an "Act for Amending the Constitution of Newfoundland." The amendment consisted in the abolition of the Council as a distinct branch of the legislature, and in authorising its members to sit and vote in the House of Assembly, where they constituted two-fifths of the whole. Thus was formed what was known as "The Amalgamated Assembly," which continued till 1849, when the Constitution was restored.

It is but right to state, lest undue importance should be

attached to these political commotions, that it was chiefly at the period of each quadrennial election that scenes of confusion took place, and that the stormy passions then engendered subsided as quickly as they arose. There was no tendency manifested to serious crime or chronic social disorder among either of the two opposing parties. Sir Richard Bonnycastle, in his excellent and impartial work on the colony, tells us that "scarcely anything worth mentioning in the way of riot or breach of the peace has ever occurred at any of these elections, excepting once, at Carbonear, in 1840, although, at the last election in the capital it was deemed requisite to keep the troops on the alert." . . . "The Irish are an excitable race, which they themselves do not affect to deny: they are easily led, but difficult to drive. But the good qualities of the Irish peasant abroad are very prominent." . . . "A more peaceable, respectable, loyal, or a kinder-hearted race than the Newfoundland English and Irish, whether emigrant or native-born, I never met with; all they want, now that temperance has so beneficially operated upon them, is education, agriculture, roads, and the quiet which a firm, decided, and impartial Government promises to have in store for them." When it is remembered that, at this time, half the population were Irish or of Irish descent, among whom it might be expected memories of old-world strifes, wrongs, and oppressions would be rife; and that the other half were Protestant and of English descent, accustomed for years to hold the ascendancy, and headed by the wealthy mercantocracy, who were not inclined to give up their time-honoured claim to rule, it would not have been wonderful to find, in such a society, atrocities and crimes abounding in a country where the arm of the law was felt but feebly. "So far was this from being the case," says Sir Richard Bonnycastle, "there has not been a capital punishment for years: the people are very orderly and respectful to their superiors; temperance has

enrolled under its banners the greater proportion, and housebreaking and serious crimes are actually unknown; and it is universally admitted that there is no country in the civilised world, where greater simplicity of manners or less crime exists, than in Newfoundland."

The foregoing statement in regard to the peaceable character of the people is as true to-day as when it was made by Bonnycastle forty years ago. Now that the memory of the political conflicts of bygone years is fading away, the people seem to have learned this great lesson, that the country must not be governed in the interests of a class or party, but for the benefit of the whole; that offices of trust and emolument must be equally open to all, without regard to religious or other distinctions; and that the ascendancy of any one section, whether denominational, mercantile, or national, to sway the destinies of the country, cannot be tolerated. The baneful effects of religious animosities in the past lead all intelligent and patriotic men to resist their introduction into future political contests.

Under the progressive government of Sir John Harvey the colony advanced greatly. Agriculture made considerable strides, and the staple industry of the fisheries also extended. Postal communication was improved. In 1840 a mail sailing-packet was appointed to ply fortnightly between St. John's and Halifax; and in 1844 this was followed by the first steam-packet bearing a mail for Newfoundland.

It was in 1846, the last year of Sir John Harvey's administration, that St. John's passed through perhaps the most terrible trial to which it had yet been subjected. On the 9th of June a fire broke out in the western end of the city, which swept everything before it, and before night closed in three-fourths of this wealthy and populous city were a smoking mass of ruins. The rapidity of the terrible

conflagration was owing in part to a high wind which prevailed at the time, and which hurled the blazing brands far and wide, and also to the fact that the greater part of the houses were wooden. Even the mercantile establishments, built substantially of stone and brick, presented no impediment to the progress of the fierce conflagration, and, with a single exception, they were totally destroyed. Nearly all the public buildings, except Government House, perished. The Post Office, Savings' Bank, Bank of British North America, Custom House, Police Office, Exchange Buildings, Ordnance Store, and several others were burnt to the ground. To add to the terrors of the scene, while the red tongues of flame were leaping from street to street, the huge oil-vats on the side of the harbour took fire. Liquid flames spread over the whole surface of the water and set fire to a number of vessels. Before the day closed twelve thousand people were homeless, and property valued at a million pounds sterling was destroyed.

Still there was no abject despair among the people. Vessels were at once despatched for provisions. When news of the terrible calamity reached England a sum of 5000*l.* was sent for immediate relief, and Parliament voted 25,000*l.* more. To this was added a very large sum collected in the churches, under the sanction of a letter from the Queen to the Archbishops of Canterbury and York. The neighbouring colonies sent liberal contributions. Cheered by this generous sympathy, the inhabitants at once set to work to rebuild their city. A law was enacted prohibiting wooden houses in the business part of the town, and enforcing increased width of the streets. Some years afterwards an abundant supply of water was introduced, so that now St. John's is as secure against fire as any other city of the New World. A recurrence of such a terrible conflagration as that of June 9th, 1846, may be regarded as impossible.

Yet another calamity was destined to mark that memorable year. On the 19th September a storm of unexampled severity swept over the island, causing an immense destruction of shipping, houses, fishing stages and flakes, fences and bridges, and engulfing in many instances the fruits of the fishermen's toils during the previous summer. These two calamities in a single year were a disastrous drawback to the prosperity of the colony for a long time.

In 1847 Sir Gaspard le Marchant was appointed Governor. Previous to his arrival a strong agitation had sprung up, having for its object the attainment of a more complete power of self-government than the Constitution of 1832 had secured. The appointments to the principal offices in the colony were still held by the Crown. The demand now made was for what is known as "Responsible Government," under which all such appointments were to be at the disposal of the party which secured a majority in the legislature. This boon of government according to the well-understood wishes of the people, or, in other words, executive responsibility, had been already conceded to all the North American colonies; but the imperial authorities, notwithstanding petitions from the people and the amalgamated legislature in favour of it, withheld it from Newfoundland for a number of years, fearing that the colony was not prepared for complete self-government. The agitation, however, in favour of it increased in intensity, and at length, in 1854, it was conceded. Charles Henry Darling, Esq., was sent out as the successor of Ker B. Hamilton, Esq., to inaugurate the new system.

The importance of possessing those institutions and that civil administration now granted became especially apparent when, in 1857, the British Government entered into a convention with that of the French, for the purpose of settling matters long in dispute regarding the fisheries of Newfoundland. When the terms of this convention were made

known in the colony they were found to be unfavourable to its fishing interests, and calculated to inflict loss, if not ruin, on the main industry of the country. A storm of opposition was speedily raised, and all parties joined in denouncing the convention. The legislature appointed delegates to proceed to London and represent the opposition of the colony to the proposed arrangement. Other delegates were sent to the neighbouring provinces to invoke their sympathy and help. The British Government, having already bestowed complete self-government on the colony, yielded at once, and the obnoxious clauses were withdrawn. A despatch was sent by the Secretary of State for the Colonies to Governor Darling, which gave universal satisfaction, and which is regarded as the palladium of the colony's liberties in regard to its territorial and maritime rights. It contained the following words: "The proposals contained in the convention having been now unequivocally refused by the colony, they will of course fall to the ground; and you are authorised to give such assurance as you may think proper, that the consent of the community of Newfoundland is regarded by Her Majesty's Government as the essential preliminary to any modification of their territorial or maritime rights." This, of course, put an end to all doubt regarding the power of the colony to regulate its own affairs in all time to come; subject, of course, to the rights secured to the French by treaty, in connection with the fisheries on the coast.

The three years following were fairly prosperous; the fisheries were productive; the population increased; the revenue was in such a condition that the legislature was enabled to undertake works of public utility. The lighthouses on the coast were increased in numbers; steam communication was improved, both internal and foreign; education was fostered; and a telegraph line was extended across the island. Responsible government worked well,

and introduced many needed improvements. The erection of a telegraph line connecting the island with the continent of America suggested the bolder project of laying down a submarine cable from the eastern shores of Newfoundland to the Irish coast, a distance of 1,640 miles. On the 5th of August, 1858, this great historic enterprise was accomplished, and the first message between the Old and New Worlds was flashed across Newfoundland. In 1860 His Royal Highness the Prince of Wales visited St. John's on his way to Canada, and met with a loyal and enthusiastic welcome from all classes of the people.

In the same year, however, political troubles clouded the horizon. The old religious dissensions unhappily once more broke out, in connection with the elections, bringing in their train some unhappy results. The party who had been most energetic in securing responsible government held the reins of authority for some years. In the session of 1861, however, a misunderstanding arose between Sir Alexander Bannerman, who had been appointed Governor in 1857, and Mr. Kent, the Colonial Premier. Into the merits of this misunderstanding it is not necessary to enter, but the result was the dismissal of the ministry by the Governor, and an invitation to Mr. Hoyles, leader of the Opposition, to form a government. This was followed by a dissolution of the House of Assembly, and a general election in the latter part of April, 1861. The old political passions, in which religious animosities unfortunately played a prominent part, were once more roused into action. The election presented scenes of tumult and violence in several localities. Protestants and Catholics were once more arrayed against each other in the political conflict. At Harbour Main a life was lost, and at Harbour Grace the disorder was so great that an election was found to be impossible. The result was that the new government obtained a majority, the action of the Governor in dis-

missing his ministry and dissolving the House being thus sustained by the voice of the people.

When the new House of Assembly was opened, in May, 1861, the political excitement ran high in the capital. The Governor received, from a menacing crowd, an ungracious reception when he arrived to open the legislature. Later in the day there was a riot. The houses of two obnoxious individuals were attacked by the mob. The soldiers of the garrison were called out to quell disturbances which the police were unable to suppress. A sad and deplorable scene followed. The mob assailed the troops with volleys of stones. The commander of the force ordered a number of his men to fire. Three persons were killed and several wounded. It was no doubt a fearful expedient to which the commanding officer had recourse, but, on investigation, the authorities exonerated him from all blame. The employment of the military in aid of the civil power, in quelling popular disturbances, is always hazardous, and can only be justified in extreme cases.

The memory of these unhappy events has gradually faded away. To-day a nobler and more patriotic spirit animates political action, which is now chiefly directed towards the development of the best interests of the community at large. There is every reason to hope and believe that religious animosity and persecution are dead in the oldest British colony.

CHAPTER VI.

“AFTER DARKNESS—DAWN.”

[1861-1882.]

Demoralising systems of pauper relief—Proposed confederation of Newfoundland and Canada—Important discovery of copper ore—Geological survey of the island—Mr. Alexander Murray's reports—Important revelations—Opposition and defeat of the projected union with Canada—Establishment of steam communication with England—Development of mineral and agricultural resources—Proposed railway—Sir John Glover on the possibilities of the country—Government charter granted to the Newfoundland railway company—Turning of the first sod and construction of the first part of the first railway in 1881—Prosperous condition of the colony—Final settlement of the French fisheries question—New railway projects, with perspective plans of increased rapidity of transit between the Old World and the New—New fields for emigration—A country one-sixth larger than Ireland, with a population less than two hundred thousand.

UNPRODUCTIVE fisheries and a widespread destitution marked the first eight years of the decade ending in 1870. A system had grown up since 1855 of distributing relief among those of the people who were needy and in want, during the winter season. The effect was most demoralising. Many persons who could have made some provision for the dead season took no heed whatever of the morrow. Pauperism increased; reckless and indolent habits were engendered; and ere long nearly a third of the entire revenue went

in charity. So many were left in a condition of semi-starvation, whenever a failure of the fisheries occurred, that government found it impossible to discriminate between the applicants for relief. So general was the distribution of relief that a great majority of the industrial population soon learned to disregard the stigma of pauperism. They claimed public assistance as a private right. This condition of things was a result of the old fatal policy of repressing colonisation, and failing to afford facilities for the people to settle on the land and cultivate it. The population had now greatly multiplied. When the fisheries failed they had no other resource on which to fall back. The credit system was also a factor in the general demoralisation. It had existed for more than a century, and had become part and parcel of the customs of the country. The effect of issuing supplies, at the beginning of each fishing season, to be paid for in kind at the close, was unfavourable to the formation of habits of thrift and industry. The returns of the fishermen's labours were also seriously discounted by the high prices they had to pay for the supposed privilege of credit.

Governor Bannerman, when opening the legislative session of 1860, dwelt forcibly on this unfavourable feature of the social condition of a portion of the working classes. He urged that "no pains should be spared to give encouragement to agriculture, and to every other source that can give employment to the labouring classes, to prevent, as far as possible, their resorting to pauper relief." In every succeeding year the warning was repeated in his speeches regarding the dangers of increasing pauperism, and the necessity of providing employment for the people outside the fisheries, which could no longer sustain the numbers who were now engaged in them. The revenue of 1861 fell to 81,000*l.*, and the public debt, which had been mainly incurred in meeting the necessities of the destitute, now

amounted to 180,000*l.* In 1863 the Governor's speech again proclaimed "widespread pauperism," in consequence of the failure of the previous year's fisheries. A committee of the legislature was appointed to inquire into the condition of the fisheries. Their report showed that there had been no actual decline in the cod fisheries, the average from 1840 to 1862 having been occasionally a little under a million quintals annually, and at times somewhat over that amount. This national industry was found to be stationary, but the population had increased, so that the same amount of produce had now to support a much larger number. Another committee was appointed to report on the agricultural capabilities of the country. They reported strongly in favour of the encouragement of agriculture, as a means of repressing pauperism. The soil and climate were pronounced to be well adapted to the requirements of the farmer. The want of roads, however, prevented any immediate efforts to settle the fine valleys of the interior. No one as yet dreamed of a railway as the means of opening up the country and settling a population in the interior.

In 1864 Mr. Anthony Musgrave was appointed Governor. Each year, in opening the session of the legislature, he repeated the same sad tale of pauperism, and suggested the old remedies. During this trying period large numbers of the people emigrated to the United States and Canada. In 1866 the fisheries were again unsuccessful. The usual distress and misery followed. The Governor advised the union of Newfoundland with Canada. He stated that it was greatly desired by the imperial authorities. The years 1867 and 1868 showed no improvement, and the financial condition of the colony grew worse and worse. The Governor's speech, which of course expressed the opinions of his ministers, announced that "year after year it is more clearly demonstrated that, in the

altered circumstances of the community, the one enterprise and occupation to which our people are accustomed, is inadequate to meet the wants of the increasing population." A gleam of hope, however, began to dawn for the people at this time. In the north of the island copper ore had already been discovered, and mining was beginning to create a new demand for labour. Ere long it became evident that the island, so long pronounced worthless by prejudiced or ignorant persons, was rich in minerals. This new industrial departure was the first substantial aid brought to the suffering people. The prospect of Newfoundland becoming a mining centre gave them fresh hope and courage. Efforts were renewed, again and again, by the legislature to obtain from the imperial powers a removal of the restrictions which prevented land grants or mining licences being issued on that part of the coast where the French had fishing rights. This embraced half the island, and the better half, as far as climate, soil, and minerals are concerned. These applications, however, did not secure the desired concessions. The people were practically excluded from their own shores. The effect of this injustice, while repressing enterprise, deepened the sense of wrong which the English colonists had borne with patience though not without protest.

The commencement of a geological survey of the island, in 1864, under the auspices of the government, must be reckoned as one of the most important measures yet introduced for making known and developing the natural resources of the country. Sir William Logan, the eminent geologist, who had long been at the head of the geological survey of Canada, was requested to nominate a competent person to take charge of the survey of Newfoundland. He selected Mr. Alexander Murray, who for more than twenty years had been associated with him in the survey of Canada, and whose experience and ability fitted him specially for this

important work. Entering upon his duties in 1864, he has prosecuted the work till the present time with commendable zeal and energy, and with important results. For the first time, the resources and capabilities of this neglected country were ascertained and reported on by competent scientific men. As, year after year, Mr. Murray's reports were published, it was at first with a feeling of doubt or incredulity that the people heard of the natural riches of the interior; of extensive pine forests; fertile valleys, in which many thousands might find a home; of carboniferous regions, containing coal-beds; and immense mineral tracts, which the labours of many generations were not likely to exhaust. His survey showed that on the west coast there were 1,320 square miles of fertile lands, admirably adapted for settlement; and in the valleys of the Exploits, Gambo, Terra Nova, and Gander, not less than 3,320 square miles, equally fitted for agricultural operations or cattle-raising, much of these regions being covered with splendid forests—in all nearly three million acres of fertile land. He further found that the island presents large developments of the “Quebec group,” which is the great metalliferous formation of North America, and therefore might be expected to be found rich in minerals—a prediction which has been amply verified. It is much to the credit of successive governments that the geological survey has been continued since 1864, and is still going on. The knowledge of the country obtained through this agency has been gradually diffused by different writers, and made known in other lands. It can be no longer doubted that Newfoundland now presents a promising field for mining enterprises; and that it contains enough of fertile land to sustain in comfort a population of several millions.

The year 1869 brought a turn in the tide of affairs, in the shape of abundant fisheries, the first for many years which could be called successful. Many of the people had

been devoting themselves more to the cultivation of the soil, and the harvest this year was good. In 1868 the government had at length grappled with the system of able-bodied pauper relief, and cut it off; and the comparative prosperity of the next few years rendered it possible to enforce this wholesome enactment. A general election took place towards the close of 1869, which turned on the question of union with Canada. The result was a return of a large majority of representatives pledged to oppose confederation with the Dominion, to which it was found a large proportion of the people were opposed. So emphatically did public feeling show itself in opposition to confederation, that the question has since been entirely laid aside. Sir Stephen John Hill succeeded Sir Alexander Bannerman in 1869.

The following years witnessed successful fisheries, accompanied by a rise in the price of the products in foreign markets. Harvests, too, were fairly good, and the revenue derived from duties on importations rose as the people were able to purchase more freely the necessaries and comforts of life.

In 1871 the revenue reached the unprecedented amount of 207,790*l.*, which enabled the government to remit some duties which bore heavily on the working classes, and also to devote certain sums to public works. Great numbers of mining licences were taken out, and the new industry advanced rapidly. The expenditure of money, in the shape of wages in connection with mining, added considerably to the means of the labouring class. The improved condition of the revenue permitted increased grants for the construction of roads, lighthouses, and other works of public utility.

In 1873 direct steam communication with England and America was established, a contract with the Montreal Steamship Company having been entered into for the con-

veyance of mails, passengers, and goods. The arrangement was for fortnightly calls, both of homeward and outward bound ships of the Allan Line, at St. John's, during nine months of the year, and monthly trips, viâ Halifax, during the remainder. The trade and commerce of the colony were greatly benefited by this improved means of communication with the outside world.

A petition was presented to the imperial authorities by the legislature, asking for the introduction of a judicial system on the so-called "French shore;" the appointment of magistrates, the establishment of custom-houses, and the removal of restrictions on the territorial rights of the colony. In this petition it was stated that there had grown up, on this part of the coast, a large population who were outside the pale of law, so that life and property were insecure, and the means of civilisation entirely absent. Meantime, local steam communication between St. John's and the principal settlements was improved and extended to Labrador Channel, St. George's Bay, Bay of Islands, and Bonne Bay. The revenue did not show any further expansion, and in 1874 was 209,531*l*.

The knowledge of the great natural resources of the country which had now been diffused, together with the necessity of providing new means of employment for the increasing population, had secured the attention of thoughtful men, who saw that, for any further progress, the construction of a railway, to open up the country to industrial enterprise, had now become a necessity. For some time the idea had been fermenting in the public mind, but in a country where the people were but little accustomed to entertain great national projects, the majority, especially of those whose capital was invested in the fisheries, shrank from the proposal as visionary and beyond the means of the colony. Still the question pressed for a solution: "What are we to do with our

increasing population who cannot find sustenance from the employment furnished by the precarious fisheries?" At length, in 1875, the government resolved on a movement designed to secure the introduction of a trunk-line of railway. Their ideas were embodied in the following passage from the Governor's speech in opening the session of the legislature: "The period appears to have arrived when a question which has for some time engaged public discussion, viz. the construction of a railway across the island to St. George's Bay, should receive a practical solution. Independently of the benefits to flow from opening up the great resources of the interior of Newfoundland to the industry of its people, there is the well-founded expectation that this line of railway would attract to our shores the mail and passenger traffic of the Atlantic, for which this island would afford the safest and most expeditious route between the Eastern and Western Hemispheres; and thus would be secured those vast commercial advantages which our geographical position manifestly entitles us to command. As a preliminary to this object a proposition will be submitted to you for a thorough survey, to ascertain the most eligible line, and with a view to the further inquiry whether the colony does not possess within itself the means of inducing capitalists to undertake this great enterprise of progress."

The result of this proposal was that the legislature voted the sum of money required for a preliminary survey of the line of railway, which was completed in the summer of 1875, under the direction of Mr. Sandford Fleming, C.E.; an eminent engineer who was at the head of the railways of Canada. Mr. Fleming had, some years previously, published a pamphlet in favour of a railway from St. John's to St. George's Bay, with the view of establishing over this line the shortest route between America and Europe. The survey showed that a favourable line could readily be obtained, presenting no serious engineering difficulties.

On reviewing the operations of the previous year at the opening of the legislative session of 1876, the Governor announced that the fisheries had been but partially successful, but that enhanced prices had rendered them moderately remunerative. "The cultivation of the soil," he said, "had met with an extraordinary degree of success." . . . "Mining pursuits," he declared, "have acquired an importance rapidly on the increase." A large number of mining licences and grants had been issued within the year, and Tilt Cove and Bett's Cove mines were worked with great success. The government brought in a measure to revive the cod fishery on the Great Banks, by bounties to be continued for five years. This effort proved highly successful.

The fishery commission in connection with the Treaty of Washington met in Halifax in the summer of 1876, the Hon. W. V. Whiteway being the delegate from Newfoundland. The commission awarded five and a-half millions of dollars as compensation for fishery rights extended to the United States by the Treaty of Washington. Of this sum Newfoundland received one million dollars.

In 1876 Sir John Hawley Glover was appointed Governor, and when opening the legislature in 1877 he said that "mining enterprise was advancing with rapid strides, and that the production of copper ore would soon take rank as a staple resource of the colony." The revenue was found to be over the estimate, but the cod fishery had been below that of any recent year.

During the session of 1878 the Hon. W. V. Whiteway, premier, who had taken the lead in introducing the first measure in connection with the railway survey, moved a series of resolutions offering a subsidy of \$120,000 and a liberal grant of Crown lands to any company that would construct and work a line of railway between St. John's and St. George's Bay. The proposal was cordially agreed to by the legis-

lature. Arrangements were made for advertising this offer, but the British Government refused to sanction the line, on the ground that its terminus would be on the so-called "French shore." The concession of appointing magistrates and establishing legal institutions and custom-houses on the western coast had been made in 1877; but the imperial authorities considered that as negotiations with the French regarding this coast were then in progress, their sanction of a railway must be left in abeyance for the present.

After waiting two years it was found that the difficulties referred to had not been removed, and that the necessity for opening the country by a railway was every day becoming more urgent. Sir John Glover made a journey across the island from Hall's Bay to Bay of Islands in the autumn of 1878, and also visited the mining region. In his speech on opening the legislature the following year he said: "My visit forcibly impressed me with the rich agricultural resources of this portion of the island and the value of the forest lands—provisions of nature destined soon to attract and reward large numbers of industrious settlers. The long level tract of country, from South-West Arm, in Notre Dame Bay, to Humber Sound, affords such facilities for the construction of a main highway that this great work might be accomplished at a very moderate outlay."

At length, in the session of 1880, the Hon. W. V. Whiteway, premier, moved that, as the difficulties in the way of a line to St. George's Bay had not been removed, the colony should now, out of its own revenues, proceed to construct a railway of about three hundred and forty miles in length, from St. John's to Hall's Bay, the centre of the mining region, with branches to Harbour Grace and Brigus. Such a line would open some of the most fertile lands in the valleys of the Gambo, the Gander, and the Exploits, and would reach the mining region, and afford vast

facilities for carrying on mining enterprises; it would also unite populous districts with the capital. The premier pointed out that there was a continued recurrence of pauperism in certain districts, when the fluctuating fisheries failed, and that it was necessary to draw the people more to the cultivation of the soil; and that the present time was propitious, as there was now virtually no public debt, and the financial position of the colony was highly favourable. The question was referred to a joint committee, composed of members of both branches of the legislature, whose report was highly favourable to the construction of the railway referred to. It dwelt on the increasing numbers of the population, and the constant recurrence of destitution with every failure of the fisheries, which were precarious and showed no tendency to expansion. The great mineral wealth of the country, as now ascertained beyond a doubt, and "the vast stretches of agricultural land" which the railway would open were referred to, as well as the excellent local markets for agricultural produce, while the facilities for raising and exporting cattle were also insisted upon. To develop these rich resources, the committee considered a railway indispensable, and recommended that a million pounds sterling should be borrowed on the credit of the colony, in annual sums of half a million dollars, and the work at once commenced. The legislature adopted the report, and authorised the required loan. An engineer-in-chief was selected, and the survey of the line from St. John's to Harbour Grace was completed in the autumn of 1880.

The legislative session of 1881 proved to be a very important one. The summer fishery of the previous year had not been successful, and the usual amount of suffering and privation had followed in certain districts. The revenue had fallen somewhat below the estimated amount. The competition of the products of the Norwegian fisheries in

several foreign markets had told unfavourably in regard to the exports of Newfoundland. In opening the legislature the Governor announced that the government had received offers for constructing the line of railway for which provision had been made during last session, and that this proposal would be submitted to the House of Assembly and the Council at an early date. When the matter was introduced by the premier he moved for a joint committee of the Legislative Council and the House of Assembly to consider these proposals, which resulted in the ratification of a provisional contract. A charter was granted incorporating the shareholders under the title of "The Newfoundland Railway Company." The leading features of the contract were that the company bound themselves to construct "a substantial, reliable, and efficient road, subject to approval by a government inspector," in accordance with certain specifications which were named in the agreement, and to complete it within the period of five years; also to equip, maintain, and operate the railway when constructed. The government agreed to pay the company an annual subsidy of one hundred and eighty thousand dollars, the proportions of this subsidy to attach while the road is in course of construction on the report of the government engineer as each five miles are completed. Further, the government bound themselves to give the company land grants along the line of railway to the extent of five thousand acres of land for each mile of railway built. These land grants are to be in alternate blocks of good land along the line, as far as practicable, in quantities of one mile along the line by eight miles in depth, provision being made for obtaining elsewhere, as the company may select, other lands in connection with reserves for the government, to make good the stipulated amount when this cannot be obtained along the line of road. All articles for use in the construc-

tion and maintenance of the line were to be admitted duty free. The railway and its capital, stock, and lands were to be exempted from exceptional taxation. The payment of the subsidy was to continue for a period of thirty-five years.

The 9th of August, 1881, was an important day for Newfoundland. It saw the first sod of the railway turned. The colony now entered upon a new era of industrial enterprise. The utilisation of the great natural resources of this fine island was commenced in earnest. The fertile lands of the interior have now the prospect of being settled and cultivated. The forests, hitherto allowed to rot or to be destroyed by fire, will be added to the resources of civilisation. Vast mineral lands will be explored and made to yield their treasures. The railway work that promises to enrich Newfoundland can hardly fail to prove remunerative to those who have embarked their capital in the undertaking.

So energetically did the Newfoundland Railway Company prosecute their labours, that at the close of 1881, about twenty miles of the line were graded, and the rails were laid along the first ten miles. A substantial wharf was built in the harbour of St. John's, and the track was carried along waterside premises occupied by the company, at which four or five large steamers could load at the same time, when piers are erected. This large wharfage will be of great value in the future. Over two hundred thousand dollars were distributed by the company in the shape of wages during the working season, and materials to the value of half a million dollars were purchased and partly transported to the island. Large contracts for cutting sleepers were taken, and thus remunerative labour was provided during the winter. The wages received by the working population added greatly to their comforts, while the trading classes shared the benefits.

When the legislature met on the 16th of February, 1882, Sir F. B. Carter, who acted as administrator of the government in the absence of Sir Henry Maxse, the Governor, announced in the opening speech that the leading industries of the country had during the previous year been prosecuted successfully on the whole, and that "mining showed a considerably enlarged export of copper ore, and prospects of a further development in the immediate future." He referred to the railway as progressing satisfactorily in construction, conferring important benefits on the people, and causing a "large monetary expenditure in the country." This "great work," he said, "is an enterprise which, in the increase of commercial and social communication, and the development of our agricultural and mineral resources, contains the elements of solid and lasting prosperity for Newfoundland."

The revenue was found to be in a very flourishing condition, amounting to \$1,003,803, being the largest ever received. This furnished the best proof of the generally prosperous condition of the colony. The speech, however, contained another announcement, second in importance only to that regarding the railway. The administrator informed the legislature that the imperial authorities had at length authorised the local government to make land grants, and issue mining licences on that part of the coast on which the French have fishery privileges. This was the boon for which the colony had been pleading in vain for many years. Its importance to the people of Newfoundland can hardly be overrated. It is a virtual settlement of the vexed "French-shore Question," and a removal of a serious and long-standing grievance. It opens the half of the island which had hitherto been closed to the people, to settlement and industrial enterprise. It enfranchises the population of this part of the island, who are in future to have two representatives in the local legislature, and removes all

restrictions on the exercise of territorial rights. The administrator very justly connected this concession with the name of Sir William Whiteway, to whose able and persevering representations the country is largely indebted for a settlement of this vexed question. "The coincidence," said the administrator, "of the improved conditions to which I have adverted with the inauguration of the Newfoundland railway, marks an era of progress which is a meet subject of congratulation to the country."

Two other important events marked the legislative session of 1882. The first was an application to the legislature for a charter of incorporation of a company under the title of "The American and European Short Line Railway Company." The objects of the company are described in the following terms: "You are already aware, from communications placed before your government, that it is the purpose of our company to construct a line of railway from a point or points on the east or south-eastern coasts of Newfoundland, through and across the said island, to a point or points on the west coast of Newfoundland, and from the western terminus to connect by steam-ferry with the railway to be constructed to a point at or near Cape North, in the island of Cape Breton; thence by said railway to the Strait of Causo; thence along the north shore of Nova Scotia to a junction with the Inter-colonial railway, by which line we make connections with the railways communicating with Boston, New York, Philadelphia, Montreal, Chicago, St. Louis, and San Francisco. It being our purpose to construct without delay the necessary links to complete this proposed trunk-line, when this line is completed, passengers may take cars at New York or Montreal, and run through to the east coast of Newfoundland. From the east shore of Newfoundland the company will establish a fast despatch line of steamships, to sail between that point and the west coast of England or

Ireland, there connecting with fast express trains to London and all European cities, thus forming a great international trunk-line across the island of Newfoundland that will absorb and facilitate the transportation of the mails of the governments of America, Europe, and Asia, as well as provide the shortest, speediest, and safest route for passenger traffic. The line, when completed, will bring Newfoundland into daily communication with the great centres of trade and civilisation of Europe and America. The average time saved by this route between London and New York will be not less than two days to the traveller over any other existing line or possible route between the two great commercial centres. The short ocean voyage, the great saving in time, together with the superior comforts and safety of this line, will soon make it the most popular route for first-class trans-Atlantic travel; and will also attract a very large part of the emigration that now goes direct to New York and other United States and Canadian ports. Thus will the great tides of emigration, flowing to the United States and Canada, be largely diverted across your territory; and many emigrants will find homes in the rich fertile valleys of your island. The proposed line will pass through parts of your territory very rich in mineral and agricultural lands, capable of supporting a large population; and when this line is open to travel, the Great Valley of the Exploits, St. George's Bay, the Gander River, and the Codroy will soon be busy with the hum of agricultural, mining, and mechanical industry, where all is now a silent, tenantless, and comparatively unknown wilderness. The railway we propose will be, in every respect, a first-class road, and the equipment of the highest standard of excellence."

The great enterprise which is defined in the foregoing extract, is not only of colonial, but of imperial and international importance. In Newfoundland it has met with an enthusiastic approval. The charter sought for has been granted; and, no doubt, in due time the colony will render

substantial aid to a project which would benefit the island more than any other country. The legislature of Nova Scotia has also warmly approved of the enterprise, and promised assistance. That this will be the great travel-route of the future between the Old World and the New can scarcely admit of a doubt, for it has been marked out by the hand of Nature.

The second proposal which came before the legislature was for a charter, to incorporate a company to construct a dry or graving dock in St. John's Harbour. The dock is to be of such dimensions that it can accommodate the largest oceanic steamers, being six hundred feet in length, one hundred feet in breadth, and twenty-six feet in depth. The site is to be hewn out of the solid rock which composes the southern boundary harbour. The government have agreed to give a subsidy of \$30,000 per annum for forty-five years, thus securing interest at five per cent. on \$600,000. The total cost is estimated at a million of dollars. This dock will be of vast importance to disabled steamers and vessels requiring repairs, great numbers of which seek this port from all parts of the Atlantic. It will also serve for the repairing of the fleet of twenty-five steamers, and the large number of sailing vessels, which are connected with St. John's itself.

It seems clear from all these facts that Newfoundland has at length fairly moved into the path of progress, and has a bright and prosperous future opening before her. Her great natural resources will now be turned to account, and her inhabitants will advance in the arts and appliances of civilised life. The population, according to the last census, taken in 1874, was 161,000; it is now probably 185,000. This small population is sprinkled round the shores of an island one sixth larger than Ireland, and having an area of 42,000 square miles. That it will become an attractive field for emigrants cannot be doubted, when once the interior valleys are rendered fairly accessible by road and rail.

Part II.

PHYSICAL GEOGRAPHY AND TOPOGRAPHY.

CHAPTER I.

SITUATION, MOUNTAINS, AND RIVERS.

A stepping-stone between the Old World and the New—Rank of Newfoundland among the islands of the globe—Breeding-ground of the cod—An iron-bound shore with a fertile interior—Picturesque waterways—Long Range and other mountains—The Exploits River—The Grand Falls—The Humber and Bay of Islands—Lakes and ponds—Grand Lake with an area of a hundred and ninety-two square miles—Great pine forests—Red Indian Lake—Virgin lands or “forests primeval.”

IN regard to geographical position Nature has dealt in the highest degree favourably with Newfoundland. It is difficult to imagine a more commanding position than that of this great island, anchored off the American continent and reaching out at its farthest point towards the Eastern Hemisphere, thus forming, as it were, a stepping-stone between the Old World and the New. It has been marked down as the travel-route of the future between the two hemispheres. Stretching right across the Gulf of St. Lawrence, to which it affords access at its northern and southern extremities, it might be compared to a huge

bastion thrown out into the North Atlantic, the capital of which, if duly fortified, might be converted into the Sevastopol of the surrounding seas. It is no less adapted to serve the peaceful interests of commerce, to facilitate communication between two continents, or become a place of arms and defence. At its south-western extremity it approaches within fifty miles of the island of Cape Breton, while its most eastern projection is but 1,640 miles distant from Ireland. When these two watery intervals are bridged by steam-ferries, the shortest and safest transit between Europe and America will be secured. Had it not been for the facilities afforded by the splendid geographical situation of the island for experiments in lengthened submarine telegraphy, it is doubtful whether telegraphic communication between the two worlds would have been established to this day. The short distance between Newfoundland and Ireland and the great level submarine plain, a thousand miles in width, between the two countries, suggested the trial, and literally paved the way to success.

In another respect Nature seems to have marked out the island as a centre of commercial activity. A glance at the map shows that its coasts are pierced by numerous magnificent bays, running, in some instances, eighty or ninety miles inland, and throwing out numerous smaller arms in all directions. Thus the ocean penetrates the land deeply, bringing with it that sea-harvest which is reaped without the preliminary labours of ploughing and sowing. The same watery highways, reaching inland in all directions, afford unrivalled facilities for the transport of the products of the fisheries, the riches of the mine and the forest, and the agricultural productions which will yet be derived from its hitherto untenanted plains. In those noble bays, moreover, are some of the finest harbours in the world, with countless coves and creeks, where the fishermen's craft find safe and easy shelter. To such

an extent are the shores indented that, though the island is about a thousand miles round, measuring from headland to headland, were its bays circumnavigated, the operation would more than double that extent of mileage. In fact, it would be difficult to find anywhere an equal land-area presenting such an extent of frontage to the sea.

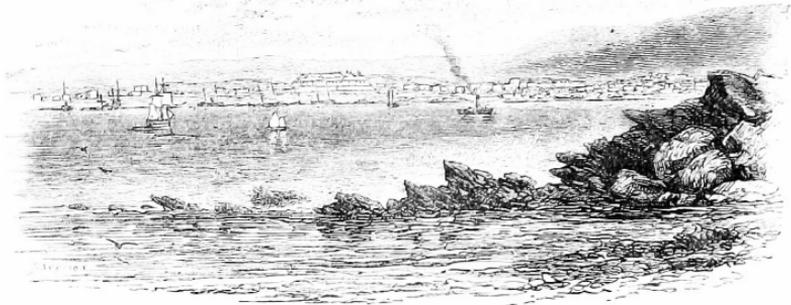
According to the latest and most accurate surveys, Newfoundland is situated between the parallels of $46^{\circ} 36' 50''$ and $51^{\circ} 39'$ north latitude, and between the meridians of $52^{\circ} 37'$ and $59^{\circ} 24' 50''$ west longitude. Its greatest length, from Cape Ray (the south-western extremity of the island) to Cape Norman (the farthest northern land) is three hundred and seventeen miles; and the greatest breadth, from Cape Spear (the most easterly point) to Cape Anguille (the most westerly) is three hundred and sixteen miles. The total area is estimated by Mr. Murray, of the Geological Survey, at 42,000 square miles. The size of a country counts for a good deal, and in the long run becomes a measure of political power. We obtain the best idea of the size of the island by comparing it with other countries. Ireland contains 32,500 square miles; so that Newfoundland is more than one-sixth larger than that country. It also contains 12,000 square miles more than Scotland. It is three times as large as Holland, and twice as large as Denmark. Taking for comparison two of the neighbouring provinces of British America, we find that it is twice the size of Nova Scotia, and one-third larger than New Brunswick. Among the islands of the globe it ranks tenth in regard to size. Its figure approaches an equilateral triangle, having a wide southern base between Cape Race and Cape Ray, and a narrow apex towards the north. Two large peninsulas project from the main body of the island. One of these points northerly and is long and narrow; it is called Petit Nord by the French. The other is the

great peninsula of Avalon, pointing south-east, and almost severed from the principal portion of the island by the two bays of Placentia and Trinity, on opposite sides of the island, the connection being a narrow isthmus, in one place but three miles in width. The Avalon peninsula is further divided by the two noble bays of St. Mary's and Conception. On its eastern side is situated St. John's, the capital; and on the northern shore of Conception Bay, Harbour Grace, the second town of the island. Owing to its extensive frontage on the Atlantic, its many fine harbours, and its proximity to the best fishing-grounds, Avalon is the most thickly-populated and by far the most commercially important part of the island.

Within a degree of its shores is the greatest submarine island of the globe—the Grand Bank of Newfoundland, which extends for a length of six hundred miles, with a breadth of two hundred miles. The great breeding-ground of the cod, these submarine hills and valleys are alive with inexhaustible stores of this noble fish. Around the shores of Avalon are countless smaller submarine elevations, where colonies of cod are located, and where fishing has been carried on for centuries without any diminution of the supply. Hence, though the soil of Avalon is as a whole poor, and in many places barren, the great proportion of the population is clustered round its shores, but they look mainly to the ocean as the source of their subsistence. The various harbours of this peninsula present also the most favourable points from which to carry on the seal fishery in the spring.

The first sight of the coasts of Newfoundland impresses the voyager unfavourably. Dark frowning cliffs; miles on miles of rocky walls, from two to three hundred feet in height, with but little verdure crowning their summits; bold promontories and headlands, sculptured into grim and fantastic forms by the blows of Atlantic billows; shapes

massive and awe-inspiring in their stern grandeur. Such is the general picture that meets the eye of the voyager at almost all parts of the island. The iron-bound shores present no pebbly beaches on which the waves break in softened music. The island is defended by rocky ramparts, dark and lofty, repelling the watery battalions that rush upon them under pressure of the tempest. Such is the seaward aspect. Should the traveller, leaving the coast, sail up one of the fiords which at intervals cleave the rocky walls, he will ere long, if the season be summer, find himself amid scenes of rare beauty. The shores



HEART'S CONTENT HARBOUR AND VILLAGE.

are dotted with dark-green forests that sweep down to the water's-edge. Verdant islands of all shapes and sizes stud the bosom of the estuary. Busy boats dance here and there on the bright waters. Fishing hamlets line the shores, with their rough stages and fish flakes for landing and drying the cod. The clearings around the villages show how little has yet been done in reclaiming the soil from the primeval wilderness. The atmosphere is balmy and exhilarating. The sky is blue and serene as that of Italy. There are, in those deep bays which pierce the land for eighty or a hundred miles, varied scenes of beauty,

such as are rarely surpassed in the world's most favoured lands.

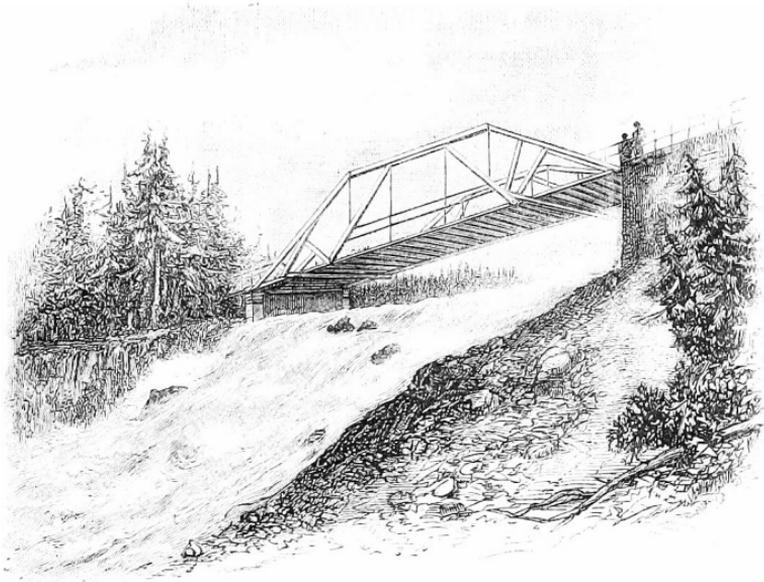
On passing from the rugged coast-line to the outer interior of the island, a hilly country presents itself, with eminences of no great elevation. Around the heads of the bays are large tracts of excellent land, generally covered with fine timber, and presenting every facility for agriculture and grazing purposes. On proceeding further inland the interior proper is reached, and, like that of Ireland, is found to consist of an elevated undulating plateau, traversed here and there by ranges of low hills, the surface being diversified by valleys, woods, lakes, ponds, and marshes. Of the interior itself hardly anything is yet known, as it has been examined only at a few points, and has been crossed in 1822, from east to west only by a single traveller, who described much of it as a savanna country, having countless lakes and lakelets, with brooks, woods, and vast green undulating plains. These savannas are composed of fine, black, compact peat-mould, formed by the growth and decay of mosses, and sustain countless herds of reindeer. All the great hill-ranges traversing the country take a north-easterly and south-westerly direction, and all the other great physical features, such as the bays, lakes, rivers, and valleys, have a similar trend. No doubt glacial action has been the cause of this peculiar conformation. The highest land is found along the western and southern shores. The course of the principal rivers shows that there is a gradual slope thence, easterly and northerly. It is along the valleys traversed by the various rivers that the greatest extent of fertile lands, and the heavy forest-growths are found, and these valleys are destined to be the seats of a large agricultural population, when rendered accessible by road and rail.

The principal mountain range is called the Long Range, which extends along the western side of the island for

nearly its entire length, having peaks more than two thousand feet in height. It commences at Cape Ray, runs north-east till it reaches the head of St. George's Bay, then turns north-east again, and terminates, after a course of two hundred miles, in the Petit Nord, or great northern peninsula. Outside of the Long Range, but parallel to it, and nearer the coast, is the Cape Anguille range, running from Cape Anguille to the highlands of St. George's Bay, with summits nineteen hundred feet high, and the Blo-mi-dons, extending along the south coast of the Humber Arm, Bay of Islands, and occasionally reaching a height of two thousand and eighty-five feet. These two ranges are of quite a different geological age from the Long Range, and present separate and independent features. Another range stretches across the country between Fortune Bay and Notre Dame Bay, and is known as Middle Range. Black River Range runs from Placentia Bay to Clode Sound, in Bonavista Bay. The Avalon district is very hilly, there being two remarkable ranges, each about thirty miles long. One of these commences at Renew's, fifty miles south of St. John's, and terminates at Holyrood, in Conception Bay, having at each end a rounded hill called the Butterpot. The other begins at St. Mary's Bay and terminates at Chapel Arm, Trinity Bay. Some of the summits in this range reach the height of one thousand five hundred feet. In addition to these well-marked ridges, the country is remarkable for a number of isolated and sharply-peaked summits, bearing the local name of Tolts, which spring abruptly here and there out of the great central plateau, and serve as landmarks. Some of the more conspicuous of these Tolts are Spread Eagle Peak, south of Chapel Arm, Trinity Bay; Powder Horn Hill, Bay of Bulls Arm, in Trinity Bay; Hodges Hill, on the Exploits (two thousand feet high); Mount Peyton (sixteen hundred and seventy feet), west

end of Gander Lake; and Lobster House, near Hind's Pond.

Compared with the size of the island, Newfoundland has few large rivers; but the want of these is amply compensated for by the numerous bays which penetrate the interior in all directions. One cause of the scarcity of large streams is the broken hilly character of many portions of



ROCKY RIVER BRIDGE.

the country. Down the small valleys flow the streams from the pond, or set of ponds, in their neighbourhood, forming numerous brooks, which thus find the nearest course to the sea. It is a mistake, however, not uncommon, to suppose that the island is destitute of large rivers.

Rocky River takes its rise in Hodge Water, a large lake in the peninsula of Avalon. After a course of about twenty miles, in which it receives a number of tributaries, it falls into the Colinet arm of St. Mary's Bay. The road

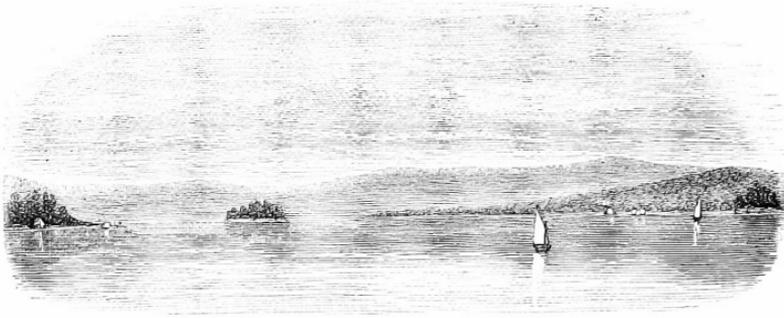
between Salmonier and Placentia crosses Rocky River near its mouth, nine miles from the former place, by a bridge in the midst of scenery, unsurpassed for picturesqueness in the whole of Newfoundland. On reaching the summit of a hill on this road, overlooking the valley through which Rocky River flows, the traveller obtains a beautiful view of the Salmonier and Colinet arms of St. Mary's Bay. The road then winds down through thick woods, with their overhanging branches, past silvery lakelets and over "barrens," till Rocky River is reached. Standing on the bridge which spans the stream with a wide arch, some 80 or 100 feet above the water, and looking up the river a series of foaming cascades is seen, at a short distance, flashing under the sunbeams. Then the river winds among heavy woods, till at length it rushes beneath the bridge, and forms another splendid cascade below, and finally leaps into a huge round basin, the surface of which, continually disturbed by eddying currents, is always white with foam. Lofty cliffs enclose this whirlpool, out of which the river is seen quietly pursuing its way to the sea.

The Exploits River is two hundred miles in length, and drains an area of between three thousand and four thousand square miles. It is a mile wide at its mouth, and gradually narrows to an average of half a mile, which it maintains for ten miles. The first ten miles is studded with islands, one of them, Thwart Island, being nine miles in length. Fourteen miles from the mouth are Bishop's Falls, a succession of cascades, the total height being about twenty feet. The scenery here is greatly admired. Some twenty miles higher up the river the Grand Falls are met with, presenting one of the finest and most picturesque scenes in Newfoundland. Captain Kennedy, of H.M.S. *Druid*, describes a visit he made to the Grand Falls in the following terms: "We found ourselves at length

directly above the Fall, and a glorious sight met our view. I must confess that we were prepared for a disappointment after many of like nature in this and other countries, but the scene now before us fully answered, if it did not exceed, our expectations. Looking upwards, to the right hand was a mass of foaming eddying torrent, with black rocks interspersed. Abreast of us, the stream was divided by a thickly-wooded islet, whereon many seagulls had built their nests. The parent birds flew round with loud and discordant screams, adding, in the roar of the waterfall, to the weirdness of the scene. Below this islet the waters met, and, wedged in by precipitous rocks on either side, plunged in a succession of cascades into the seething cauldron beneath. Seating ourselves beside the Fall we contemplated this fine sight, not a living soul to interfere with us. Possibly with the completion of the railway we shall have a station at Exploits River and a hotel at the Grand Falls; but for the present let us rest content that we have seen, without question, the finest picture in Newfoundland, untouched by the hand of man. A very fine view must be obtained from above the Falls and also from below; but the limited time at our disposal prevented our doing more than resting for a short half-hour on the spray-covered rocks, and taking a sketch of the scene before starting on our wearisome walk back. The whole height of the Falls is given at one hundred and forty-five feet; of this a good deal is broken water. I should estimate the largest Fall at not more than fifty feet, and perhaps as many yards across the gorge; but the beauty of the Fall is not so much in its height as in the immense body of water compressed into the space, and in the general wildness of the place." The railway now under construction from St. John's to Hall's Bay will traverse part of the noble valley of Exploits, and there can be no doubt that its splendid scenery will prove attractive to tourists and sportsmen, as

it is one of the finest salmon streams in the island. At one point the railway will come close to the Grand Falls. The banks of the river are clothed with lofty pine, together with birch, poplar, aspen, etc., at intervals. The soil is fertile, and capable of yielding crops of all kinds, including oats, barley, wheat.

“The Exploits River,” says Mr. Murray, of the Geological Survey, “rises in the extreme south-western angle of the island, and within twelve miles of the southern coast, near La Poile, and, flowing in a north-easterly direction, terminates in the Bay of Exploits, Notre Dame Bay, the



WIGWAM POINT, EXPLOITS RIVER.

distance from the sources to the outlet measuring nearly two hundred miles in an air line. The upper waters flow in two minor branches, the Exploits proper and the Victoria branch, of about equal size, both of which empty into Red Indian Lake, which itself is thirty-six miles long, with an average width of about two miles, and very deep, whence flows the main stream for seventy-two miles to the sea. The normal surface of Red Indian Lake is four hundred and sixty-eight feet above the sea, and its total area is sixty-nine square miles. There are numerous tributaries to this great river, some of which might with justice be termed rivers themselves; and the whole area drained by the

Exploits Valley is nothing under three thousand square miles."

The next largest river is the Humber, falling into the Humber arm of the Bay of Islands, on the western coast, after draining an area of two thousand square miles. The main branch of the Humber rises about twenty miles inland from Bonne Bay, and after a circuitous course falls into Deer Lake. The other branch rises north of Sandy Lake, and flows through it into Grand Lake; thence by Junction Brook it joins the main branch, six miles above Deer Lake. From this lake, which is sixteen miles long, the Humber flows majestically into the Bay of Islands. The scenery of the Humber is among the grandest in the island. At certain points in its course, perpendicular rocks, several hundred feet high, spring from the deepest water, forming canons. At the mouth of the Humber marble beds, of almost every hue, are found, and in the Blo-mi-don Hills a copper mine has been recently opened.

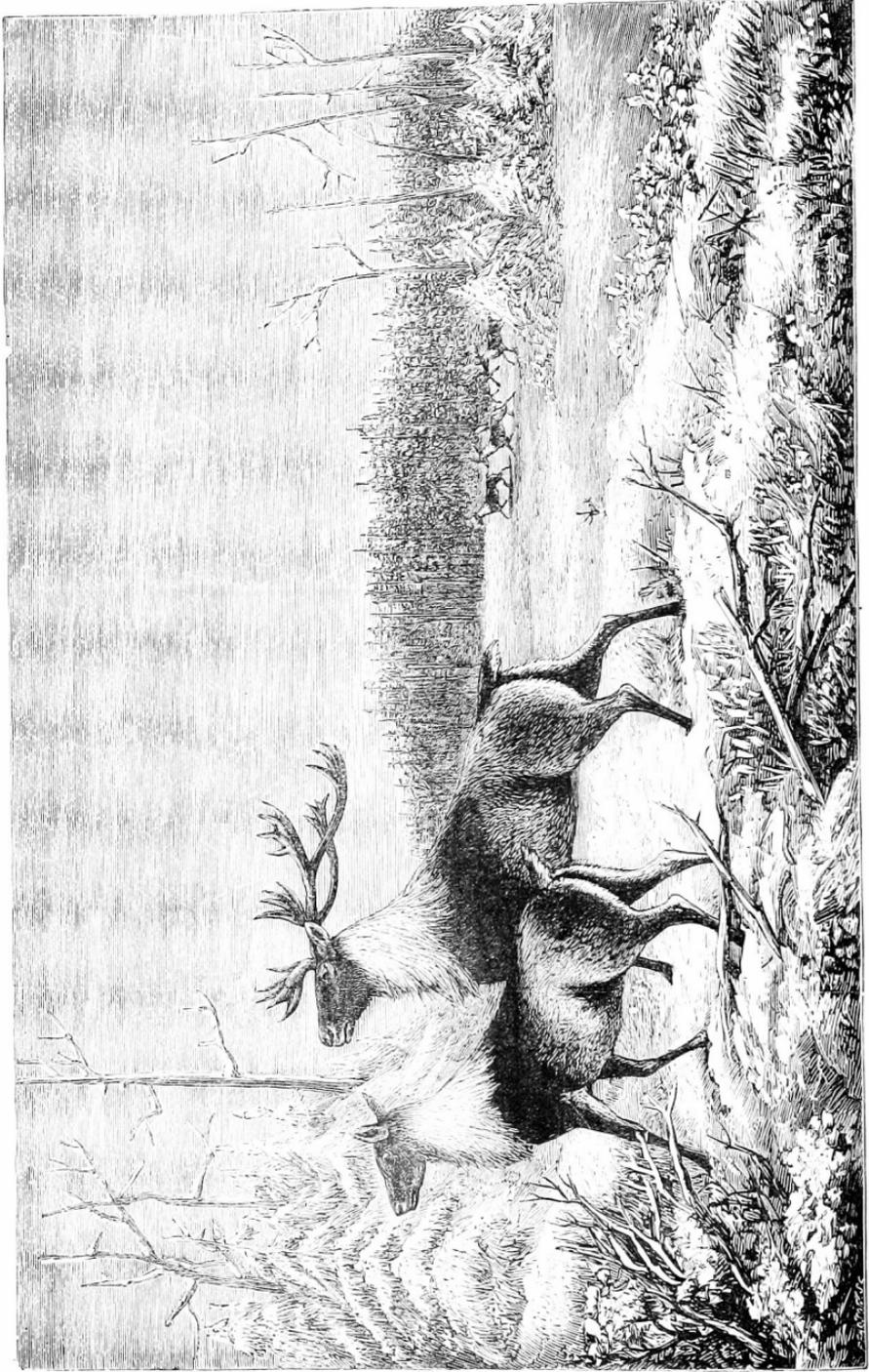
The Gander is the third of the large rivers of the island, and drains an area of two thousand five hundred square miles, falling into Fresh Water Bay. Its principal branch rises near Bay D'Espoir, on the southern coast, and running north-easterly falls into the Great Gander Lake. The other, after a very meandering course, falls into the same lake, whence the united stream runs easterly for thirty-one miles into Fresh Water Bay. Gander Lake has an area of forty-four square miles and is thirty-six miles long.

These are the three main arteries; but there are numerous smaller streams, most of them rising at right angles to the course of the larger streams, which have comparatively short courses, and rush in turbulent torrents to the sea. The Gambo is a small stream flowing from Gambo Pond, and having some splendid pine timber growing on its banks. Terra Nova River is a considerable stream, noted for its rapids, falling into Bonavista Bay.

Colinet River falls into St. Mary's Bay. The Codroy River rises in the Long Range Mountains, and flows through a valley containing the finest land in the island.

One of the most remarkable of the physical features of the island is its immense number of lakes and ponds. They are so numerous that were the island mapped out in detail, more than one-third of the whole surface would probably be represented by water. They are found in every possible position: in the mountain gorges; in the depressions between the low hills; in the valleys; and frequently in hollows near the tops of the highest eminences. They are of all sizes, from tiny pools and lakelets to sheets of water nearly sixty miles in length. From the tops of some of the highest hills from sixty to one hundred and fifty ponds and lakes have been counted. They form a very beautiful feature in the landscape, in many districts, as the eye ranges from the hilltop, over an expanse of country having these bright gems, overhung with thick woods, dotting its surface. Nearly all of them are well stocked with trout. There can be little doubt that these lakes and lakelets are relics of the Glacial Age, and have been scooped out by glaciers when the island was under an ice-mantle, two or three thousand feet thick, as Greenland now is, and down its mountain gorges, huge glaciers were throwing off myriads of icebergs into the encompassing seas.

The largest lake in the island is Grand Lake, fifty-six miles in length, with an area of one hundred and ninety-two square miles. Its surface is but fifty feet above the sea level, while, at its deepest portion, the bottom is more than three hundred feet below the level of the sea. Many brooks empty into it, but it has only one outlet—Junction Brook, which joins the Humber. The southwestern extremity bears about north-east from the head

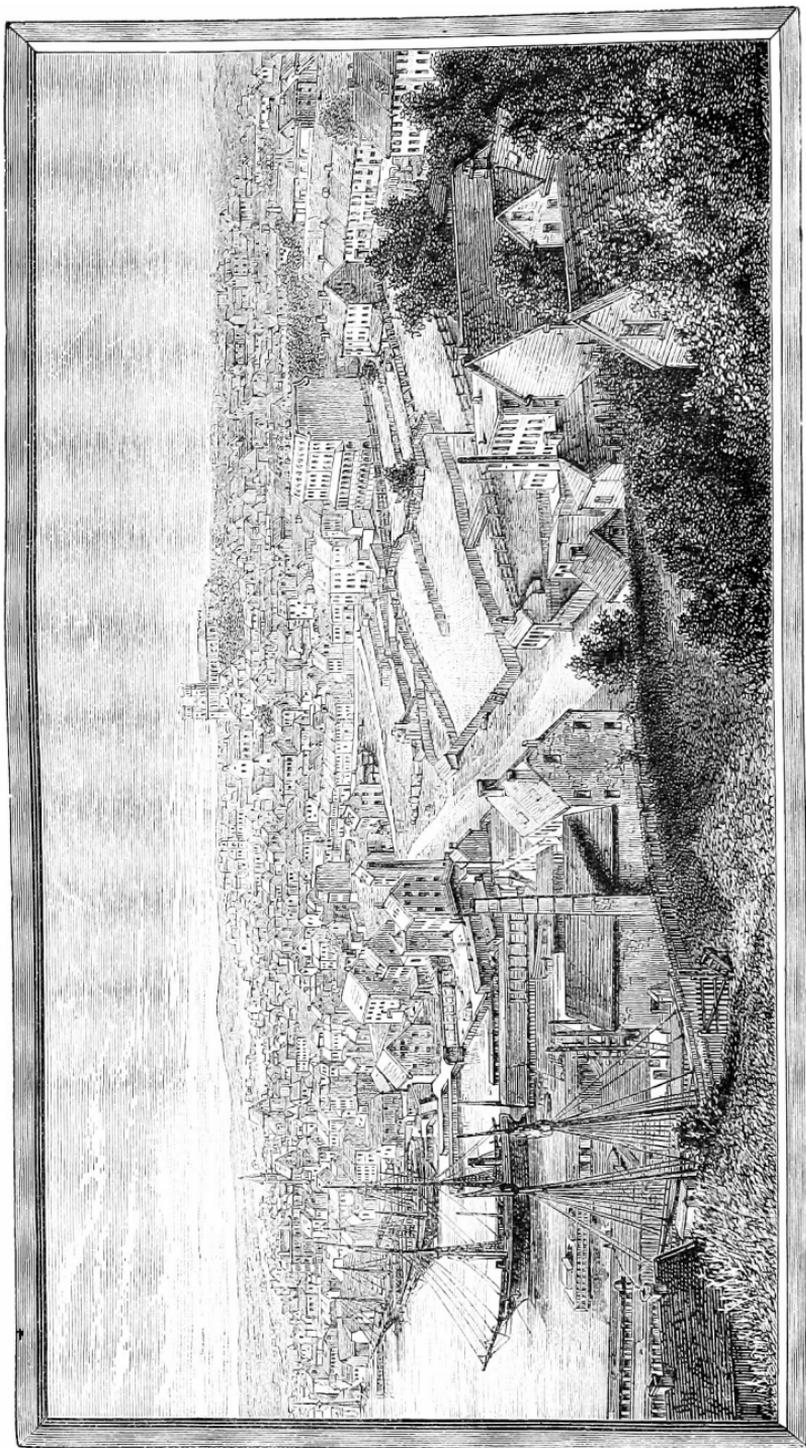


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of St. George's Bay, from which it is distant about fifteen miles. Seven miles from this end it divides into two arms, each about a mile wide, inclosing an island twenty-two miles long and four or five broad, to which the name Sir John Glover's Island has been given of late, in compliment to the late Governor, who in 1878 visited and explored the lake. From the island the lake runs in a north-eastern direction, and widens to a breadth of five or six miles. The shores are densely wooded to the water's-edge, in some places precipitous, in others presenting a gentle rise. The scenery in summer, when the trees are clad in "living green," or still more in autumn, when the leaves are russet, orange, and gold, is magnificent. The island is covered with valuable timber, but what the character of its soil may be is yet unknown. It is a favourite resort of the reindeer in summer, and the shores of the lake opposite to it present the best ground for deer-stalking in the island, as the deer swim across when setting out on their southern migration, and collect in herds on the "barrens" near the lake.

The next largest lake is Red Indian Lake, through which the River Exploits flows. It is thirty-seven miles long, and from half-a-mile to three miles wide, with an area of sixty-four square miles. Around its shores are forests of fine timber, indicative of a fertile soil. Great Gander Lake is thirty-three miles in length, with an average width of two miles, and covers an area of forty-four square miles. Its banks, and that of the Gander River which flows through it, present immense tracts of the finest agricultural and timber lands in the island. Deer Lake, through which the Humber flows, is but ten feet above the high-tide level, and has an area of twenty-four square miles. The land around it is fertile in the highest degree. Sandy Lake, Victoria, Hind's, Terra Nova, and George IV. lakes range next in size.

As yet the shores of these great lakes, the valleys through which these noble streams flow, are absolute solitudes, without a single human inhabitant. The magnificent pine forests are left to rot, or perish by fire. The soil is fertile enough to sustain many thousands of people in comfort, but it is as yet untouched by plough or spade. The "forests primeval" show no clearings won by human industry. All is primitive wilderness. It may seem surprising that such should be the case in an island only five days' steaming distance from Great Britain, and with thousands of emigrants passing these shores every day to seek a home in the far west of America. But it must be remembered that until recently the very existence of Newfoundland's fertile lands and valuable forests was unknown. Now that the great revolutionist, the railway, is about to render her solitudes accessible, a portion of the great stream of emigration will ere long be diverted towards these untenanted wastes, which, by human industry, may be made to "blossom like the rose."



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CITY OF ST. JOHN'S, NEWFOUNDLAND.

CHAPTER II.

ST. JOHN'S, THE CAPITAL OF NEWFOUNDLAND.

The site of the city—The Narrows—Character of the local buildings—The new dock—Water supply—Protection against fire—Churches and chapels—Government offices and banks—Population and its religious denominations.

ALL travellers who visit St. John's admire the striking and picturesque approach to the harbour, and the fine view on entering its waters. In a lofty iron-bound coast, whose grim rocks frown defiance on the billows of the Atlantic, there suddenly presents itself to the voyager a narrow opening in the rocky wall, as if, by some convulsion of nature, the rampart had been rent asunder, and the sea had rushed in. Hills from five to six hundred feet high guard this opening on each side, and, as the vessel glides through, the traveller looks up, not without a feeling of awe, at the great cliffs of dark-red sandstone piled in broken masses on a foundation of gray slate-rock. On his right he sees an almost perpendicular precipice, three hundred feet in height, above which rises, with almost equal steepness, the crest of Signal Hill, five hundred and ten feet above the level of the sea, on which stands the "Block House," for signalling vessels as they approach the harbour. On the left hand the hill rises still higher by a hundred feet, picturesque, rugged and broken. From its base a rocky

promontory juts out, forming the entrance of the Narrows on one side, on the summit of which is Fort Amherst Lighthouse, where is heard the hoarse roar of the restless Atlantic as the waves break on the rocks beneath. It is a scene which for grandeur and sublimity is not surpassed along the entire American coast. Formerly batteries, armed with formidable guns, rose one over the other amid the clefts of these rocks ; but years ago the garrison was withdrawn and the cannon removed. The Narrows leading to the harbour are nearly half a mile in length, and it is not till two-thirds of them are passed that the city itself opens to view, as, at the termination of this channel, the harbour trends suddenly to the west, thus completely shutting out the swell from the ocean. In ten minutes after leaving the Atlantic a steamer is safely moored at the wharf in the still waters of a perfectly land-locked harbour. Vessels of the largest tonnage can enter at all periods of the tide, the rise of which does not exceed four feet. The entrance of the Narrows, between Signal Hill and Fort Amherst, is about fourteen hundred feet in width ; and at the narrowest point, between Pancake and Chain Rocks, the channel is not more than six hundred feet. The harbour is about a mile and a quarter in length, and nearly half a mile in width. It is deep, with a mud bottom, having from five to ten fathoms, and in the centre it is ninety feet in depth. Of its size it would be difficult to find a finer harbour.

The city is built on the northern side of the harbour, on a site which could scarcely be surpassed. From the water's edge the ground rises with a slope till the summit is reached, where there is a large level space. Along the face of this slope the main streets run, and the city is rapidly extending itself in all directions beyond. The facilities for drainage are all that could be desired. Three principal streets run parallel with the harbour and with one another the whole length of the city, and these are inter-

sected by a number of cross-streets. The former follow the sinuosities of the harbour, so that they are irregular and winding. On the south side the hills spring so abruptly from the water that only a sufficient site for a range of warehouses and oil factories could be scooped out. From the waters of the harbour the city presents a very picturesque appearance, climbing the slope of the hill, which is crowned by the Roman Catholic cathedral, a noble structure, which overlooks the whole. There is ample space in every direction for expansion. Already, on the summits overlooking the business part of the city, houses of a superior description are erected; and these will ere long grow into crescents and squares, and form the fashionable quarters: Water Street, the principal business street, presents a very substantial though not handsome appearance, the houses being of stone or brick. Shops, stores, and mercantile counting-houses occupy the ground-floors, while the merchants and shopkeepers live in the upper storeys. The fish stores and other warehouses and the wharves project from behind, on the side next the harbour. Many of the shops present a very handsome appearance. In other parts of the city the houses are for the most part built of wood, and many of them are dingy and commonplace. Of late years, however, taste has been developing, and houses have been built of a superior description. Gradually the wooden buildings will be replaced by houses built on the best models. Increasing wealth and the growth of the middle class will lead to greater regard for appearances. More attention will be given to the condition of the streets and side-walks, now too much neglected; to the proper lighting and cleansing of the city; and a corporation, the want of which is now felt severely, will take charge of all urban matters, and carry out improvements of all kinds. In due time St. John's will be transformed into a handsome city, for the magnificent site it occupies admits of the introduction

of the best improvements of modern times. As it is, business engrosses the thoughts of all; and perhaps there are few towns of equal size in which so much business is transacted and money made in the course of a year.

Already the want of more harbour accommodation is felt, and it will soon be found necessary to deepen and extend the harbour at its western extremity, so as to admit of an increase of wharfage. The want of a graving dock is at length to be supplied. Last session the legislature granted a charter to a company who have contracted to build a dry dock of such dimensions as to be able to receive the largest steamers afloat. The length of its floor is to be six hundred feet, the width at top one hundred feet, at bottom eighty-three feet, and the depth twenty-six feet. Such a dock will be equal to anything on this side the Atlantic. The cost is estimated at a million dollars. The government agree to give to the company an annual subsidy of \$30,000, for forty-five years, being interest at five per cent. on \$600,000. As security for guaranteeing the interest on the bonds to this amount, the government hold a first mortgage on the dock. The work is to be finished in five years, and no subsidy is payable until completion. The site of the dock is to be excavated out of the rocky boundary of the south side of the harbour, so that it will be literally hewn out of the solid rock, and, when once constructed, will last for all time. This great public work will give an immense impulse to the business of the port. There are now a fleet of thirty steamers and a large number of sailing vessels connected with the port of St. John's, the bulk of them engaged in the seal fishery. Their owners will have the great advantage of getting the repairs done on the spot. St. John's lies far out in the Atlantic, near the track of all the great trans-Atlantic lines of steamers; and when the dock is completed, the port will become the great harbour

of refuge for any that meet with accidents or become from any cause disabled. Hence this dock, capable of accommodating the largest steamers, is really of international importance. On the security of the colony the necessary funds have been already obtained, and the work is to be commenced at once.

St. John's enjoys the immense advantage of possessing an abundant supply of the purest water. The terrible fires which devastated the city again and again taught an impressive lesson in regard to the importance of a good supply of water as a security against such calamities, to say nothing of sanitary considerations. The cost of the water-works, commenced in 1860, was considerable; but the saving effected in the reduction of insurance rates, by the introduction of the water supply, more than covered the city taxation for the payment of the interest on the investment; while, at the same time, the public health has been improved, and habits of cleanliness promoted among the working classes. St. John's is rarely visited with epidemics, and is one of the healthiest cities on the American side of the Atlantic.

The supply of water is obtained from Windsor Lake, four and a half miles distant from the city, and standing at a height above it of five hundred feet. The pressure is thus so great that water from the hydrants can be thrown over the highest buildings. In case of fire there is no need of engines, the hose being at once attached to the hydrants, whence water in abundance can be poured on the conflagration. The area of the lake is over two square miles, and, were it necessary, the flow of a stream which runs out of it could be arrested, and a supply of water equal to the consumption of a city two or three times as populous as St. John's could be obtained. As it is the supply is abundant, and the consumption unrestricted. Three millions of gallons are run off daily in the city. The water is soft,

pure, and excellent for all household purposes. The lake has a shingly bottom, and no mud. There are in the city forty street fountains, and nearly two thousand service pipes. Water from a seven-eighth nozzle can be thrown from a hydrant to a distance of one hundred and fifty feet along the street, and to a height of fifty feet against a wall. The fire brigade consists of one hundred and ten men, all volunteers. No fire of any considerable extent has occurred since the introduction of the water, and few cities enjoy greater security against fire, notwithstanding that two-thirds of it consist of wooden houses. The water-works have been constructed by a joint-stock company, with a capital of \$400,000, the interest on which is guaranteed by government at the rate of five per cent. The water rates are fixed so as to meet the interest on the capital stock of the company, together with the working expenses. The amount of revenue collected annually is \$33,600. The annual working expenses amount to \$6,340. Three rates are collected to meet interest and expenses: the first, on freehold property, for protection against fire; second, on the occupier, which is the consumption rate; and third on vessels entering the port, five cents per ton once a year, and also twenty cents per ton on all coal landed in the town. The rate is moderate. A house, the rent of which is \$160 per annum, will pay as water rate about \$18, and others in proportion. The poorer classes are supplied at public fountains without charge. The business of the water company is conducted by three directors who are appointed by government.

The churches in the city are the Roman Catholic Cathedral; St. Patrick's Church; Church of England Cathedral; St. Thomas and St. Mary's Churches, belonging to the Church of England; Gower Street, George Street, and Cochrane Street, (Wesleyan); St. Andrew's Presbyterian Church; and the Congregational Church.

The most conspicuous building is the Roman Catholic Cathedral, occupying a commanding site on the summit of the hill on which the city is built. It is richly ornamented with statuary and paintings, and over the gateway and near the entrance are some fine pieces of sculpture. The cathedral is built in the form of a Latin cross, the entire length being two hundred and thirty-seven feet, and the length of transepts one hundred and eighty feet. The two towers in front rise to the height of one hundred



ROMAN CATHOLIC CATHEDRAL, ST. JOHN'S.

and thirty-eight feet. The exterior facings are of limestone and Irish granite. The stone of which it is built was obtained principally in Kelly's Island, Conception Bay, and was all carried and brought to the spot by voluntary labour. It was opened for worship in 1850. Close beside the cathedral are the episcopal residence, the Catholic College, and the Presentation Convent and schools.

The Church of England Cathedral, when completed, will rank among the finest ecclesiastical edifices in British America. The nave was completed and opened for service

in 1850; and the transepts, chancel, and tower are now in course of erection from a design of Sir Gilbert Scott, and will probably be finished in two or three years. Its length, when completed, will be one hundred and twenty feet; its width fifty-six feet, and its tower and spire one hundred and thirty feet. It is of the pointed Gothic or ecclesiastical style of architecture; and the workmanship, externally and internally, is beautifully finished. Its lofty pointed windows are filled with fine examples of stained glass.

The three Wesleyan churches are tasteful and commodious erections. St. Andrew's Presbyterian Church is a handsome brick and stone structure in the centre of the city. The Congregational Church is a plain stone building which was opened in 1853.

Among the public buildings, Government House and the Colonial Building, or Parliament House, are the most important. Both are situated on the plateau stretching inland from the termination of the sloping declivity on which the main portion of the city stands. Government House is a plain, substantial, and spacious building, without any architectural pretensions; but in regard to internal accommodation and comfort it is all that could be desired. Its erection, in 1828, cost the Imperial Government 30,000*l.* sterling. The grounds around it are tastefully laid out and planted. The Colonial Building is one hundred and ten feet in length, and eighty-eight in breadth, and was erected at a cost of \$100,000. The white limestone, of which it is built, was imported from Cork. It has a stone portico, supported by six massive pillars, thirty feet high, of the Ionic order, resembling strongly the front of the British Museum on a small scale. The foundation-stone was laid, in 1847, by Sir Gaspard Le Marchant, who was then Governor, and it was first occupied by the legislature in 1850. The building contains chambers for the two branches

of the legislature, each thirty feet by fifty; and the whole of the government offices, with the exception of that of the Surveyor-General, are now removed to the Athenæum.

One of the handsomest and most conspicuous of the public buildings is the Athenæum. The foundation-stone of this erection was laid, in 1875, by Sir Hugh Hoyles, Chief Justice. It was completed and opened in 1877, the total cost having been \$58,000. It is owned by a joint stock company, and is so well managed as to pay a fair



GOVERNMENT HOUSE, ST. JOHN'S.

dividend to the shareholders. The building comprises a public hall, handsome and well-proportioned, in which concerts, lectures, and public meetings of all kinds take place, capable of accommodating a thousand persons; a reading-room and library, rented by the Athenæum Literary Institute—the former supplied with the leading newspapers and periodicals of Britain and America, and the latter containing five thousand volumes of well-selected books. The Savings' Bank, the office of the Surveyor-General, the Geological Survey office, the office of the Colonial Railway

Engineer, are also in the same building. The Athenæum building is a credit to the city in its appearance external and internal, and serves important purposes of public utility.

St. Patrick's Hall, lately completed and opened, is still larger than the Athenæum Hall, and is a building of noble proportions, substantial, handsome in appearance, and admirably arranged. The hall occupies the entire second storey, and on the ground-floor are the spacious school-rooms of the Christian Brothers, in which about four hundred children are receiving an education.

The Union and Commercial Banks are both fine ornamental buildings, and admirably adapted to the purposes for which such institutions are designed. The Court House, Police Office, and Post Office are under the same roof, and little can be said in commendation of this building. An Act has been passed authorising the erection of a new Post Office, which is greatly needed. In addition to the foregoing buildings there are convents, academies, and schools. The penitentiary, a solid granite building, and the public hospital, are on the outskirts of the city. Both these institutions are creditably managed, and will compare favourably with those of any of the neighbouring colonies. The lunatic asylum is a handsome building of brick and stone, possessing a picturesque and beautiful site, about three miles from the city. It is also well arranged and under excellent management.

St. John's has of late years made respectable progress in manufactures. It has three iron foundries, two well-appointed machine shops, a large boot and shoe factory, an extensive furniture factory, two tobacco factories, soap and candle works, a woollen factory, and a tannery. A factory for the manufacture of ropes, twine, nets, seines, etc., is also in course of erection. Now that a railway and a dock are going forward, a great impulse will be given to manufacturing industry of all kinds.

Since 1836, St. John's has doubled its population, which is now estimated at 30,000, or a sixth of the entire population of the colony. The last census, taken in 1874, gave the population of the city proper as 23,890. The religious denominations of the city then stood as follows :

Roman Catholics	15,719
Church of England	4,658
Wesleyan Methodists. . . .	2,360
Presbyterians	715
Congregationalists	437

There were 3,907 inhabited houses, and 4,570 families.

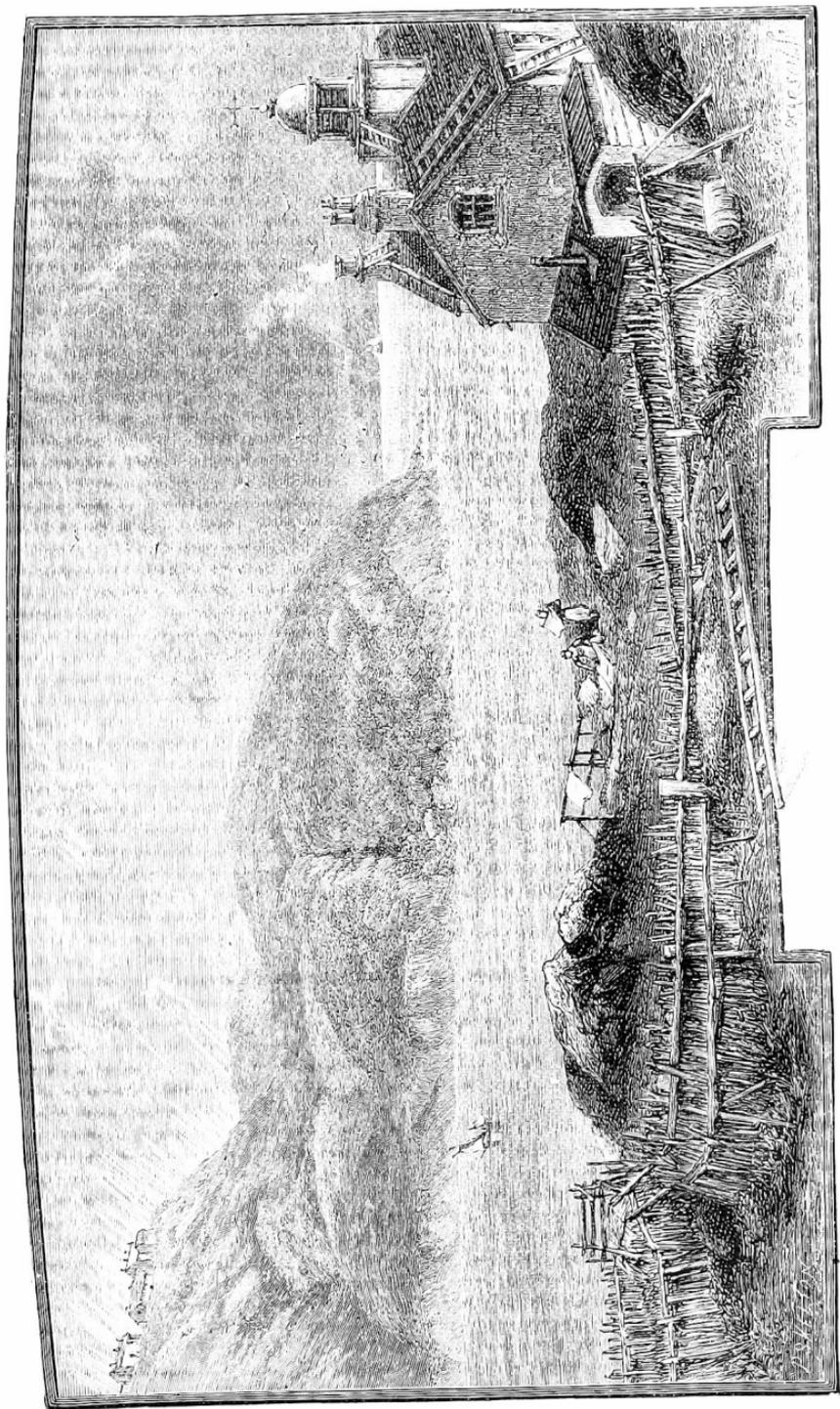
The city is in latitude $47^{\circ} 33' 33''$ N., and $52^{\circ} 45' 10''$ of west longitude. It is $10^{\circ} 52'$ east of Halifax, and stands on the most eastern portion of the American land, Cape Spear, five miles south of St. John's, alone projecting a little farther towards the Old World. It is a thousand miles nearer England than New York, and but sixteen hundred and forty miles from the Irish coast.

CHAPTER III.

BAYS AND HARBOURS.

St. John's—The Narrows—Round about the island—Placentia Bay—Burin and St. Pierre—Fortune Bay—The Penguin Islands—Cape Ray—On the banks of Bay St. George—Discovery of lead and other minerals—Marble beds in the Humber—The Straits of Belle Isle—The Bay of Notre Dame and Bett's Cove—"The Beautiful Conception Bay."

THE harbour on which St. John's, the capital, is built, is situated in the centre of the Avalon peninsula, and is spacious and well sheltered. The entrance to it, which is called The Narrows, is an opening in a huge wall of rock, extending for many miles along the coast, and at the sea-face is but nine hundred feet across, and finally diminishes to four hundred. The harbour has ninety feet of water in the centre, and is accessible at all periods of the tide. On the northern side of the entrance a precipitous sandstone hill rises to the height of five hundred and twenty feet, and on the south side another rocky guardian rears its head six hundred feet, having a sort of shoulder near the water, on which a lighthouse and a battery, called Fort Amherst, are erected. Formerly, in war time, a ponderous chain was stretched across the narrowest part of The Narrows, which before the invention of ironclad men-of-war effectually barred the entrance of hostile ships. From the termination of The



ENTRANCE TO ST. JOHN'S HARBOUR—LOOKING SEAWARDS.

Narrows the harbour trends sharply westward, so that the swell from the Atlantic, even in a storm, is hardly felt. It is effectually sheltered by the surrounding hills from all winds. It is more than half-a-mile in length and a quarter of a mile in breadth. In ten minutes after leaving the broad Atlantic steamers reach the wharves. The city is built on the north side of the harbour, which slopes upward to a high and level ground, and presents an admirable site. The hills on the south side of the harbour spring so precipitously from the water's-edge that it has been possible only to obtain foundations for a range of stores and warehouses, in which seal-oil is manufactured, and fish products stored for exportation.

Leaving the capital for a rapid excursion round the island, in order to form some idea of the bays and harbours, let us turn southward. At the distance of twenty miles from St. John's we pass Bay of Bulls (a corruption, probably, of the French *Bay de Bois*, Bay of the Woods), a fine harbour and an important fishing station; and twenty miles farther Ferryland comes in sight—one of the oldest settlements in the island, founded by Lord Baltimore in 1623. Here are some ancient ruins and the remains of fortifications. Sixty miles south from St. John's the well-known Cape Race is reached—the south-east point of the island, where the land trends to the westward. The coast here presents a grim repulsive aspect, and is associated with many a tale of shipwreck and disaster. St. Shotts, twenty-five miles farther, is the most dreaded and fatal spot on these shores, where many a gallant ship has met her doom, and many a mariner has gone down “unknelled, uncoffined, and unknown.”

The cause of many of these marine disasters is the indraught of the great bays, and the irregular current and undertow caused by two tidal waves which are here confluent. St. Mary's, the first of the great bays,

now opens, being twenty-five miles wide at the mouth, and running thirty-five miles inland. The splendid arms of this bay, Salmonier and Colinet, reach still farther into the land; and here are some of the finest salmon fisheries in the country; while their heavily-timbered



PLACENTIA.

shores, with a fertile soil, present most inviting locations for settlers. Trepassey, between Cape Race and St. Mary's, is an excellent harbour, and has a productive fishery. St. Mary's, with a population of seven hundred, has an extensive shore cod fishery, and is somewhat of a farming

district. After passing Cape St. Mary we enter the Bay of Placentia, the largest in the island. It is fifty-five miles wide at the entrance, and has a depth of ninety miles. Its fisheries of cod, herring, and salmon are unsurpassed, and its scenery is rendered more picturesque by the numerous islands which stud its teeming waters. The town of Placentia, built at the head of a magnificent harbour, is a place of historic interest. It was long held by the French, and was founded in 1660 under a grant from Louis XIV. of France. Its site is very peculiar, as it is built on a beach of coarse gravel, and two considerable arms of the sea extend inland several miles beyond the town, adding greatly to the beauty and interest of the scenery. It has a population of upwards of a thousand.

Burin, in the same bay, occupied by two thousand three hundred people, is situated on one of the finest land-locked harbours in the island. It has extensive fisheries, and a large trade with St. Pierre. Next in position is Fortune Bay, which is about twenty-five miles wide and seventy in length. This is one of the principal seats of the herring fishery. Great numbers of American vessels visit Fortune Bay for bait. At Long Harbour, in 1878, some Newfoundlanders interfered with the operations of a number of American fishermen, who were, as they believed, violating the local laws in regard to the time and mode of taking herring. This petty squabble was magnified into an international difficulty. After lengthened diplomatic correspondence, the British Government agreed to pay 15,000*l.* as compensation for damages alleged to have been sustained by the Americans. At the entrance of Fortune Bay are the two islands of St. Pierre and Miquelon, ceded by treaty to France for the shelter of their fishermen; and now the only relics of the vast possessions once held by France in North America. Fortune Bay has several picturesque arms, the largest of which are Bay D'Espoir,

Hermitage Bay, and Connaigre Bay. From Fortune Bay there is a straight line of coast called the "western shore," which is upwards of one hundred miles in length, and terminates at Cape Ray. It is indented with numbers of small bays and harbours, the largest being La Poile and Rose Blanche Bays. There are also numerous clusters of islands, such as the Penguin Islands, so called from the multitude of birds of that name which were formerly seen there, and the Burgeo Islands, from the largest of which Captain James Cook, the celebrated navigator, observed an eclipse of the sun in 1765.

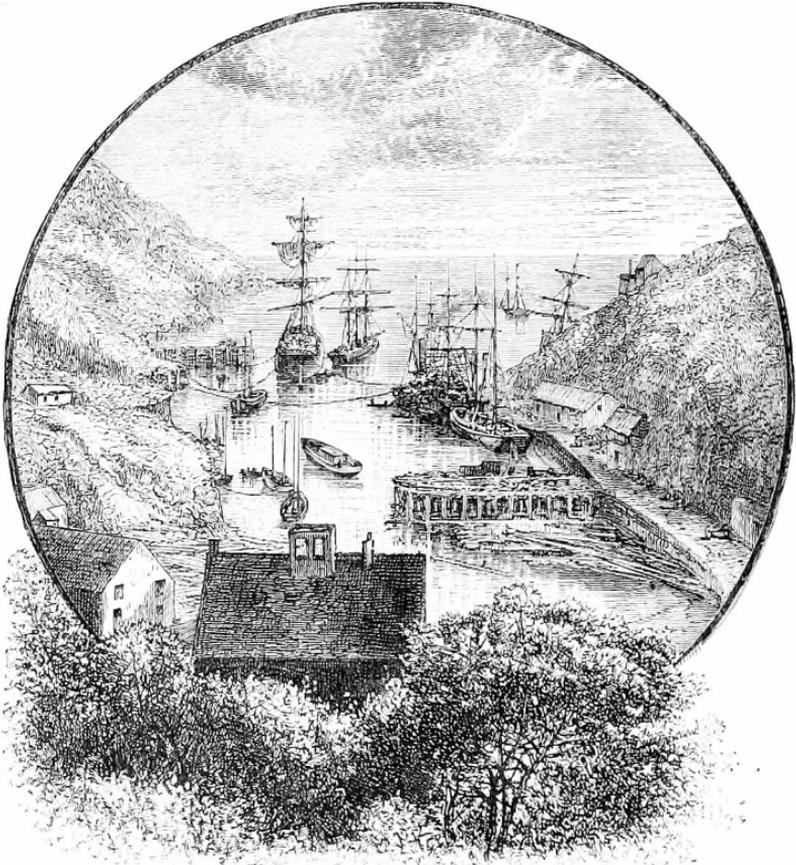
Cape Ray is the most western point of the island, and opposite to it, at the distance of about fifty miles to the south-west, is Cape North, in the Island of Cape Breton. These two capes guard the entrance of the Gulf of St. Lawrence. It is across this narrow strait that the Great American and European Short Line Railway Company propose to establish a transit by swift steamers. At Cape Ray commences what has been popularly called the French Shore, from the fact that the French have certain fishing privileges secured to them here by the treaties of Utrecht, Versailles, and Paris. The coast included in these treaties extends from Cape Ray around the western and northern shores, and terminates at Cape John, on the north-east coast. It includes the best part of the island in regard to soil, climate, timber, coal, marble, and gypsum beds. The effect of these treaties, though they conferred no territorial rights on the French, was virtually to prevent settlement, as no titles to lands or minerals were granted. Last year these restrictions were removed by the British Government, and now the so-called French Shore is as open to settlement as any other portion of the island.

From Cape Ray to Cape Anguille the coast is singularly wild and inhospitable, varied only by Little Harbour, which is five miles from the former. The Great and Little Codroy

Rivers discharge their waters between these two points. They flow through a valley which redeems the barren appearance of the shore. It is forty or fifty miles in length, and for fertility of soil could scarcely be surpassed. Bay St. George, on the banks of which two thousand nine hundred persons are settled, comes next in our survey. It is a noble bay, some forty miles wide at the mouth, and stretching far inland, with a good harbour at its head. Around its shores are some of the most fertile valleys in the island, but almost without a human inhabitant. Fine forests of timber, and a coal field of large extent await the hand of industry and enterprise. Lead and other minerals have been found here, and also in the peninsula of Port-a-Port, which extends to the north-west of St. George's Harbour, and is joined to the mainland by a narrow isthmus called the Gravels. On this side of the island the climate is much superior to that of the southern and eastern shores. Fogs are unknown, and the effect of easterly winds unfelt.

Bay of Islands (population fifteen hundred) is next met with, having three magnificent arms running twenty miles inland, one of which receives the Humber River, the second largest stream in the island. It is the seat of a winter herring fishery of great value, and a place for the exportation of lumber. Extensive marble beds are found at the mouth of the Humber. As the name indicates, this bay contains numerous islands. Bonne Bay, farther north, has two long arms, communicating with lakes at some distance from the coast, by means of their respective rivers. Other bays on this coast are Ingornachoix Bay, divided into two arms, in which are Hawke's Harbour and Port Saunders; St. John's Bay, which receives the waters of Castor River, the size of which is considerable for fifteen miles inland. Along the Straits of Belle Isle the coast is uniformly straight, and at some points is but nine miles distant from the opposite

coast of Labrador. Cape Norman is the north-west point of the island, having on the east Pistolet Bay. Cape Bauld, with Quirpon Harbour and Island, is the north-eastern point of Newfoundland. Hare Bay is a deep and wide gulf, reaching up more than two-thirds of the whole breadth of



BETT'S COVE HARBOUR, NOTRE DAME BAY.

this part of the island, which is very narrow, and branching out into arms and bays, which are sheltered by lofty hills. The French have numerous fishing establishments on this part of the coast. Passing Canada Bay, where fine marble beds are found, and White Bay, we reach Cape St. John, the termination of the French Shore.

The magnificent Bay of Notre Dame now opens up before the gaze of the voyager along the coast. It is more than fifty miles in width at its mouth, and with its numerous arms it reaches seventy or eighty miles inland. Its shores are now famous as the great copper-bearing region. Here are situated Tilt Cove, where the first copper mine was opened, in 1864; Bett's Cove Mine, the most productive yet discovered; and Little Bay Mine, which was commenced in 1878, and appears to be one of the finest copper mines in the world. The whole coast here, for miles inland, is covered with mining grants and licences, and mineral indications are met over an extent of country forty or fifty miles in length.

Notre Dame Bay contains numerous islands, the most important being Twillingate Island, where there is a population of three thousand engaged in fishing; and Fogo, with a population of eight hundred; Herring-Neck, New World Island, with a population of one thousand.

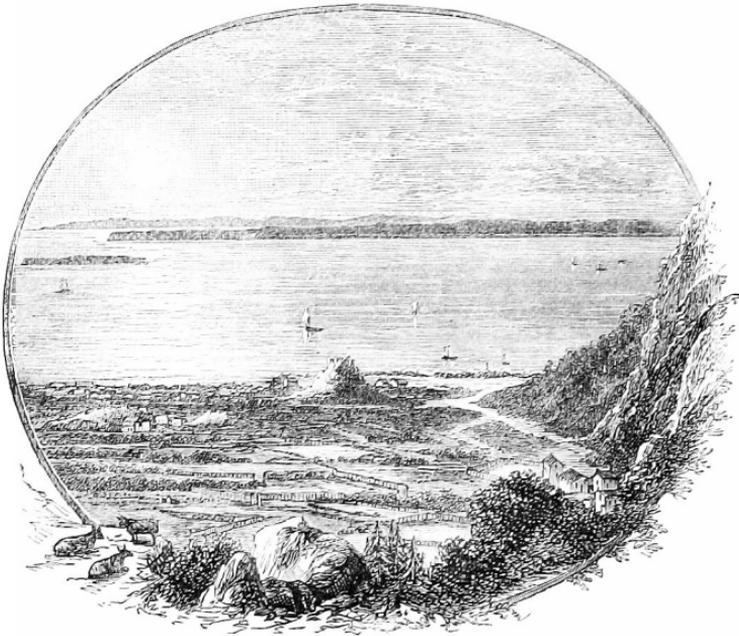
Coming south, the next large bay that claims attention is Bonavista, extending from Cape Freels to Cape Bonavista, having numerous groups of islands, arms, and inlets, and presenting some of the finest scenery in the island. The land in many of these islands and around the head of the bay is very fertile. The town of Bonavista is beautifully situated in a fertile district, and has a population of three thousand. It is one of the oldest settlements. Greenspond is an island on the north side of this bay, with an extensive fishery, and a population of sixteen hundred. The whole population of the bay numbers thirteen thousand.

Catalina is a harbour of refuge at the entrance of Trinity Bay, a magnificent sheet of water running up seventy or eighty miles inland. The town of Trinity lies at the base of Rider's Hill, on one of the finest harbours in the world. On the south side of this bay is the well-known harbour of

Heart's Content, where the Atlantic cables are landed. A population of fifteen thousand are clustered around the shores of Trinity Bay.

Random Sound and Island, from the fertility of the soil, will yet be the garden of Newfoundland.

We now arrive at the last of the great estuaries, the



CONCEPTION BAY. TOPSAIL, NEWFOUNDLAND. GREAT AND LITTLE BELLE ISLE
IN THE DISTANCE.

beautiful Conception Bay, the most populous and commercially important of all the seats of population, containing forty-one thousand inhabitants, and many thriving towns, villages, and settlements. Harbour Grace, on its northern shore, is the second town in the island, with a fine harbour, a population of eight thousand, and an extensive trade. Carbonear is a thriving town, with a population of five thousand. Other towns and villages are Spaniards Bay,

Bay Roberts, Cupids, Port-de-Grave, and Brigus, near which gold has recently been found. Passing Cape St. Francis, at the entrance of Conception Bay, we once more reach St. John's, twenty miles farther south, after having made a round of the island.

CHAPTER IV.

THE INTERIOR.

The harvest of the sea—The Geographical Survey—Vast tracts of country still unexplored—An adventurous traveller—First impressions of a new country—Cormack's description of the new-found country—Extinction of the aboriginal Indians—Abundance of game—Beaver and venison—A paradise for the sportsman—A vast grazing country—A friendly mountaineer—The island crossed from east to west.

THE seats of population, it will be noticed, are all situated on the various bays and harbours, and the whole of the inhabitants are sprinkled round the sea margin. There are no settlements in the interior or at any distance from the sea-coast. Along the roads connecting the different settlements are farmhouses and cottages at intervals, and a small portion of the soil is cleared and cultivated. On the harvest of the sea, however, the great bulk of the people are dependent for their subsistence. The sea is their bountiful mother, by whom they are clothed and fed. It is also the grave of many of their kindred. Tales of wreck and disaster form no small part of the fishermen's talk around the winter's hearth.

The geological survey has now been going on for seventeen years, so that Newfoundland is no longer the *terra incognita* it once was: Large sections of it have been carefully explored by scientific men, and the information

they have accumulated, and which was long neglected because buried in their reports, has now been to some extent popularised and diffused. The survey has been conducted along the line of all the great rivers and lakes, and many of the smaller; around the shores of the bays, and among some of the island groups. Special attention has been given to the extent of land suitable for cultivation, and to the mineral and forest wealth of the country. Invaluable additions to our knowledge of the island have been made by the geographical survey, and the information thus gathered is thoroughly trustworthy.

Still it is true that a vast extent of the interior, at a distance from the shores, and from the great lakes and rivers, is yet unexplored; and what this may contain of good soil or of mineral treasure has yet to be determined. Much is known, but far more is still unknown. An adventurous traveller, Mr. Cormack, a Scotchman, crossed the island in 1822 (accompanied by a single Micmac Indian) from the head of Trinity Bay in the east to St. George's Bay in the west. He was a man of ability and education. The narrative of his journey throws much light on the condition of the interior proper. According to his account, the first portion of his journey lay through dense forests of pine, spruce, birch, and larch, and proved to be a uniform ascent, till at length he reached the summit of an elevated ridge, which served as a barrier between the sea and the interior. From this summit the vast and mysterious interior, on which the eyes of a white man had never before gazed, broke on the view of the traveller in all its magnificence. He describes the sight as grand and almost overpowering. Far as the eye could reach a vast basin spread out in a succession of green plains, marbled with woods and lakes of every form and extent. It must have been a rapturous moment for the traveller, more than enough to repay him for all his toils

and dangers, when his eyes first wandered over this expanse, untrodden by the foot of man, now for the first time disclosed in its beauty and sublimity to an appreciative observer. It carried the mind back to the ages when primeval man took possession of his fair heritage and gazed with wonder and worship on the green earth and its glorious canopy of light and blue. How different from the picture which Ignorance and Prejudice had so long been painting for us, on platforms, in dispatches, and in newspapers! Instead of impassable morasses, grim rocks, stunted woods, scowling deserts, a scene of striking beauty and mysterious grandeur met the eye. The soft breezes came laden with the scent of the wild flowers. The great plain was alive with a vast variety of birds and beasts, whose movements gave animation to the landscape, and whose tameness showed how innocent they were of the designs of man the hunter. North and south, in undulating beds, stretched the vast savannas, lakes, brooks, and skirting woods giving variety to the scene. Here and there, for more than ten miles, a yellow-green surface was spread out without a single rock or shrub, or any inequality in the unbroken steppe. The deep-beaten deer-paths were seen, like a vast network, seaming the surface in all directions. The courage of the adventurous traveller rose, and a passionate longing to penetrate the unknown land took possession of him. "A new world," he wrote, "seemed to invite us onward, or rather we claimed the dominion and were impatient to take possession. Fancy carried us swiftly across the island. Obstacles of all kinds were dispelled and despised. It was manifested on every hand that this was the season of the year when the earth here offers her stores of productions. Land-berries were ripening, game-birds were fledging, and beasts were emerging to prey on each other. Everything animate and inanimate seemed to be our own. There was no will but

ours. Thoughts of the aborigines did not alter our determination to meet them, as well as everything living that might present itself in a country yet untrdden and before unseen by civilised man. I now adopted, as well for self-preservation as for the sake of accomplishing the object of my excursion, the self-dependent mode of life of the Indian both in spirit and action."

Descending from this mountainous belt which encircles the coast, Cormack entered this open interior, which he found to be level plains or savannas, composed of fine black compact peat-mould, formed by the growth and decay of mosses, and covered for the most part with wiry grass. He describes these savannas as being in reality "magnificent natural deer-parks, adorned by woods and water. The trees here sometimes grow to a considerable size, particularly the larch; birch is also common. The deer-paths are countless, trending from park to park through the intervening woods, in lines as established and deep-beaten as cattle-paths on an old grazing farm. It is impossible to describe the grandeur and richness of the scenery, which will probably long remain undefaced by the hand of man." Not a trace of the Red Indians was found on the whole route. The aboriginals are long since extinct.

It took the traveller a month to cross this savanna country, which was about one hundred and fifty miles in breadth, the length being unknown. The progress was slow, as, in order to examine the country he did not follow a direct course: while to find game, and to get round the extremities of woods and lakes, he had frequently to adopt a circuitous course. There was no deficiency of game—deer, beaver, geese, ducks, and trout from the ponds and brooks constituted their food. Wild berries in great variety were in prodigal abundance. Cormack says that for the first ten days after the stock of bread he carried was exhausted he felt a longing for it, but after that did not miss it. The

venison he found excellent, the fat upon the haunches being often two inches in thickness. He had no trouble in supplying himself with deer's flesh. "The leading stag of a herd," says Cormack, "is generally the fattest. He is as tall as a horse, and must sometimes be shot at full speed, sometimes by surprise. The ball having pierced him he bounds, gallops, canters, falters, stands, tosses his antlers, his sinewy limbs quiver, unwillingly bend, and he stretches out his graceful corpse. Should the ball have passed through his heart he falls at once, probably balanced on all-fours. There is regret as well as triumph in taking possession of the noble vanquished." Beavers were found in great abundance, also black ducks, the finest of table-birds. So unsophisticated were the trout from their being unacquainted with man that they took the artificial fly merely by holding out the line in the hand without a rod. "No country in the world," says the traveller, "can afford finer sport than the interior of this island in the midst of August and September. The beasts of the chase are of a large class, and the cover for all game excellent." Here is a new and boundless hunting-ground for English sportsmen when the railway has pierced these solitudes and rendered this savanna country, with its abundance of game, accessible.

The countless deer-paths proved that the whole of the interior is amply stocked with caribou, who migrate to the north-west in spring, returning to the south on the approach of winter. No such herds of reindeer are to be met with in any part of continental America. It is not uncommon to meet with specimens weighing six and even seven hundred pounds. Were these reindeer utilised, as in Norway and Lapland, vast benefits might be realised. They are easily tamed when young, and could be conducted from pasture to pasture, by qualified herdsmen. There can be no doubt that this savanna soil could be reclaimed by drainage and tilling, so as to yield green crops, a

process which has been carried out in Scotland and other countries. A vast grazing country, it may be safely predicted, will one day be found where now these deer solitudes extend. The climate is far superior to that of the regions along the eastern shores. Fogs are rare and the summer warmth is delightful. During the two months he spent in the interior, Cormack mentions that there were but eight rainy days, four foggy, and forty-one bright days. The prevailing winds were westerly; frosts did not set in till the second week of October.

When near the centre of the island, one hundred and twenty miles inland from the head of Trinity Bay, and after crossing about ninety miles of the savanna country, Cormack and his Indian were fortunate enough to meet, in those solitudes, with a mountaineer Indian, from Labrador, who was out on a hunting excursion. The mountaineer, who was accompanied by his wife only, had erected his wigwam on a small island in a lake, nine miles in length, called by the Indians Crooked Lake, but which Cormack named Jameson Lake, after Professor Jameson of Edinburgh. Observing, to his great delight, a slender white column of smoke on this island, an indication of human beings, Cormack fired his gun, and presently another gun was heard in reply. "Soon afterwards," says Cormack, "to my great delight, there appeared among some woody islets in front, which precluded the view of the other side of the lake, a small canoe with a man seated in the stern, paddling softly towards us, with an air of serenity and independence possessed only by the Indian. After a brotherly salutation with me, and the two Indians kissing each other, the hunter proved to be unable to speak English or French. They, however, soon understood one another, for the stranger, although a mountaineer from Labrador, could speak a little of the Mic-mack language, his wife being a Mic-mack. This

was his second year in Newfoundland, his only companion being his wife. He invited us over with him in his canoe, to rest a day at his camp (where, he said, he had plenty of venison) which was readily agreed to on my part.

“The island on which the mountaineer’s camp was lay about three miles distant. The varying scenery, as we paddled towards it, amongst innumerable islands and inlets, all of granite, and mostly covered with spruce and birch trees, was beautiful. His canoe was similar to those described to have been used by the ancient Britons, on the invasion by the Romans. It was made of wicker-work, covered over outside with deer-skins sewed together and stretched on it, nearly of the usual form of canoes, with a bar or beam across the middle, and one on each end to strengthen it. The skin covering, flesh side out, was fastened or laced to the gunwales, with thongs of the same material. Owing to decay and wear, it requires to be renewed once in from six to twelve weeks. It is in those temporary barks that the Indians of Newfoundland of the present day navigate the lakes and rivers of the interior. They are easily carried, owing to their lightness, across the portages, from one water to another, and when damaged, easily repaired.

“His wigwam was situated in the centre of a wooded islet, at which we arrived before sunset. The approach from the landing-place was by a mossy carpeted avenue, formed by the trees having been cut down in that direction for firewood. The sight of a fire not of our own kindling, of which we were to partake, seemed hospitality. It was occupied by his wife, seated on a deer-skin, busy sewing together skins of the same kind to renew the outside of the canoe which we had found required it. A large Newfoundland dog, her only companion in her husband’s absence, had welcomed us at the landing-place with signs of the greatest joy. Sylvan happiness reigned here. His wigwam

was of a semicircular form, covered with birch-rind and dried deer-skins, the fire on the foreground outside. Abundance and neatness pervaded the encampment. On horizontal poles over the fire hung quantities of venison steaks, being smoke-dried. The hostess was cheerful, and a supper, the best the chase could furnish, was soon set before us on sheets of birch-rind. They told me 'to make their camp my own, and use everything in it as such.' Kindness so elegantly tendered by these people of Nature, in their solitude, commenced to soften those feelings which had been fortified against receiving any comfort except that of my own administering. The excellence of the venison and of young beavers could not be surpassed. A cake of hard deer's fat, with scraps of suet toasted brown intermixed, was eaten with the meat; soup was the drink. Our hostess, after supper, sang several Indian songs at my request. They were plaintive and sung in a high key. The song of a female, and her contentment in this remote and secluded spot, exhibited the wonderful diversity there is in human nature. My Indian entertained them incessantly until nearly daylight with stories about what he had seen in St. John's. Our toils were for the time forgotten. The mountaineer had occupied his camp for about two weeks; deer being very plentiful all around the lake. His larder, which was a kind of shed erected on the rocky shore for the sake of a free circulation of air, was, in reality, a well-stocked butcher's stall, containing parts of some half-dozen fat deer, also the carcasses of beavers, of otters, of musk-rats, and of martens, all methodically laid out. His property consisted of two guns and ammunition, an axe, some good culinary utensils of iron and tin, blankets, an apartment of dried deer-skins to sleep on, and with which to cover his wigwam, the latter with the hair off; a collection of skins to sell at the sea-coast, consisting of those of beaver, otter, marten, musk-rat and deer—the last dried

and the hair off; also a stock of dried venison in bundles. Animal flesh of every kind, in steaks, without salt, smoke-dried on the fire for forty-eight hours, becomes nearly as light and portable as cork, and will keep sound for years. It thus forms a good substitute for bread, and by being boiled two hours, recovers most of its original qualities.

“We left the veteran mountaineer, James John by name, much pleased with our having fallen in with him. He landed us from his canoe on the south shore of the lake, and we took our departure for the west coast along the south side. Truly could this man proclaim :

“I’m monarch of all I survey,
My right there is none to dispute;
From the centre all round to the sea,
I am lord of the fowl and the brute.”

One more feature of the interior, as described by Cormack, deserves notice. After nearly a month’s travel over the savanna country, the traveller reached a hilly ridge to the westward, which he named Jameson’s Mountains. This ridge proved to be a serpentine deposit, including a variety of rocks, all lying in nearly vertical strata alternating. “The mineralogical appearances,” says Cormack, “were altogether so singular that I resolved to stop a day or two to examine them. All the highest parts of the ridge were formed of this metalline rock, and were extremely sterile. The other rocks were noble serpentine, varying in colour from a black-green to a yellow, and from translucent to semi-transparent, in strata nearly a yard wide; steatite, or soap-stone; verde antique; diallage; and various other magnesian rocks. Sterile red earthy patches, entirely destitute of vegetation, were here and there on and adjacent to the ridge; and on these lay heaps of loose fragments of asbestos, rock-wood, rock-horn, and stones, light in the hand, resembling burnt clay,

cum multis aliis, the whole having the appearance of heaps of rubbish from a pottery, but evidently detached from adjacent strata and veins. I could not divest myself of the feeling that we were in the vicinity of an extinct volcano."

This range is about twelve hundred feet above the level of the sea. The serpentine deposits of which they are formed separate the low slate country, covered with savannas, through which the granitic rocks occasionally peep in the east, from a high granitic country that appears in the west. This spread of serpentine, which Cormack describes, is highly important, because it is in this formation that copper ore is found in this island, and wherever it comes to the surface copper ore may be looked for with a probability of success. This serpentine, therefore, in the centre of the island, which occurs again in Bay of Islands and Bonne Bay, may on examination be found metalliferous; and corroborates the opinion that the serpentine rocks from Notre Dame Bay run across the island, coming to the surface at intervals, the strike being south-westerly.

After crossing the granitic country at the west the daring traveller with great difficulty, and amid many perils and hardships, reached St. George's Bay, both he and the Indian being in the last stage of exhaustion. His bold achievement of crossing the island from east to west at its broadest part, with only his gun to depend on, has never been repeated since. To him we are indebted for all we know regarding the central interior. His journey from Trinity Bay to St. George's Bay occupied a little over two months. His success, he says, was in part owing to the smallness of his party. "Many together could not so easily have sustained themselves. The toil and privations were such that hired men or followers of any class would not have endured them."

CHAPTER V.

GEOLOGY.

Jukes, Logan, and Murray—Eighteen years of surveying—Coal deposits—"The Quebec group"—The great ancient rock systems represented in Newfoundland—More than half the island found to be Laurentian, and the highest series of rocks carboniferous—Geological demonstrations of the capacity of the country to sustain a large population.

THE late J. B. Jukes, who was for many years at the head of the Irish geological survey, was the first scientist who was employed to examine the geological structure of the island. When a young man he spent the year 1840 in exploring the country, having been engaged by the government for that purpose. In such a short time, and having great disadvantages to contend with, he could accomplish but little. His work, however, was far from being fruitless. He published, in two volumes, an account of his explorations, which is highly interesting in many respects, and though the result of a short and superficial survey, and its information imperfect and frequently erroneous, it can still be read with pleasure and profit. Mr. Jukes's work had the effect of drawing attention to the island, and proved to be the preliminary step to a thorough geological survey at a later date.

In the year 1864 the government of Newfoundland

took up the subject of a survey of the island, and opened a correspondence with Sir William Logan, who had been long engaged on the geological survey of Canada. The result was the appointment of Mr. Alexander Murray, C.M.G., F.G.S., to take charge of the important work. He had been for twenty years a colleague of Sir William Logan in the Canadian survey, and was strongly recommended by him as an able and experienced geologist. The result has amply justified the high opinion Sir William had formed of his qualifications. Mr. Murray has now spent eighteen years in the work, aided, during the last dozen years, by Mr. James Howley. He has prosecuted the survey with unremitting zeal and energy; and to him we are mainly indebted for that reliable information regarding the agricultural and mineral resources, and the forest wealth of the island which has entirely revolutionised people's views on these points, and is now leading to enterprise and the application of capital with a view to the colonisation of the country and the development of its great natural capabilities. Mr. Murray's reports have been collected and reprinted in a handsome volume,* and those who wish to obtain accurate information regarding the geology of the island and its character as a field for colonisation, will find in this book the results of patient scientific observations extending over many years. We are indebted to his work for the following sketch of the geology of the island. For obvious reasons minute scientific details are avoided, and only the general outlines are indicated.

A geological survey is something more than a purely scientific study of the various formations of a country. It has a practical bearing, and is designed to throw light on its economics, and to determine whether beneath its surface

“Geographical Survey of Newfoundland.” By Alexander Murray, C.M.G. London: E. Stanford. 1881.

mineral treasures, coal, marble, gypsum, or other materials of value may be searched for with a probability of success, and in what quarters. It also takes cognisance of the extent and character of its agricultural lands and its forest wealth. The bearing of geology on these, and its value in determining them, are now so well established, that the governments of all civilised countries are engaged in carrying out geological surveys, as the best means of promoting the development of their natural resources.

When the survey of Newfoundland was initiated under Mr. Murray, Sir William Logan pointed out two things that were to be specially kept in view. One of these was to determine whether a continuation of the rich coal deposits of Sydney, in the Island of Cape Breton, might be searched for in the carboniferous areas of Newfoundland, along the shores opposite the coal-bearing strata of Cape Breton, with a probability of success. As there was a general analogy in the character of the measures on the opposite sides of the water dividing them, it was for geologists to determine whether the attitude of the strata in Newfoundland warranted the expectation of finding there coal-beds that would be available for commerce. To what extent this has been determined we shall see when the mineral resources of the island come to be described. The other important point to be kept in view was to determine to what extent the metalliferous zone of North America was developed in Newfoundland. This is called in Canadian geology the Quebec group, its middle division, the Lauzon group, being rich in metalliferous deposits all over North America. It was, therefore, of primary importance, to find whether there was a spread of this formation in Newfoundland and to what extent, as its importance as a mining region would depend on this. The serpentine in which copper ore has been found at Tilt Cove, Bett's Cove, and other localities, belongs to the Lauzon division of the

Quebec group, so that an examination of it becomes of the first importance in determining where minerals may be looked for with a hope of success. "The scattered facts already known," said Sir William Logan in 1866, "prepare us to expect a great development of the metalliferous division of the group in the southern as well as in the northern portion of the island; convincing me that a thorough knowledge of a great portion of the mineral wealth of the province will be greatly promoted by a careful and connected exploration and study of the Lower Silurian series." We shall see that the hope thus expressed has been largely realised in the carrying out of the survey. It seems highly probable that there are vast tracts on both the sides, and also in the centre of the island, which contain ores of great value and importance, chiefly copper, nickel, lead, iron, while in several localities indications of gold and silver have been found.

All the great ancient rock systems between the Lower Laurentian and the Coal measures, are more or less represented at one part or another of the island.

According to Mr. Murray, the following column is the descending order of the different series that have been recognised:

Carboniferous :

Coal measures.

Millstone grit.

Carboniferous limestone, Gypsum, Conglomerate.

Devonian :

Gaspe sandstones, etc.

Middle Silurian :

Clinton.

Medina.

Lower Silurian.

(Trenton group.)

Hudson River.

Utica.

Trenton.

Bird's-eye and Black River.

(Quebec group.)

Serpentines, Chlorite slates, Diorites, etc.

Sillery sandstone.

Levis.

Calciferous.

Potsdam.

Primordial.

Huronian :

Huronian.

Laurentian :

Upper and Lower Laurentian.

The Laurentian system has an immense spread in the island. It constitutes the principal mountain ranges, coming to the surface through the more recent deposits, on the axes of anticlinal lines, or brought up by great dislocations, most of which trend nearly parallel with each other in a general bearing of about N.N.E. and S.S.W. The Laurentian gneiss of the Long Range, on the western side of the island, extends in a nearly straight course from Cape Ray to the headwaters of the Castor on the great northern peninsula. On the south-west extremity of the island these rocks occupy the coast from Cape Ray to La Poile. They are largely exhibited on the Grand Lake, running in a spur from the Long Range, between it and the Red Indian Lake, and bearing for the south-eastern shores of Hall's Bay. The central portion of the northern peninsula is Laurentian, which also spreads over a wide expanse of country between Grand Lake and the Humber and

Exploits Rivers, and shows itself on the coast between Canada Bay and White Bay. Another range of Laurentian comes up in the district of Ferryland, and shows itself occasionally on the coast between Holyrood and Manuel's River in Conception Bay. Thus more than half of the island is Laurentian.

Three-fourths of the peninsula of Avalon are Huronian (equivalent to the Cambrian of English geologists), a formation which does not extend west of Fortune Bay. The Huronian here consists of a set of slates with conglomerate bands, diorites, quartzites, and alternating green and reddish hard silicious and clay slates, surmounted by a great mass of thick-bedded green and red sandstones, the latter passing into a moderately coarse conglomerate, with many pebbles of red jasper at the top. These are the "Lower Slates" and "Signal Hill sandstones" of Jukes. They occupy by far the greater portion of the whole peninsula of Avalon. "The town of St. John's, and in fact nearly all the settlements between Fortune Bay on the south and Bonavista Bay on the east are built upon this formation." Signal Hill, overlooking the harbour of St. John's, is capped with the sandstone of the Huronian formation, which is largely used for building purposes. Veins of white quartz are abundant, and in many instances are impregnated with ores of copper, lead, or iron; but with the exception of the lead ore, these have not hitherto given much promise of economic importance. Still it is quite possible that a more extended research may find deposits of minerals of great value in these rocks. The whole Huronian system is not less than ten thousand feet thick, and has been cut through by denudation to the Laurentian floor upon which it has been built. The rocks of the Primordial Silurian age are spread unconformably over the area thus ground down. These evidences of denudation and reconstruction are very clear in Conception

Bay, where the rocks of the intermediary system have been ground down to the Laurentian gneiss, and subsequently the submarine valley thus formed has been filled up with a new set of sediments, the remains of which are still to be found skirting the shores of the bay and forming the islands in its midst.

Regarding the spread of rocks of the Silurian age, the most extensive is on the peninsula of Cape St. Mary's on the west side, and around the head of Trinity Bay. These belong to the Primordial Silurian group. The same rocks come out on some of the headlands of Conception Bay and form the islands of that bay. The lower Silurian rocks have a large development, and it is in these that the metallic ores occur which seem destined to render the island a great mining centre. This formation is largely developed on the western side of the island, the great northern peninsula, the peninsula of Port-a-Port, and other regions. The Lauzon division of the Quebec group, which is the true metalliferous zone of North America, has an immense spread in the island. Mr. Howley, assistant geologist, says of this formation: "It comes in at Bluff Head, on the east side of Port-a-Port Bay, and has a considerable extent between there and the Humber Arm, Bay of Islands. The entire western coast from this bay to its northern limit, the whole of the north coast and the eastern coast of the northern peninsula, as far south as Canada Bay, is occupied by the same series, the Lauzon division being well displayed in many parts of their distribution, especially near Bonne Bay, Pistolet Bay, and at the head of Hare Bay. A small portion of the series comes in on the west side of White Bay, in Bay Vert, around the shores of Notre Dame Bay, and in many of the islands of that bay; the Lauzon division, in particular, is very largely displayed here. Rocks having all the characteristics of this latter division were recognised on the Gander

Lake in great volume, and again on the head of the Bay East River; and there is reason to believe they occupy the most of the intervening country between these two latter localities. The Lauzon division of the Quebec group, consisting of serpentine rocks associated with dolomites, diorites, etc., is well known throughout North America to be usually more or less metalliferous, and in this respect the Newfoundland rocks are no exception, but on the contrary, give evidence of being rich in metallic ores. Hence it is only reasonable to infer the probability that many parts of the island are destined to become important mining centres."

The Middle Silurian division of rocks is also widely spread; and the most fertile belts of land and the most valuable forests are nearly all situated on the country occupied by this formation. The great valley of the Exploits and Victoria Rivers, the valley of the Gander, the country around Gander Lake, and several smaller tracts, belong to the Middle Silurian formation.

The Carboniferous series, in which the coal-beds are to be found, occupies a large area on the western side of the island, in the neighbourhood of St. George's Bay and Grand Lake. There is a section of the carboniferous strata between Cape Auguille and the Little Codroy River of about three thousand feet in thickness; but it belongs to the lower and middle part of the series, and contains no workable seams of coal. But higher measures, containing several workable coal-seams, whose extent is not yet determined, occupy all the country on the south-east side of St. George's Bay, between the Long Range Mountains and the sea, "extending in its line of strike from the mouths of the Codroy Rivers to Flat Bay." This is the true coal area of the island, and the results of explorations here will be described in the chapter on the mineral resources of the island. On the north side of St. George's Bay there are two smaller troughs of the carboniferous rocks. A much

wider spread of the same series occurs along the valley of the Humber River, around the shores of Deer Lake, the eastern half of Grand Lake, and as far as Sandy Lake. "Coal," says Mr. Howley, "is known to exist at several places in this series; and seams apparently of workable thickness, judging from the outcrops, occur on the Middle Barachois, and Robinson's Brooks, in St. George's Bay. It may also be reasonably expected in some parts of the Humber River trough. The best land and the finest part of the country will be found supported by the rocks of the Carboniferous age."

It will thus be seen, from the geological record, that the highest series of rocks in the island is the Carboniferous, and that this is confined to the western side; while the middle, eastern, and southern portions are occupied by Silurian, Huronian, and Laurentian formations. On this point Mr. Murray remarks: "It would appear that while the ancient Laurentian continent was long submerged on the eastern side of the island, on which the intermediate system was deposited, it was not until towards the Primordial, or perhaps the Potsdam epoch, that it began to subside on the western side; and these subsidences must have continued, with many intermediate oscillations and interruptions, until a comparatively late date in the Carboniferous era."

The geological structure of Newfoundland, as shown in the foregoing brief sketch, presents us with a country admirably adapted to sustain a large population engaged in a great variety of pursuits. The encompassing seas contain the largest and best fishing banks in the world, abounding in cod, herring, etc.; in the rivers and estuaries salmon and herring fisheries are carried on with success. These fisheries are now the principal means of support for the present population of Newfoundland, amounting to about 185,000. But the character of the island geo-

logically, shows that it is fitted to sustain a very large agricultural population; that many thousands might be employed in lumbering and ship-building; and that its undeveloped mineral wealth is such, that a vast number will probably one day be employed in working its mines.

In connection with the geology of the country, it may be mentioned that a great dislocation or fault has been found, running in nearly a straight line from near Cape Ray to White Bay.

CHAPTER VI.

CLIMATE.

Popular fictions—The Gulf Stream and the Arctic current—Fogs almost unknown in the interior—Compared with Canada and the United States—Meteorological observations—Average temperature and rainfall—“ A silver thaw ”—The robustness of the people quoted by authorities in favour of the climate.

ERRONEOUS ideas regarding the climate of Newfoundland have been quite as prevalent as the delusions in reference to its soil. These mistakes are not difficult to account for. The climate of the Banks of Newfoundland, a hundred miles distant from the shore, and of the southern and south-eastern sea-board which are affected by the sea fogs, has been taken by voyagers or casual visitors as indicative of the climate of the whole island. Hence it has been concluded that the country is enveloped in almost perpetual fogs in summer; and, on the other hand, an impression has grown up that it is given over to intense cold and a succession of snow-storms in winter. The Arctic current, rushing out of Davis Straits, washes the eastern shores of Newfoundland, and in spring bears on its bosom those ice-fields and icebergs which obstruct navigators crossing the North Atlantic. This current has a chilling effect on the climate of the eastern coast, and frequently retards the advent of spring. Meeting in its southerly

course the warm waters of the Gulf Stream the Arctic current mixes with the heated "river in the ocean," and thus enormous masses of vapour are generated. This is the cause of the fogs which in summer frequently overhang the banks where this "meeting of the waters" occurs. When southerly, or south-easterly winds blow, the fog is rolled in on the southern and south-eastern shores of the island, covering the bays, creeks, and headlands with a thick curtain of vapour. The fog seldom penetrates far inland. Hence the saying of the fishermen that "the land eats up the fog." While the coasts are shrouded in vapour the sun is shining brightly inland, and the atmosphere is dry and balmy. It not unfrequently happens that at St. John's a dark wall of fog is visible a few miles out at sea while sunshine and genial weather prevail on shore, and during southerly winds the great bays on the southern coast become receptacles of the sea-fog. It often fills up Placentia Bay, where it drifts over the narrow isthmus into Trinity Bay, while Conception Bay is comparatively clear. The fogs are thus but partial in their influence, being confined to the southern and south-eastern shores and bays. On the western shore, after Cape Ray is passed, fogs are almost unknown. The same holds good of the northern and north-eastern coasts, as far south as Bonavista Bay. In his journey across the interior Cormack experienced but four foggy and drizzly days during two months; forty-one were bright and only eight rainy days. Mr. Howley, assistant geologist, says: "I myself spent four months during the past season in the interior without experiencing a genuine foggy day, until reaching within twenty miles of the southern side of the island. During the entire months of July and August the weather in the interior was delightful, while fogs prevailed at the same time along the southern shore."

It must also be remembered that it is only during a

portion of the year, and when certain winds blow, that the fogs engendered on the Bank are wafted shorewards. During three-fourths of the year the westerly winds carry the vapours across the Atlantic, and the British Isles get the benefit of their moisture. In winter there is little fog on the banks, as the Arctic current then is stronger, and pushes the Gulf Stream more to the south; while in summer the latter spreads its warm waters nearer the shores of the island, and thus creates the huge volumes of vapour which often envelop sea and shore. However unpleasant and gloomy these fogs may be, it must be remembered that they are not prejudicial to health.

Taken as a whole, the climate of the island is more temperate, and more favourable to health, than that of the neighbouring continent. The fierce summer heats of Canada and the United States, and the intense cold of their winters are unknown in Newfoundland. It is but rarely and then only for a few hours, that the thermometer sinks below zero in winter; while the summer range rarely exceeds eighty degrees, and for the most part does not rise above seventy. Like all insular climates, that of Newfoundland is variable, and subject to sudden changes. The Arctic current exerts an unfavourable influence along the eastern coast; but, as a compensation, it brings with it the enormous wealth of cod and seals which has rendered the fisheries the most productive in the world. Only in cold water are cod and seals at home and abundant. The Gulf Stream, which creates the fogs, modifies the cold; and if it darkens the skies, it paints the cheeks of the people with the rosy hues of health. The salubrity of the climate is evidenced by the robust healthy appearance of the people. Their clothing in winter does not require to be much warmer than that worn in Britain at the same season of the year. Open fireplaces are sufficient

to warm the houses, and free exercise in the open air is attainable at all seasons.

The following extracts from a Table showing the average of certain meteorological quantities, for a period of eight years, from 1857 to 1864 inclusive, will furnish reliable data regarding the climate. The observations were taken by Mr. E. M. J. Delany, C.E., at St. John's :

Year.	Mean temperature for year.	Mean height of barometer for year
1857 . . .	42 degs. . .	29·31 inches.
1858 . . .	41 „ . .	29·5 „
1859 . . .	44 „ . .	29·79 „
1860 . . .	41 „ . .	20·60 „
1861 . . .	40 „ . .	29·40 „
1862 . . .	41 „ . .	20·50 „
1863 . . .	44 „ . .	29·60 „
1864 . . .	37 „ . .	29·40 „

Average mean temperature for eight years, 41·2 degs.

Average height of barometer for eight years, 29·37 inches.

The maximum height of the thermometer for the eight years was 83 degs.; the minimum, 7 degs. The average number of days on which rain fell during the eight years was 105·07. The highest range of the thermometer was on July 27th, 1857, when it reached 89 degs.; the lowest was on February 11th, 1858, when it marked 2 degs.

The observations taken during 1879 gave the following results :

Mean temperature for year . . .	40·2 degs.
Absolute maximum temperature . . .	61·1 „
Absolute minimum temperature . . .	21·4 „
Highest temperature, August 3rd . . .	82·0 „
Lowest temperature, December 22nd . . .	4·0 „
Mean height of barometer for year . . .	29·998 inches.

As to the rainfall, the following observations will show the average depth of rain, in inches and tenths, during the years named :

Year.	Depth in inches and tenths.
1875	30·61
1876	48·46
1877	57·37
1878	46·47

The latter two, for 1877 and 1878, include depth of rain and melted snow. During the eight years from 1857 to 1864 the average rainfall was 63·52 inches.

In the "Tables of Aqueous Precipitation for Series of Years," collected by the Smithsonian Institution, United States, and published in 1872, the average fall of rain for Newfoundland is reckoned at 58·30 inches.

In order to compare St. John's with Toronto, Canada, in regard to temperature, the following records will be serviceable :

Year.	TORONTO.	Mean tempera- ture of year.
1875	40·77	degs.
1876	43·98	„
1877	46·10	„
1878	47·09	„
1879	44·16	„

Average temperature in Toronto for thirty-nine years, 44·12 degs.

In the foregoing returns it should be remembered that the observations in Newfoundland were taken at St. John's, which is the point in the peninsula of Avalon that stretches farthest eastward, and is therefore most exposed to the chilling influence of the Arctic current. The climate of St. John's, therefore, is an unfair standard by which to

measure that of the whole island. At the heads of the bays, in the interior, and on the western coast the climate is much warmer than at St. John's. The following comparative table, for 1874, will furnish a fair basis on which an estimate may be founded :

	Mean tempera- ture for year.	Lowest temperature.
St. George's Bay, Newfoundland .	43·8 degs. .	15 degs.
Windsor, Nova Scotia	42·7 „ .	15 „
Toronto	44·3 „ .	7·5 „
Winnipeg, Manitoba	30·8 „ .	4·3 „

The rainfall of each place is, when compared, favourable to Newfoundland :

Total days of rain in four months.	
St. George's Bay	34
Toronto	47
Winnipeg	52
Truro, N.S.	68

Thus, in the American sense of the word, Newfoundland is by no means a cold country; but it partakes of the general character of the North American climate, and is therefore much colder than in the same latitude of the Old World. Its latitude corresponds to that of France, but its climate is very different. Winter sets in, as a rule, in the beginning of December, and lasts till the end of March or middle of April. The frost is occasionally broken by southerly winds and bright warm days, and much of the snow is melted. Then it returns, and fresh falls of snow are experienced. The frost rarely penetrates the ground to a greater depth than a few inches, whereas in Canada it has been known to go down three feet. During winter there are often heavy gales of wind, which however do not extend far out to sea. The cold is of course felt more

intensely in consequence of these gales. Snow-storms are not uncommon; and when the icy particles are hurled on the wings of a fierce north-wester it is safest to keep within doors. Such storms, however, do not often occur, nor, as a rule, do they last long. Winter is the season of social enjoyments of all kinds, and is far from being unpleasant. Nothing can be more exhilarating than the bracing air of a fine winter's day, with the hard crisp snow underfoot and a bright sun overhead. The musical tinkle of the sleigh-bells when driving over the frozen snow, and the purity of the atmosphere add to the charms of the scene. In fact, winter is regarded as the most enjoyable part of the year. The snow preserves the ground from the influence of the frost, and when in April it melts, the fields soon become fit for the operations of the farmer. It is true the spring is late, and often

Winter lingering chills the lap of May.

But once vegetation sets in it progresses with marvellous rapidity, and crops grow and ripen much quicker than in the Eastern Hemisphere. The autumn is usually very fine, and is prolonged often till November. The frosts of winter, too, aid the operations of the husbandman, and help to pulverise the soil. Thus there is nothing in the climate of the country to interfere with agriculture. The destructive tornadoes that often spread havoc in certain portions of the American continent are unknown in Newfoundland. Thunder-storms, too, are very rare, and when they occur seldom prove injurious.

A curious phenomenon, called in Newfoundland "the silver thaw," is often witnessed in winter, though seldom seen in Canada. When rain falls with a low state of the thermometer near the earth, it is congealed as it descends, and thus a regular deposition of ice takes place on the

branches and the smallest twigs of trees and shrubs. The layer of ice goes on increasing till it attains a thickness of half an inch or more. A magical transformation is wrought. The trees are hung with glittering jewels, even the smallest twigs being loaded, and the branches bent to the earth. When the sun shines a scene of dreamlike splendour is presented. Each tree has the appearance of a great chandelier of crystal, the play of the sunbeams on myriads of prisms producing a dazzling effect. The weight of the icy jewellery often breaks the thickest branches. Sometimes the wind rises suddenly and speedily unloads the jewelled trees.

Another phenomenon witnessed in perfection in Newfoundland is the aurora borealis. At certain seasons the play of the northern lights presents occasionally one of the grandest sights in the world. The whole heavens are lighted up with the brilliant display, and flame-curtains of all hues seem to wave over the vast concave. The auroral phenomena are finer here than even in the Arctic regions.

It may be desirable to cite the opinions of a few intelligent persons who, from experience, have been enabled to form an opinion of the character of the climate. That famous ancient mariner Richard Whitbourne, who spent many years in voyaging to the country, and also made it his residence for a length of time, about 1615, was an enthusiastic admirer of the island. In his book, after many encomiums on the country and its productions, he says: "What receive we from the hands of our owne country which in most bounteous manner we have not had or may have at hers? Nay, what can the world yield to the sustentation of man which is not in her to bee gotten? Desire you wholesome ayre (the very food of life)? It is there. Shall any land powere in abundant heaps of nourishments and necessaries before you? There you have them. What seas so abounding with fish? What shores so

replenished with fresh and sweet waters? The wants of other kingdoms are not felt heere; and those provisions which other countries want are from them supplied. How much is Spain, France, Portugal, Italy, and other places, beholding to this noble part of the world for fish and other commodities (it is to be admired). Let the Dutch report what sweetness they have suckt from thence by trade thither, in buying fish and other commodities from our nation, and (albeit all the rest should be dumbe) the voyces of them are as trumpets, lowd enough to make England fall more and more in love with such a Sister-land.

“I am loth to weary thee (good reader) in acquainting thee thus to those famous faire and profitable Rivers, and likewise to those delightful large and inestimable Woods, and also with those fruitful and enticing Hills and delightful Vallies—there to hunt and hawke, where is neither savage people nor ravenous beasts to hinder their sports. They are such, that in so small a piece of paper as now my love salutes thee with I cannot fully set them down as they deserve; and therefore I doe intreat thee with judgment, with patience, and with true desire for the benefit of thy dread Sovereign and Country, to reade over this discourse which (I trust) may encourage thee to further so hopeful a Plantation as it appeareth to be, and also I trust give thee ample satisfaction and just cause to answer opposers, if any out of ignorance or any other sinister respect should seek to hinder so honourable and worthy designs.”

Sir Richard Bonnycastle, who spent some years in the country, in his interesting work on Newfoundland (1842), says, regarding the climate: “We find that the extremes of temperature in Newfoundland are trifling compared with those of Canada. There the thermometer falls as low as twenty-seven degrees below zero, and even lower at times in winter, and rises to ninety in summer. Here the lowest temperature in winter scarcely exceeds zero, or

eight or ten degrees below it, excepting upon rare occasions; and in the height of summer does not attain more in common years than seventy-nine degrees. Winter may really be said to commence here towards the latter end of November only, though fires are comfortable adjuncts during most of that month; and its severity begins after Christmas, runs through January and February, and becomes less and less stern until the middle of April, when it ceases altogether. In the winter of 1840 ploughing was going on after Christmas.

“It is generally supposed in England that Newfoundland is constantly enveloped in fog and wet mist; nothing, however, can be further from the truth. The summers are frequently so hot and dry that for want of rain the grass perishes—the summer of 1840 was one of these—and the nights are unusually splendid; whilst in winter fog is very rarely seen.”

He kept a register in regard to foggy days, from which it appears that in 1841 there were only seventeen and a half days of thick fog in St. John's, “which is more exposed to the ‘bank weather,’ as it is called, than any other part of the island;” and light fogs were prevalent only nineteen and a half days—giving thirty-seven days of foggy weather on the shore throughout the year. He remarks further on the light clothing with which the labouring classes went about in winter, and on their robust appearance, and pronounces the climate salubrious in the highest degree.

The Right Rev. Dr. Mullock, in one of his lectures, says regarding Newfoundland: “We never have the thermometer down to zero, unless once or twice in the year, and then only for a few hours, and for a few degrees, three, four, or perhaps ten; while we hear of the temperature of ten and twenty below zero in Canada and New Brunswick; and this life-destroying cold continuing for days, perhaps weeks. Then see another effect of

this—the Canadians and other North Americans of the same latitude, are obliged to keep up hot stoves continually almost in their houses, while we have open fireplaces or at most Franklins; our children, I may say, are lightly clad as in summer, spend a large portion of their time in the open air; and thus while our neighbours have the sallow hue of confinement tinging their cheeks, and their children look comparatively pale and delicate, our youngsters are blooming with the rosy hue of health, developing their energies by air and exercise, and preparing themselves for the battle of life hereafter, either as hardy mariners, or healthy matrons—the blooming mothers of a powerful race.” . . . “I may remark that by the climate table furnished me by Mr. Delany, I find that the highest temperature was ninety-six degrees on the third of July; eight degrees on the 3rd of March; and the mean temperature of the year (1859) forty-four degrees; mean maximum pressure of barometer 29·74; rain 63·920 inches; [for the year; maximum quantity in twenty-four hours 2·089 inches. Wind, N.N.W. and W.N.W. two hundred days; N.E. twenty-five days; W. and W.S.W. thirty-eight days; S.S.W. and S.E. one hundred and two days; thunder and lightning five days; rain fell on one hundred and ten days; snow fifty-four days.”

In reference to the high temperature of ninety-six degrees on July 13th, 1859, mentioned in the foregoing extract, Mr. Delany, in a foot-note to the table, remarks that it was probably owing to a large portion of the woods being on fire on that day, in the neighbourhood of St. John's. Such a temperature is never reached except under exceptional conditions.

Sir Stephen Hill, formerly Governor, says in one of his despatches, after a description of the country and the seasons: “Before quitting this subject, I would observe that the climate of Newfoundland is exceedingly healthy.

The robust and healthy appearance of the people, and the advanced ages which many of them attain, testify to the purity and the excellence of the air which they inhale, and the invigorating qualities of the breezes of British North America."

Mr. Murray, geological surveyor, says: "In other respects the climate of Newfoundland is, as compared with the neighbouring continent, a moderately temperate one. The heat is far less intense, on an average, during the summer, than in any part of Canada, and the extreme cold of winter is much less severe. The thermometer rarely indicates higher than seventy degrees Fahrenheit, in the former, or much below zero in the latter; although the cold is occasionally aggravated by storms and the humidity consequent on an insular position. The climate is undoubtedly a very healthy one, and the general physique of the natives, who are a powerfully-built, robust, and hardy race, is a good example of its influence."

CHAPTER VII.

THE ABORIGINES.

Human relics—The American Indian skull—"Survivals"—The Bethuks—Cartier on the natives of his day—Whitbourne's description of "The Natural Inhabitants"—Early experiences of the Settlers—Invasion and retaliation—British intervention—Indians captured and taken to St. John's—Disappearance of the native tribes—Modes of sepulture—Cormack's expeditions—Wigwams and deer-traps—Indian vocabulary.

IN the Museum of St. John's there is preserved a human skull, to which a curious interest attaches. It is the only cranium known to be preserved of the once numerous and powerful Bethuk or Boeothic tribe of Red Indians, the aborigines of Newfoundland—a race now extinct. It was found in a grave in Greenspond, together with a thigh bone, a shoulder blade, and a few other smaller bones; the remainder of the skeleton having been probably carried off by the wolves or foxes. The skull is in a good state of preservation, except that the cheek bone and the lower part of the socket of one eye are broken. Underneath where these remains lay was a circular hole, lined with birch bark, about twenty inches in diameter and ten inches in depth, at the bottom of which were two pieces of iron pyrites. In the grave was also found the shaft of a spear stained with red ochre. The skull and bones are the only relics of the

kind which remain of the vanished Bethuks, once lords of this large island. Diligent search has been made within the last few years, by more than one traveller, in the burial places of the tribe around Red Indian Lake and elsewhere, for skulls or other bones; but, so far, not a fragment has been found. A few of their arrow and spear heads and stone implements of various kinds have been dug up in various places; but only a solitary skull remains to tell us what was the configuration of "the dome of thought" in which beat the brain of a Bethuk. Even this relic was in danger of being consigned to the dust-bin through carelessness, when the present writer rescued it, and placed it in the local museum. It has been since photographed, and formed, together with stone implements, the subject of a paper by Mr. Lloyd, which was read before the Anthropological Institute of Great Britain and Ireland, and printed in their Journal. The peculiarities which stamp the American Indian skull are discernible—the vertical occiput, the prominent vertex, the low defective forehead, the square form, the quadrangular orbits, and the massive maxilla. It is the cranium of a savage, but not one of a low type. Around the skull in its present place of repose, are appropriately grouped various Indian implements of stone which were found in the island. One of these is an oblong vessel of soft magnesian stone, hollowed to the depth of two inches, the lower edges forming a square of three and a half inches in the sides. In one corner is a hollow groove which apparently served as a spout. There are also arrow-heads of a hard gray cherty stone, an axe-shaped tool of felsite slate, and a finely-worked and highly-polished gouge-shaped implement of chert, nine and a half inches in length. No little skill and patient labour were needed to form these poor implements of stone. They were the best which heads of the type here presented could devise to help them in their hard "struggle for existence." With these poor

implements they were perhaps hunting and fishing when our own progenitors in Europe had not got far in advance of the red men.

Ethnologists are generally agreed in regarding the aborigines of America as but a single race, from Cape Horn to the confines of the Esquimaux, around the Arctic circle, divided into an infinite number of small tribes, presenting more or less differences one from the other. Dr. Morton separates them broadly into two great families: the Toltecan nations—embracing Mexicans and Peruvians—and the barbarous tribes, including the whole remaining inhabitants of the continent. The barbarous tribes have been arranged into five groups: First, Iroquois; second, Algonkin and Apalachian; third, Dacota; fourth, Shoshonees; fifth, Oregonians. The question is to which of these groups did the red men of Newfoundland belong. Some writers have regarded them as being Esquimaux, and others as Micmacs; but for neither opinion is there any foundation.

The Esquimaux are looked upon by some recent ethnologists as the “survivals” of the Cave Men of Europe. If this theory be correct, then the Cave Men were gradually driven farther and farther north by new arrivals in Europe, until they were pressed within the Arctic regions. But when the Bethuks are compared with them there are no points of resemblance. They are also quite distinct from the Micmacs, another tribe of red men. Latham, one of the highest authorities in ethnology, regards the Bethuks of Newfoundland as a branch of the great Algonkin tribe of North American Indians.

In his “Varieties of Man” he says that all doubts on this subject have been set at rest by “a hitherto unpublished Bethuk Vacabulary, with which I have been kindly furnished by my friend, Dr. King, of the Ethnological Society. This marked them a separate section of

the Algonkins, and such I believe them to have been." The evidences we are about to furnish seem to point to the same conclusion. Thus we may safely classify them as a branch of the wide-spread and warlike Algonkins, whose area embraced the whole of Canada, Nova Scotia, Cape Breton, New Brunswick, Labrador, and part of Hudson's Bay territory, together with a large portion of the United States. In fact this tribe were distributed east and west, from the Rocky Mountains to Newfoundland, and north and south, from Labrador to the Carolinas. The Bethuks came of a good stock of red men, and if they were unable to retain a footing in Newfoundland before the advancing tread of civilisation, they have only anticipated a little the inevitable doom which awaits their race in continental America.

At what time the Bethuks found their way to Newfoundland from the shores of Canada or Labrador is of course utterly unknown. When Cabot discovered the island, in 1497, he found them in possession. No doubt, for many centuries previously, they had been fishing in its creeks, harbours, and bays, hunting the caribou over its plains, and erecting their wigwams by the placid waters of its inland lakes. At this day there are few better hunting-grounds than those of Newfoundland; and what must they have been before the coming of "the pale faces," with their destructive fire-arms! One can fancy that the island, with its abundance of wild creatures of all kinds, and its shores and countless lakes swarming with fish, must have been the very paradise of the red men. Unmolested, they pursued the game over a country having an area of forty-two thousand square miles. Countless herds of the finest reindeer bounded over the savannas of the interior, in their annual migrations; and who more skilled than the red men in entrapping and slaying the lordly stag, in capturing the beaver, with which the ponds were lavishly stocked, or in

bringing down the plump ptarmigan, of which vast flocks were everywhere to be met with. We can hardly doubt that when "monarchs of all they surveyed," and with all the resources of the island at their command, the Bethuks revelled in a savage luxury, feasting on venison, and clothing themselves in the rich furs which were the spoils of the chase.

The early historical notices of the red men of Newfoundland are very brief, but serve to give us some idea of their appearance and habits as they presented themselves to the early voyagers. The earliest reference met with is in "Hakluyt,"* where there is an account of the discovery of Newfoundland by Cabot. Of the aborigines Cabot is reported to have said: "The inhabitants of this island use the skins and furs of wild beasts for garments, which they hold in as high estimation as we do our finest clothes. In war they use bows and arrows, spears, darts, clubs and slings."

In "Kerr's Travels," it is stated that Cabot, on his second voyage, brought away three of the aborigines, and took them to England. "In the fourteenth year of the king (Henry VII.,) three men were brought from Newfoundland, who were clothed in the skins of beasts, did eat raw flesh, and spoke a language which no man could understand; their demeanour being more like that of brute beasts than men. They were kept by the king for some considerable time, and I saw two of them about two years afterwards, in the Palace of Westminster, habited like Englishmen, and not to be distinguished from Englishmen until I was told who they were."

It may be doubted whether this account is correct in all respects, as Cabot does not appear to have had much to do with Newfoundland after its discovery. The red men

* Vol. iii. p. 27.

referred to may have been natives of Cape Breton or Prince Edward Island.

Jacques Cartier, in 1534, described the aborigines of Newfoundland as "of indifferent good stature and bigness, but wild and unruly. They wear their hair tied on the top like a wreath of hay, and put a wooden pin in it, or any other such thing instead of a nail, and with them they bind certain birds' feathers. They are well clothed with beasts' skins, as well the men as the women; but the women go somewhat straighter and closer in their garments than the men do, with their waists girded."

Hayes, who was second in command to Sir Humphrey Gilbert, about 1583, and whose narrative has been preserved in the Hackluyt Collection, says: "The savages are altogether harmless."

Captain Richard Whitbourne, 1622, gives much fuller accounts in his interesting book on Newfoundland. He tells us that "the natural inhabitants of the country, as they are but few in number so are they something rude and savage people, having neither knowledge of God nor living under any kind of civil government. In their habits, customs, and manners they resemble Indians on the continent." He further describes them as ingenious and tractable, full of quick and lively apprehension; willing to assist the fishermen in curing fish for a small hire." He shows that "in their habits they resemble the Canadian Indians, as they constructed canoes with the bark of birch trees, which they sew very artificially and close together, and over-lay every seam with turpentine." He also tells us that they were able to "sew the rinds of spruce-trees, round and deep in proportion, like a brass kettle, to boil their meat in;" and on one occasion he says three of his men surprised a party of them enjoying themselves in a sumptuous manner. "They were feasting, having the canoes by them, and had three pots made of rinds of trees, standing each

of them on three stems, boiling, with fowls in each of them, every fowl as big as a pigeon, and some as big as a duck. They had also many such pots so fowled, and fashioned like the leather buckets that are used for quenching fires, and were full of the yolks of eggs that they had taken and boiled hard, and so dried small, which the savages used in their broth: they had great store of the skins of deer, bettners, bears, seals, otters, and divers other fine skins which were well-dressed; as also great store of several goots of flesh dried; and by shooting off a musket towards them, they all ran away naked, without any apparel, but only their hats on their heads, which were made of seal-skins, in fashion like our hats." We are greatly indebted to this quaint old skipper of the days of Queen Elizabeth for preserving these details, and thus supplying the only picture we have of the domestic life of this extinct tribe. They evidently knew how to appreciate the good things around them, and had very fair ideas of cookery.

The friendly relations which at first existed between the white and red men in Newfoundland did not continue long. The savage people began speedily to exhibit a tendency to annex the white man's goods whenever opportunity offered. Such objects as knives, hatchets, nails, lines, or sails, presented a temptation which to them was almost irresistible. Their petty thefts were regarded by their invaders as crimes of the darkest dye, quite sufficient to justify the unsparing use of the strong arm for their extermination. The rude hunters, trappers, and fishermen in the more distant settlements in the north of the island were rough men outside the control of law, and but little disposed to try conciliation or kindness on a tribe of savages whose presence in the country was felt to be an annoyance. That they treated the poor Bethuks with brutal cruelty admits of no doubt. In fact, for a long period they regarded the red men as vermin to be hunted down and destroyed. We can hardly

doubt that such treatment provoked the red man to deeds of fierce retaliation, and that at length "war to the knife" became the rule between the two races. The savages, at first mild and tractable and disposed to maintain friendly relations, became at length the fierce and implacable foes of the white man, and sternly refused all overtures for peaceable intercourse when at length such offers were made by a humane Government. Deeds of wrong and cruelty were perpetrated by the invader, and followed by retaliation on the part of the savages. In such a conflict the weak must go to the wall. Bows, arrows, and clubs could avail little against the firearms of the white man. Gradually their numbers were thinned; they were driven from their best hunting-grounds. War, famine, and disease thinned their ranks. To-day not a single representative of the Red Indians of Newfoundland is known to be in existence. Their haunts in the interior have been explored in the hope of discovering some remnants of the ill-fated race, but in vain. Only a few graves and the mouldering remains of their huts and deer-fences have been found. Their camp-fires have been extinguished for ever, and the record of their fate fills another dark page in the white man's progress in the New World. Some believe that a small band of them escaped and took refuge in the wilds of Labrador, but of this there is no proof. It may be regarded as quite certain that in Newfoundland not a single individual of the race now exists. They are gone

Like the cloud-rack of a tempest,
Like the withered leaves of autumn.

We must further take into account that the white men were not the only enemies of the doomed aborigines. The Micmacs invaded their territory from Cape Breton and Nova Scotia, and, having learned the use of firearms, carried on a deadly war against the unhappy Bethuks. Assailed on the

one hand by the white settlers, and on the other by the Micmacs, it is not wonderful that the unhappy tribe were slowly but surely exterminated.

Through the representations of various humane individuals, the British Government were at length aroused to take measures to arrest the barbarities of the settlers; but owing to the scattered nature of the settlements and the lawless habits of the early trappers and fishermen their efforts had little effect. The earliest official notice of the aborigines is in the form of a proclamation by the governor. Bearing the date of 1760, it seems to have been repeated on the accession of each new governor. The document sets forth that His Majesty had been informed that his subjects in Newfoundland "do treat the savages with the greatest inhumanity, and frequently destroy them without the least provocation or remorse. In order, therefore, to put a stop to such inhuman barbarity, and that the perpetration of such atrocious crimes might be brought to due punishment, His Majesty enjoined and required all his subjects to live in amity and brotherly kindness with the native savages," and further enjoined all magistrates to "apprehend persons guilty of murdering the native Indians and send them to England for trial."

Not content with such proclamations the Government engaged in various zealous efforts to establish friendly relations with the Bethuks. A reward was offered for the capture of a Red Indian, and in 1804 a female was taken by a fisherman and brought to St. John's, where she was kindly treated and sent back to her tribe loaded with presents. A strong suspicion was entertained that the presents aroused the cupidity of the man who was entrusted with the duty of conveying her back to her own people, and that the wretch murdered her and took possession of the property.

In 1810, Lieutenant Buchan, of the Royal Navy, was

sent to the River Exploits, with orders to winter there, and open a communication with the Indians. He succeeded in finding a party of them; and, taking two of their number as hostages, and leaving two marines with them as a pledge of good faith, he returned to his depôt for presents. During his absence, the fears of the red men were aroused, lest, from his delay in returning, he might be bringing up reinforcements with a view to capture them. They murdered the hostages and fled to the interior. In 1819, another female was taken by a party of trappers on Red Indian Lake. Her husband and another Indian were with her, and, having offered resistance, were both relentlessly shot. The woman was brought to St. John's, and was named Mary March, from the month in which she was taken. She was treated with great kindness and sent back to her friends, with numerous presents, but died on the voyage, having been suffering for some time from consumption. Her body was placed in a coffin and left on the margin of a lake, so that it might be found by her people. They conveyed it to their burying-place on Red Indian Lake, where, as we shall presently learn, it was found several years afterwards by the adventurous traveller, Cormack, lying beside the body of her murdered husband.

In 1823, three Indian females were taken in a wigwam, by a party of men from Twillingate. They proved to be a mother and her two daughters. They were brought to St. John's and treated with great kindness. The mother and one of the daughters died; but the third, whose name was Shanandithèt, survived for about two years and became useful as a house-servant. She is described as six feet high, and having a fine figure; her complexion swarthy, like the Micmacs, and her features handsome. In her manners she was bland, affable, and affectionate. When a pencil and a piece of paper were given to her she drew a deer perfectly at a few strokes, and, what was most

surprising, she began at the tip of the tail. Both she and the others were unwilling to be sent back to their tribe; but Shanandithèt declared they would be killed by their own people as traitors, as they had been among the whites, whom they considered their deadly enemies. She also said that her tribe was reduced to a very small number. These were the last of the Red Indians seen alive. Shanandithèt died in the hospital in St. John's, of consumption, after six years of civilised life.

A final effort to open communications with the Bethuks was made in 1828. In that year a "Boeothick Society," formed at St. John's, having for its object the civilisation of the aborigines, organised an expedition to the part of the island supposed to be still occupied by a remnant of the tribe. Mr. Cormack, the traveller who had crossed the island in 1822, headed the expedition. He took with him three Indians—one an intelligent man of the Abenakie tribe, from Canada; the second an elderly mountaineer from Labrador; and the third an adventurous young Micmac, born in Newfoundland. The party entered the country at the inlet called the North Arm, at the mouth of the River Exploits, and took a north-west course to Hall's Bay, an arm of Notre Dame Bay, across the extremities of New Bay, Badger Bay, Seal Bay, etc. On the fourth day after their departure, at the east end of Badger Bay, at a portage known by the name of the Indian path, they found traces made by the Red Indians, evidently in the spring or summer of the preceding year. They observed a "canoe-rest" on which the daubs of red ochre and fibrous roots of trees used to fasten or tie it together, appeared fresh. Fragments of their skin-dresses, a spear-shaft eight feet in length and recently made, ochred parts of old canoes, and a few other objects were found scattered about. The remains of eight or ten mamateeks, or winter wigwams, each fitted to contain from ten to twenty persons, were also seen close together.

Besides these there were the remains of summer wigwams. The winter wigwams were conical, the frames made of poles covered with skins or birch bark. One difference between the Bethuk wigwam and those of other Indians was that in most of the former there were small hollows, like nests, dug in the earth around the fireplace, one for each person to sit in. "These hollows," says Cormack, "are generally so close together, and also so close to the fireplace and to the sides of the wigwams, that I think it probable these people have been accustomed to sleep in a sitting posture." In addition, each winter wigwam had close to it a small square-mouthed or oblong pit, dug into the earth about four feet, to preserve their stores. Some of these pits were lined with birch rind. Cormack also found in this Indian village the remains of a vapour bath, which, it seems, was used chiefly by those who were suffering from rheumatic affections. Their method of making a vapour bath was the same as that practised by many other savage tribes. Large stones were, first of all, made very hot in the open air by burning a quantity of wood around them. After this process the ashes were carefully removed, and a hemispherical framework, closely covered with skins to exclude the external air, was fixed over the stones. The patient then crept in under the skins, taking with him a birch-rind bucket of water, and a small bark dish to dip it out. By thus pouring water on the hot stones he could raise the steam at pleasure.

Failing to get any further intelligence regarding the Red Indians at Hall's Bay, Cormack decided on proceeding to Red Indian Lake, hoping that at that noted rendezvous he should at last find the object of his search. After a march of ten days over a marshy country, during which no traces of the red men were seen, he obtained a glimpse of this splendid sheet of water, more than thirty-five miles in length and five to six in breadth. From the hills at the

northern end of the lake he looked down on its waters with feelings of admiration. But no canoe could be discovered moving on its placid surface; no human sounds were heard; no smoke from wigwams mounted into the air. Silence, deep as death, reigned around. Cormack and his party were the first Europeans who had seen Red Indian Lake in an unfrozen state, only one or two parties having preceded them in the depth of winter by way of the Exploits River. The view was solemn and majestic. "We approached the lake," says Cormack, "with hope and caution; but found to our mortification, that the Red Indians had deserted it, for some years past. My party had been so excited, so sanguine, and so determined to obtain an interview of some kind with these people, that, on discovering from appearances everywhere around us that the Red Indians, the terror of the Europeans as well as the other Indian inhabitants of Newfoundland, no longer existed, the spirits of one and all were deeply affected. The old mountaineer was particularly overcome."

The party, he tells us, spent several "melancholy" days wandering around the borders of the east end of the lake. Everywhere they met with indications that this had long been the headquarters of the tribe in the days when they enjoyed peace and security. On several places by the margin of the lake they found small clusters of winter and summer wigwams in ruins; also a wooden building, constructed for drying and smoking venison, still perfect; and a small log-house, probably a store-house, in a dilapidated condition. Among the bushes on the beach they lighted on the wreck of a large, handsome, birch canoe, twenty-two feet in length, and evidently but little used. The probability is that, after being wrecked it had been cast up by the waves, the people who were in it having perished.

The most interesting objects met with were the repositories for their dead—one trait of the Bethuks having

been great respect for the remains of their dead. It appears from Cormack's account that there were among them four modes of disposing of the dead, according to the rank and character of the persons entombed. One of the burying places met with "resembled a hut ten feet by eight or nine and four or five feet high in the centre, floored with square poles, the roof covered with rinds of trees, and in every way well secured against the weather inside and the intrusions of wild beasts."

On entering this structure their curiosity was raised to the highest pitch. They found the bodies of two grown persons laid out at full length on the floor, wrapped round with deer skins. But what most astonished them was the discovery of a white deal coffin containing a skeleton neatly shrouded in white muslin. "This was the coffin of Mary March, which had been carried by some members of her tribe from the sea-coast to this solitude. In the building were also found two small wooden images of a man and a woman, supposed to represent husband and wife, and a small doll, which perhaps represented their child." Several small models of their canoes, two models of boats, an iron axe, a bow, a quiver of arrows, were placed by the side of Mary March's husband, and two fire-stones (nodules of iron pyrites, from which they produced fire by striking them together) lay at his head. There were also various kinds of culinary utensils, neatly made of birch rind, and ornamented."

The second mode of sepulture observed here was similar to that of the Western Indians of the sources of the Mississippi. The body of the deceased had been wrapped in birch rind, and with his property, placed on a sort of scaffold, about four feet and a half from the ground. The scaffold was formed of four posts, about seven feet high, fixed perpendicularly in the ground, to sustain a kind of crib, five feet and a half in length, by four in breadth, with

a floor made of small squared beams laid close together horizontally, and on which the body and property rested.

A third mode was, when the body was bent together wrapped in birch rind, and was enclosed in a kind of box, on the ground, the box was made of small squared posts, laid on each other horizontally, and notched at the corners, to make them meet close. It was about four feet by three and two and a half feet deep, and well lined with birch rind, to exclude the weather. The body lay on the right side.

A fourth and more common mode of burying, was to wrap the body in birch-rind, and cover it over with a heap of stones, on the surface of the ground, in some retired spot. Sometimes the body, thus wrapped up, was put a foot or two under the surface, and the spot covered with stones. In one place where the ground was sandy and soft, the graves were found deeper and no stones were placed over them.

Cormack's party returned by way of the River Exploits, which flows from Red Indian Lake, this part of its course being about seventy miles. Cormack says, "Down this noble river the steady perseverance and intrepidity of my Indians carried me on rafts in four days, to accomplish which otherwise would have required probably two weeks, What arrests the attention most while gliding down the stream, is the extent of the Indian fences to entrap the deer. They extend from the lake downwards continuously, on the banks of the river at least thirty miles. There are openings left here and there in them, for the animals to go through and swim across the river; and at these places the Indians were stationed, to kill them in the water with spears, out of their canoes, as at the lake. Here, then, connecting these fences with those on the north-west side of the lake, are at least forty miles of country, easterly and westerly, prepared to intercept all the deer that pass that

way, in their periodical migrations. It was melancholy to contemplate the gigantic, yet feeble efforts of a whole primitive nation, in their anxiety to provide subsistence, forsaken and going to decay. There must have been hundreds of the Red Indians, and that not many years ago, to have kept up these fences and pounds."

With Cormack's expedition the last hope of finding the Bethuks was abandoned. Either they were gradually thinned in numbers, by wars, disease, and want, till at length, perhaps on the banks of the Red Indian Lake, the last Bethuk looked despairingly on the ruins of his race, and the graves of his fathers, and then folding his deer-skin robes around him, followed his ancestors to the happy hunting-grounds of the hereafter. Or it may be a little forlorn band, relics of a once numerous nation, took a last mournful look at the desolate scene, and then departed for some unknown retreat, where the murderous arm of the white man could not reach them, but where, with the fatality that follows their doomed race, extinction gradually overtook them.

This sketch of the tribe extends over a period of three hundred and thirty years, commencing in 1497 and terminating in 1828. A few of their peculiarities and customs remain to be briefly noticed. Their method of kindling fire by striking together two pieces of iron pyrites, was not peculiar to the Bethuks, as the use of these "fire-stones" was known to other tribes of the North American Indians. But their custom of making small hollow-like nests around the fire-places of their wigwams, dug into the earth, one for each person to sit and probably sleep in, was, so far as is known, peculiar to the Bethuks. These oblong hollows were lined with tender branches of pine (white), fir, and dry moss, and doubtless added greatly to their comfort in the cold nights of winter. Their bows were made of sycamore or mountain-ash, and were five and a half feet

in length, having strings of deer's sinews. The arrows were made of well-seasoned pine (white), or sycamore, and were light and perfectly straight. Their intercourse with the whites supplied them with scraps of iron, out of which they made a two-edged lance, about six inches long, for the arrow head. This was let into a cleft on the top of the shaft and secured there by a thread of deer's sinew. The stock was about three feet in length, and was feathered by the quill of the goose or of the bald-headed eagle. Their deer-fences were made by felling the trees along the ridge of the river's bank without chopping the trunks quite asunder, taking care that they fell parallel with the river, each tree having been guided so as to coincide with and fall upon the last. Gaps were filled up by driving in stakes and interweaving the branches and limbs of other trees. They were raised to the height of six, eight, or even ten feet, as the place required, and were not to be forced or leaped by the largest deer. Their wigwams were conical, the base being proportioned to the number of the family, whose beds formed a circle of nest-like hollows around the fireplace. The frame of the wigwam was composed of poles and covered with birch-rind, which was overlaid, sheet upon sheet, in the manner of tiles, and secured in its place by outside poles. This perfectly sheltered the whole apartment except the fireplace, over which was left an opening to carry off the smoke. The central fire spreading its heat on all sides made the apartment quite warm. Where materials and labour were plentiful, one of these wigwams could be completed in an hour, and yet so durable were they, that they have been found standing after a lapse of thirty years on Red Indian Lake. Besides wigwams, they had square habitations, one side of which was made of trees well squared and placed horizontally one on the other, the seams being caulked with moss. The other three sides were made of upright studs, the seams being stuffed with deer-skins.

The beams and rafters were neatly executed, the roof being in the form of a low pyramid.

According to Mr. Lloyd the Bethuk canoe was peculiar to these Indians. "The principle on which it is constructed" he says "is perhaps nowhere else to be met with. It has, in a way, no bottom at all, the side beginning at the very keel and from thence running up in a straight line to the edge or gunwale. A transverse section of it at any part whatever makes an acute angle, only that it is not sharpened to a perfect angular point, but is somewhat rounded to take in the slight rod which serves by way of a keel. The rod is thickest in the middle (being in that part about the size of the handle of a common hatchet) tapering each way and terminating with the slender curved extremities of the canoe." "The peculiar shape of their canoes may be owing, as suggested to me by Mr. John Evans, Pres. Geo. Soc., to an adaptation of form to circumstances; the greater height of the gunwale, and the curving up of the ends of the canoe, as compared with the ordinary birch bark canoe of Canada, would render it less liable to ship a sea, while its V shaped section would increase its capability as a sailing craft in moderate weather. The fact of paddles, arrow-heads, and other articles having been found on the Funk Islands, more than thirty miles from the mainland, appear to show that the Indians could travel a considerable distance out to sea in their canoes."

The implements and utensils found in various parts of the island consist chiefly of mortar-shaped vessels, spear and arrow heads, gouges and rude axes. They are all fashioned from stones of various degrees of hardness. In 1875, a discovery of Indian stone implements was made on Long Island Placentia Bay, at some eighteen inches underneath the surface, there having been a growth of stout timber over the spot where they were found.

They consisted of arrow and spear heads, gouges, tomahawks, rubbing and sharpening stones, and a pot shaped out of serpentine. The arrow and spear heads were in every stage of manufacture, from the rude outline roughly chipped out of the raw material to the perfected and highly polished implement suggesting the idea that here there had been a manufactory for the production of these stone implements. About one third of the whole are polished. Some appeared to be failures which had been cast aside. A thorough exploration of this locality might lead to a discovery of many more of their relics.

As to their personal appearance the Bethuk men were of the ordinary stature, and about five feet ten inches in height. Their hair was coarse and black, and the men let it fall over their faces. Their complexion was lighter than that of the Micmacs. Their dress consisted of two dressed deer-skins, which were thrown over their shoulders, sometimes having sleeves. Rough mocassins of deer-skin covered their feet. There is nothing to show that they had any religious culture or mode of worship, and the vocabulary which has been preserved does not contain any word to express the idea of a Deity.

The following vocabulary may prove interesting to philologists, who are acquainted with the Indian tongues of North America. It was supplied by Mary March, and recorded by the Rev. John Leigh. The original is in the possession of a gentleman in St. John's:

VOCABULARY OF MARY MARCH'S LANGUAGE.

Presented to MR. JOHN PEYTON by the REV. JOHN LEIGH.

A.		Bonnet	Abodoneek
Arms	Memayet	Beaver	Mamshet
Arrow	Dogernat	Boat and vessel...	Adothe
		Buttons & money	Agamet
B.		Berries	Bibidigemidic
Boy	Büküşämēsh	Blanket	Manavooit
Breast	Bogomot or a	Bear	Gwashuwet

L.		R.
Lobster	Odjet	Rocks Ahmee
Lamp	Bobbiduishemet	Rain Bathuc
Lord bird (or Har-		Running... .. Wothamashet
lequin duck ?)	Mammadronit	Rowing Osavate
	or <i>u</i>	
Leg	Aduse	S.
Lead	Goosheben	Shoes Moosin
Lip	Ooish	Smoke Bosdic or <i>a</i>
Lie down	Bituwait	Seal Bidesook
Louse	Kusebeet	Shaking Mathic-bidesook
		Spoon Adadimiuk or <i>ute</i>
M.		Sun Kuis and Manga-
Man	Bukashman (or	roonish or <i>u</i>
	Bookshimōn, J.P.)	Sit down... .. Athes
Mouth	Mameshook.	Sleep Isedoweet
Moon	Kuisand Washew-	Saw Deddoweet
	nish	Sails Ejabathook
Mosquito (black		Shovel Godawik
fly)	Shema-bogostuc	Stockings Gossett, gasack
		Sword Bidisoni
N.		Silk handkerchief
Nose	Gun or geen	Egibidinish
Net	Giggaremanet	Scissors Ozegeen
Necklace	Bethec	Sore throat Anadrick
Night and dark-		Snipe Aoujet
ness	Washen	Swimming Thoowidgee
Nipper(mosquito)	Bedadrook	Seal sunken Apparet, o bide-
Nails	Quish	sook
Neck and throat	Tedesheet	Scratch Bashbet
		Scallop or Frill... .. Gowet
O.		Sneezing Adjith
Oil	Emet	Singing Awoodet
Otter	Edru or <i>ee</i>	Shoulder Manegemethon
Ochre	Odemet	Standing... .. Kingiabit
Oar	Podibeac	Shaking hands Meeman Monas-
		thus
		Stars Adenishit
P.		T.
Puppies	Mammasaveet	Teeth Botomet onther-
Puppy	Mämmōsēmich,	mayet
	J. P.	Trap Shabathooret or <i>t</i>
Pin	Dosomite	Trousers Mowead
Partridge (Ptar-		Trout Dattomeish
migan)	Zosweet	Ticklass (a sea
Pitcher and cup... ..	Manune	bird) Gotheyet
Pigeon (a sea bird)	Bobbidish	Turr (a sea bird) Geonet
Puffin	Gwashawit	Tinker (a sea bird) Osthonk

CHAPTER VIII.

MANNERS AND CUSTOMS.

Two famous races—Physical and social characteristics—An orderly and amiable people—The middle and upper classes—Life among the fishermen—"The credit system"—Amusements and pastimes.

THE present population of Newfoundland is derived entirely from the Saxon and Celtic stocks, blending the strength, endurance, and perseverance of the one with the versatile rapidity, brilliancy, and imaginativeness of the other. This blending of two races on the same soil, in proportions not far from equal, has resulted in producing a hardy, energetic, industrious people, with many of the best qualities of the stocks from which they originated. Reared in one of the healthiest climates in the world, and engaged mainly in open-air employments, they are physically as fine a race as can be found, with plenty of iron in their blood, able to "toil terribly," and well fitted to encounter the world's rough work. We have depicted the early settlers, in these pages, and the hardships they had to encounter, fighting cold and hunger in their "tilts," battling with the ice-floes, drawing a scanty subsistence from the stormy ocean, and pursuing their ill-remunerated labours amid discouragements of all kinds. But in the struggle with difficulties they gained energy, courage, self-reliance, all

that constitutes true manhood; and they transmitted these, as an inheritance, to their posterity, who have now "entered into their labours," and find their lot cast amid happier surroundings. According to Samson's riddle, "Out of the eater came forth meat, and out of the strong came forth sweetness." But it is not alone in physical qualities that the Newfoundlanders hold a high place. Their intellectual development has not been helped by education, as, under happier circumstances, it might have been, so that their contributions to the mental wealth, or literary or scientific gains of the world, are yet to come. In the earlier periods of their history too often

Chill penury repressed their noble rage,
And froze the genial current of the soul.

The struggle for the daily bread rendered mental pursuits an impossibility. Now, however, that material prosperity has dawned, and many have attained comfort and even wealth, leisure is found for the cultivation of the mind; and when young Newfoundlanders go to other countries for the higher education not yet attainable at home, they frequently carry off the highest honours at school and college. Indeed anyone who comes in contact with the people will be struck with their mental quickness and intellectual aptitude. When education, which is still in its infancy, though making hopeful progress, has done its work, there can be little doubt that the descendants of the fishermen who fought the billows and drank in the health-giving sea breezes will be found competing successfully with the foremost brain-workers of the coming age.

As to their moral qualities, it is admitted on all hands that a more orderly, law-abiding population cannot be found elsewhere. Serious crime is very rare, and the proportion of offenders against the law to the whole population is very small. Formerly intoxicating drinks were cheap and

abundant, and were largely indulged in by a people who had few other enjoyments; but as they have risen in the scale of comfort and civilisation, drunken habits have disappeared, and, as a whole, they are now temperate, and a large number are total abstainers. Their kindness and hospitality to strangers who visit the country are proverbial. A traveller finds himself at once at home in Newfoundland, whether in the capital or the more distant settlements, and all vie with each other in showing him attention and kindness. Quiet, orderly, church-going, attached to their religious faith, the people live peaceably among themselves, and outbreaks of bigotry or fanaticism are now almost unknown. Kindness to the poor and indigent is a marked feature in the character of the people; and when, through failure of the precarious fisheries, distress occurs, the fishermen help each other to the full extent of their means, and often share to the last morsel with those more indigent than themselves. Charitable societies for the relief of the poor are organised in the capital and chief towns. Facilities for obtaining education are now multiplying, and a taste for literature is spreading. The Athenæum in St. John's has done excellent service by providing a good public library and reading-room, and securing the delivery of a course of public lectures each winter. The Catholic Literary Institute is a similar institution, and has also a course of winter lectures. In the larger towns, such as Harbour Grace and Brigus, there are also literary societies; and these light-radiators will increase. Music is widely cultivated in the capital, and the concerts of the choral society and others attract crowded audiences.

There is, of course, no distinction of ranks other than that arising from wealth, or official or professional position. The upper class is composed of the officials of Government, members of the legislature, judges, clergy, merchants, doctors, lawyers, and wealthy individuals who may have

retired from business. The middle class is composed of the newer merchants, shopkeepers, tradesmen, farmers, and that large class who, by industry and economy, have acquired a modest competence, and now look to Newfoundland as their home, and that of their children. Happily this class, well named "the shield of society," is increasing rapidly, and making its influence felt more extensively.

The large mercantile firms engaged in the exporting business are about twelve in number, ten of them being in St. John's. The older members of these firms for the most part reside in Britain, and junior partners or agents conduct the business. The merchants of Newfoundland are a highly respectable and intelligent class of men, many of whom have realised considerable wealth, and their standing in the commercial world is very high. Sir Richard Bonnycastle says of the merchant of former days: "He came to Newfoundland, not with any idea of living there, but to amass, in this new Sea Peru, sufficient wealth to enable him to return to the scenes of home and youth." This has undoubtedly been one of the great drawbacks to the prosperity of the country. The wealth amassed in the island did not remain as capital to extend its business, develop its resources, and be invested in agriculture, buildings, and other improvements. It went to enrich other lands, and develop branches of trade elsewhere. The interest felt in the prosperity and advancement of the country, by non-resident capitalists, could not be the same as in case of those who regarded the country as their own permanent abode and that of their posterity. It is not wonderful then to find, as we have shown in other portions of this work, that the merchants of former days, as a class, resisted all changes and frowned on all innovations. Happily a different spirit animates many of this class in the present day, though among the older school, the former traditions linger, and they cannot admit that any other

occupations than fishing are possible or desirable. But the younger school hold different ideas, and admit that the fisheries are quite insufficient to support the present population, and that the time has come for colonising and settling the fertile lands of the interior. It is, however, among the middle class, which has grown up, that the sentiment of progress has taken deepest root. All these interests are bound up with the country; and in its progress lies their hope for the future. The fishermen, too, welcome the prospect of new industries for the support of themselves and their children, feeling that their present means of subsistence are insufficient for their increasing numbers.

There is another class of men called "planters" to be found in all the principal fishing centres. This term carries us back to the days when all colonies were "plantations," and the colonists were "planters." The name is still continued here, but does not at all indicate a farmer, or one who plants anything; but simply means a sort of middle-man who stands between the merchant and the fisherman. He takes his supplies direct from the merchant, to whom he is accountable, and distributes them among a number of fishermen at the commencement of the season. These fishermen either work directly under his control on his own premises, or they carry on operations apart, under his eye, and at the close of the season hand over the proceeds of their labour in payment of advances. The planter again passes the fish to the exporting merchant. Many of the "planters" are independent, and can pay cash for their supplies. Others have but moderate means, and are simply fishermen who own a fishing room, with boats and fishing gear. They engage a number of hands for the season, and the fish is made on their own premises.

The fishermen are the working classes of the country. During the height of the fishery season, and when fish

are abundant, their labours are severe and incessant; but during winter they are for the most part in a condition of enforced idleness. Much of the work of curing the fish is done by women and girls, and their labours are often very heavy. When the fisheries are over, there are boats, nets, etc., to repair, stages and flakes to look after, and fuel to be cut in the woods and hauled over the snow. Those who have gardens, or plots of ground under cultivation, take up the produce and store it in their cellars. If the fishery has been successful, then the fisherman has a balance coming to him after paying for his summer supplies, and is enabled to lay in a stock of provisions for the winter. Should the fisheries prove a failure, the poor fisherman, after all his toils, has perhaps only a few quintals of fish to hand over, in payment of his advances. He is in debt, and has to depend on the liberality of the supplying merchant for a scanty supply of the necessaries of life, to sustain himself and his family throughout the winter. Should a second unfavourable season follow, he is hopelessly involved in debt. The advances made have to be charged at high prices, in order to allow a margin for bad debts. Here too often, all the evils of "the credit system" are felt in the hopeless indebtedness of the fisherman; and when a good year comes, all is swallowed up in paying old debts. The unfortunate fisherman has no heart to work, and is tempted to recklessness and idleness. Many of them however, who are careful and industrious, and especially those who cultivate the soil, are able to make ends meet and live comfortably. On the other hand, in unfavourable seasons, widespread poverty is felt and severe privations.

The "credit system" has much to do with the hardness of their lot; but how to get rid of it is the difficulty. It is injurious both to him that gives and him that takes.

Increased openings for other industries, the cultivation of the soil, employment during winter, education with the forethought and thrift which it teaches, will alone enable the fishermen to get rid of the injurious "credit system" and attain comfort and independence. Late years have witnessed a marked improvement in the condition of the fishermen, and larger numbers than formerly can now afford to dispense with supplies on credit. Still the system has very wide ramifications, and its practices are deeply engrained in the habits and ideas of the fishermen. The present class of merchants are not accountable for a system which is the growth of many generations, and which can only be got rid of by degrees.

Winter is the season for enjoyment among the fishermen. Among them, too, with all their toils and privations, life vindicates its right to gladness and relaxation. The season for "fireside enjoyments, home-born happiness," is welcomed. They have their simple social pleasures of various kinds, limited in range, but satisfying to those whose aspirations do not take a lofty flight. Dancing is a favourite winter amusement among the fishermen and their families; and to the music of the fiddle, or, in its absence the flute or fife, they will dance vigorously for hours. Weddings are, of course, occasions of much festivity. Tea meetings, temperance soirées, readings with music, have multiplied of late years in the larger villages and settlements. Newspapers, periodicals, and books are finding their way to these distant and lonely "dwellers by the sea," and stirring intellectual life among them. When intercourse with the capital is facilitated by railways a wider range of thought and sympathy will be developed. As it is, there is perhaps as much genuine happiness among these people as among any similar number who toil for their daily bread. Nature has wonderful compensations; and in

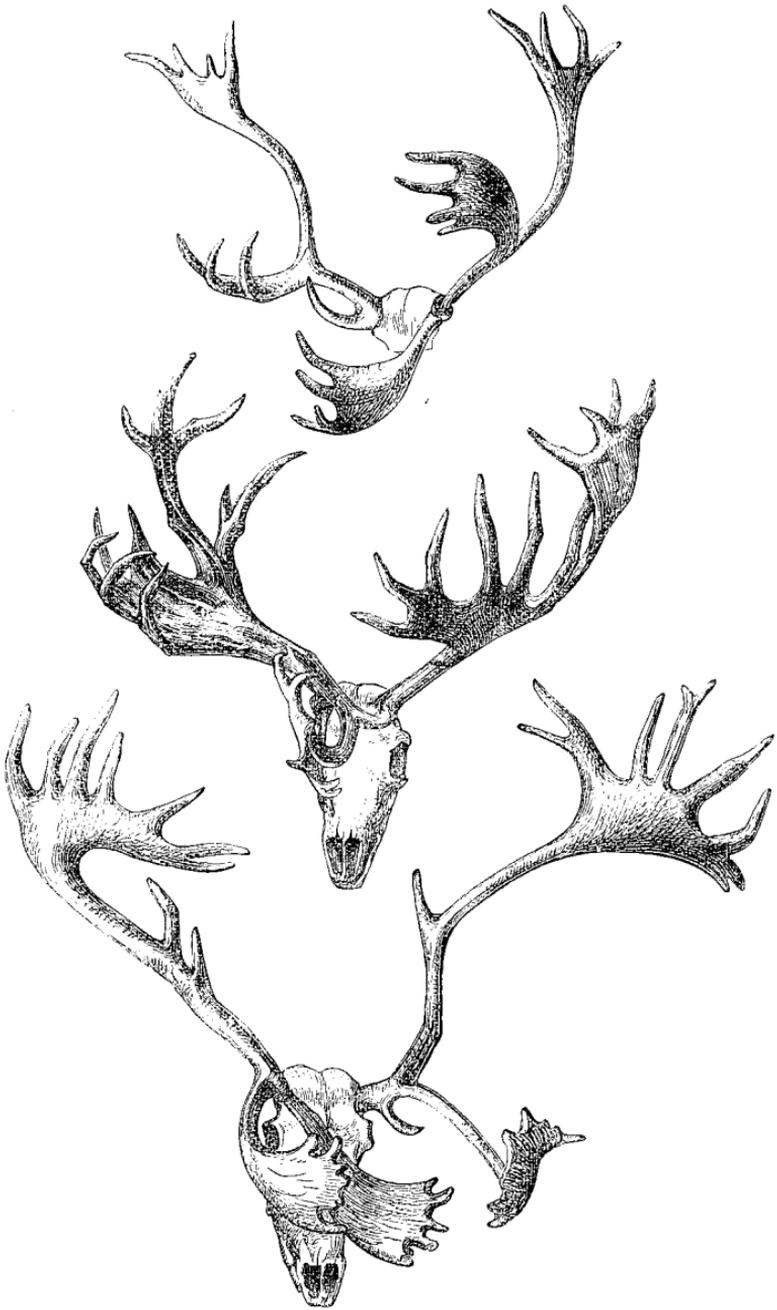
the health, vigour, freedom, and capability of enjoying simple pleasures which the Newfoundlanders possess, they have much to console them for the absence of those exciting and artificial enjoyments in which more advanced communities find their chief happiness.

CHAPTER IX.

ANIMAL KINGDOM.

The caribou, wolf, and black bear—The “Wolf Killing Act”—The beaver—“Newfoundland dog”—The seal tribe—Eagles, hawks, and pigeons—The American bittern—The great auk—The gigantic cephalopod, or devil-fish.

AMONG the well known wild animals indigenous to Newfoundland are the caribou or reindeer, of which an account will be given in the chapter on “Newfoundland as a Sporting Country,” and the wolf, of which there are considerable numbers in the interior, though they are rarely seen by the settlers. Captain Kennedy in his “Sporting Notes” gives it as his opinion that the wolves are far less numerous than is generally supposed. They are very destructive to the caribou. The black bear is frequently met with. It feeds on the wild berries and roots in summer, and passes the winter in a state of torpor. The seal-hunters occasionally encounter the white or polar bear on the ice off the coast, and sometimes it has been known to land. The fox is found in considerable numbers and varieties, as the black, silver, gray, and red fox. The skin of the black fox is worth 15*l.* sterling; that of the silver fox, 8*l.*; the gray fox, 1*l.* 10*s.*; the red fox, which is the commonest, only 8*s.* The skin of a bear is valued at from 2*l.* to 3*l.*; that of a deer at 15*s.*, and that of a wolf at 1*l.* By the



HORNS OF THE CARIBOU.

1. The ordinary Canadian Type. 2. Caribou horns from Newfoundland.
3. Horns from Labrador.

Facing page 230.

“Wolf Killing Act” a reward of twelve dollars is offered for every wolf skin; but so cunning are these animals that it is exceedingly difficult to trap or shoot them, and the reward is seldom obtained. The beaver is still numerous in the lakes of the interior; the skin is worth 16s. A good trapper will kill thirty or forty beavers in a week, and average two a day all the season. The otter is less numerous; the skin is valued at 17. 8s. There are two species, one frequenting fresh water, and a much larger kind found on the coast, and chiefly in salt water. The marten, the weasel, the bat, the rat, the field and common mouse, and the musquash or musk-rat are numerous. The Arctic hare grows to a large size, and becomes completely white in winter. It is a variety of the *lepus Americanus*. A few years ago a few pairs of the common North American hare were brought from Nova Scotia and let loose in the neighbourhood of the capital. They have thriven and multiplied rapidly, and in many places furnish an important item of food for the settlers in the winter. They are called “rabbits,” but improperly so, as they never burrow, and have all the habits of the hare.

There are few fine specimens of the world-renowned “Newfoundland dog” to be met with now in the island from which it derived its name. The common dogs are a wretched mongrel race, cowardly, thievish, and addicted to sheep-killing. By starvation, neglect, and bad treatment the race has degenerated so that few traits of the original remain. The Newfoundland dog thrives better elsewhere, though there are still some superior specimens to be met with in the country. The origin of this fine breed is lost in obscurity. It is doubtful whether the aborigines possessed the dog at all; and it is highly improbable that the Newfoundland dog is indigenous. Some happy crossing of breeds may have produced it here. The old settlers say that the ancient genuine breed consisted of a dog about

twenty-six inches high, with black ticked body, gray muzzle, and gray or white-stockinged legs, with clew-claws behind. These were probably the progenitors of the present Newfoundland dog, whose life-saving capacities in cases of threatened drowning, especially with those who live near the sea or great rivers, are valuable. Judicious treatment has greatly improved the breed. Landseer, as is well known, has immortalized one of them in his celebrated picture entitled "A Distinguished Member of the Humane Society," and the breed to which he belonged is known as the "Landseer Newfoundland." Their colour is white with black patches, curly coats, noble heads and powerful frames. The favourite Newfoundland dog at present is entirely black, of large size, from twenty-six to thirty inches in height, remarkable for his majestic appearance. It is now generally admitted that there are two distinct types of the Newfoundland dog, one considerably larger than the other, and reckoned as the true breed; the other being named the Labrador, or St. John's, or Lesser Newfoundland. The latter is chiefly found in Labrador, and specimens are also to be met with in Newfoundland.

Within the last four or five years the celebrated Leonberg dog has been introduced into Newfoundland and thrives remarkably well. The first specimens were brought by Herr T. A. Verkruzen, a German naturalist, who visited the island for the purpose of collecting mollusca. He brought with him three carefully selected puppies from Essig's establishment in Leonberg, Wurtemberg, of this renowned breed, now so much sought after by the gentry and nobility of Europe. The Leonberg is the result of a skilful crossing of the St. Bernard with the Newfoundland dog and the wolf dog of the Pyrenees, the result being the largest and handsomest long-haired dog now in existence, and distinguished for sagacity, strength, and faithfulness. Some of the finest well-trained specimens of the breed are sold in

Europe as high as 50*l.* and 100*l.* They possess some of the highest moral qualities of the noble races whose blood blends in their veins. At the leading dog shows of the world they have carried off the highest prizes. They grow to the height of thirty-three to thirty-six inches, and are over one hundred pounds in weight. The breed is multiplying in the island and is much esteemed and sought after. In time they will perhaps supersede the present degenerate breed of the Newfoundland. Their colours are white with black spots, wolf gray, and black. The last have often a double or split nose.

Of the seal tribe there are four species—the harbour or bay seal, the harp, the hooded seal, and the square flipper. These will be described in the chapter on the seal fishery. The walrus, or morse, is often met with by the sealers. The cetacea, or whale tribe, are represented by the fin-backed whale, which lives on caplin, lance, etc., the sharp-nosed whale (*Balaena acuta nostra*), and the pike-headed species; the great Greenland whale is rarely, if ever seen. The delphinidæ are represented by the species called by the fishermen black-fish, or pot-heads; the body is bluish black, the head round and blunt, and the blow-hole very large; they yield from thirty to a hundred gallons of oil. Another variety is called puffing-pig and herring-hog by the fishermen. The porpoise is common around the shores, and specimens of the grampus are seen occasionally.

The birds of Newfoundland are far too numerous to be named in this brief and imperfect sketch, and only a few of the more important can be enumerated. Mr. Henry Reeks, F.L.S., an English naturalist of note, spent two years on the western coast of the island, studying its ornithology, and published the result of his observations in the "Zoologist." He enumerates two hundred species of birds, and of course there are many more. A Swedish naturalist

on a visit to the island estimated that there were five hundred species of birds. Nearly all the birds are migratory.

The sea eagle is occasionally seen, and the bald or white-headed eagle is common. The latter is called by the fishermen "the grepe." Of hawks, the most important varieties are the American osprey or Irish hawk, the pigeon, the sparrow, the Greenland falcon, and the American goshawk. Of owls, there are the snowy owl, the great horned owl, the long-eared and short-eared owls, and the hawk owl.

Of woodpeckers, there are the hairy, the downy, and the black-headed woodpeckers. The American chimney swallow is rare, and the American night hawk is a summer migrant. The belted kingfisher is common. There are six species of fly-catchers, and the same number of thrushes. Of the latter, the migratory thrush or American robin—called the blackbird or robin in Newfoundland—is the earliest songster, and even when the ground is still covered with snow is heard pouring forth its sonorous notes. The warblers and swallows are in great variety. The finches include the American pine grosbeak, the American cross-bill, the snow bunting, the snow bird, and the chipping sparrow. The American raven and jay, the blue and Canada jay are common.

In the chapter on "sporting" reference will be made to the grouse or ptarmigan of the island, erroneously called "partridge." This game-bird is the willow grouse (*Lagopus albus*); but there is another kind called the rock ptarmigan (*Lagopus rupestris*), an Alpine species, inhabiting only the highest and barest mountain ridges, and called the "mountain partridge." The Canadian grouse, or spruce partridge, is sometimes seen as a rare visitor on the western side of the island. Mr. Recks met with some specimens. The American bittern, the American golden plover, and

other varieties, and a great number of different species of sandpipers and curlews are abundant. The Canada goose and the Brent goose are regular summer visitants. Of ducks there are the black, the pintail, the green-winged teal, the gray, and the American golden-eye. The harlequin duck is called "lords and ladies," and the long-tailed duck "hounds," from their fancied resemblance to the cry of a pack of hounds in full chase. The eider duck and the red-breasted merganser are tolerably common. The local name of the latter is "shell duck." The stormy petrel, gulls in great variety, gannets, cormorants, and the loon, or great northern diver, are common.

The great auk was once found in myriads around the shores, but is now extinct everywhere, not a specimen having been found for the last fifty years. The little auk, the puffin, the common guillemot, called locally the "murr and turr," and the razor-billed auk are abundant. The great auk was a very remarkable bird, and deserves more than a passing mention. It must now be reckoned, like the dodo, among the things that have been, though in the sixteenth and seventeenth centuries it was to be seen in multitudes on the low rocky islands on the eastern coast of the island, and immense flocks of them were encountered by the mariners of those days as far out as the Banks. Now the discovery of a single living specimen, or even of a skeleton, would be hailed as a most fortunate event. The last auk was shot on an isolated rock off the south coast of Iceland, in 1844, and is now in the museum of Copenhagen. In all the museums of Europe and America there are only seventy-two specimens of the bird. Three of these were found on Funk Island, off the north-eastern coast of Newfoundland in 1864. They came into the possession of Bishop Field, who forwarded one to Agassiz, another to Professor Newton, of Cambridge, and the third ultimately reached the British Museum, where there is but one other specimen,

brought from the Orkneys, in 1812. Numerous bones of the great auk have been found on Funk Island, and a careful search might discover many perfect skeletons. The great auk was larger than a goose. Its wings were very small, and not constituted for flight, but were admirable paddles in the water, enabling the bird to move about even more swiftly than the loon. The legs were extremely short, but powerful, and placed so much posteriorly, that, in resting on the rocks the birds assumed an upright attitude, the whole of the leg and toes being applied to the surface. It was a native of the Northern Hemisphere, the penguin being its relative in the Southern. The causes of its extermination are not difficult to discover. Its short wings and peculiar conformation rendered it helpless on the land; while its flesh and feathers were so valuable as to invite the rapacity of man. There were few suitable breeding places, and when these were invaded it could not fly elsewhere, and had no choice but to die. In the "struggle for existence," to which nature subjects all her animated productions, such a bird as the great auk must perish early.

It must have been a curious sight, two hundred years ago, to see these wild lonely islands, their coasts literally swarming with these strange birds, as they waddled slowly about in an erect position, with their broad webbed feet and short wings, resembling the flippers of a seal. They were the connecting link between the fish and bird, partaking of the nature of both. The "English Pilot" for 1774, thus refers to them: "They never go beyond the banks, as others do, for they are always on it or within it, several of them together. They are large fowls, about the size of a goose, a coal-black head and back, with a white spot under one of their eyes, which nature has ordered to be under their right eye—an extraordinary mark. These birds never fly, for their wings are very short, and

most like the fins of a fish, having nothing upon them but a sort of down and short feathers." Not only were the crews of the fishing vessels of those days in the habit of consuming vast quantities of these birds fresh, but they were accustomed to salt down many tons of them for future use. The merchants of Bonavista and other places were in the habit of salting them and selling them, in the winter season, instead of pork, to the fishermen. The sailors used to land on the islands where they bred, and fill their boats with the plump unwieldy birds (which on land could make no effort to escape), driving them, according to Whitbourne, on board by hundreds, or knocking them on the head with sticks. They feasted on their eggs, and even burned their bodies for fuel, in order to warm water to pick off the feathers which were valuable. After slaughtering them, they sometimes shut them up in stone enclosures, in order to have them ready when wanted. It is not wonderful that, under such circumstances, the great auk has been completely exterminated.

The principal commercial fishes in the waters around the island will be described in the chapter on "The Fisheries," the cod, salmon, and herring being the most valuable. The mackerel, once abundant, have been extremely scarce for many years. Halibut, turbot, plaice, sole, etc., are not taken in such quantities as to render them of value. Eels are plentiful in lakes, rivers, and salt water. Sturgeons are rarely taken. Lobsters are most abundant, and now constitute a valuable article of export. Oysters are not found around the shores; crabs are plentiful. A few other species are met with, such as the pipe-fish, frog-fish, bellows-fish, sculpins, lance, cat-fish, and lump-fish. Sharks are not uncommon. A specimen of the basking shark was brought ashore a few years ago at Topsail, in Conception Bay, measuring thirty feet in length. The dog-fish, a kind of small shark, hated by the fishermen,

as it often takes the fish from their nets and hooks, is abundant. The fox-shark, or thresher, is only seen occasionally.

The absence of venomous reptiles of all kinds, and also of frogs and toads, is remarkable. Several animals common on the continent of America are also wanting, such as the lynx, the skunk, porcupine, mink, and squirrel.

Of the molluscous animals the principal representative is the common squid, a cephalopod about five or six inches in length, which visits the coast in immense shoals in August and September, and supplies a valuable bait for the fishermen. It possesses ten arms radiating from the head, a small horny beak, and an ink-bag, from which at pleasure it ejects a black fluid, thus darkening the water so as to elude its foes. It moves either backwards or forwards through the water with great rapidity.

A very great interest was awakened among naturalists in 1873 by an announcement which one of the present writers (Mr. Harvey) was fortunate enough to be able to make, of the discovery of a new species of cuttle-fish, of gigantic size, in the waters around Newfoundland. Victor Hugo in his "Toilers of the Sea," gives a thrilling description of such a monster under the title of the "devil fish;" but the reality surpassed the fiction. Victor Hugo's devil fish was only four or five feet between the extremities of the outspread arms; the creature now discovered had arms the longest of which measured each twenty-four feet, and between their outspread extremities were fifty-two feet. The body was between seven and eight feet in length. The circumstances under which the discovery was first made were as follows: On the 26th of October, 1873, two fishermen of Portugal Cove were out in a small boat off the eastern end of Belle Isle, in Conception Bay. Observing something floating in the water they rowed up to it and one of them struck it with his boat-hook. Instantly the mass showed that it was

animated by putting itself in motion. A huge beak reared itself from among the folds and struck the boat, and a pair of large eyes glared at them ferociously. The men, as may be imagined, were petrified with fear; but before they had time to escape two corpse-like arms shot out from around the head and flung themselves across the boat. Had those slimy arms, with their powerful suckers, once attached themselves to the boat, it would speedily have been drawn under the water and its occupants would have been brought within reach of the monster's powerful beak. One of the men, however, had the presence of mind to seize a small hatchet that fortunately lay in the bottom of the boat, and with a couple of blows he severed the arms as they lay over the gunwale of the boat. The creature uttered no cry of pain; but at once moved off from the boat and ejected an enormous quantity of inky fluid which darkened the water for two or three hundred yards. The men saw no more of it, and having dragged the amputated arms into the boat speedily made for the shore. The shorter and thicker of the two arms was thrown carelessly aside and destroyed, but was described as six feet in length and ten or twelve inches in circumference. The longer arm was brought to St. John's by the fisherman, and Mr. Harvey was fortunate enough to secure it. After being photographed it was placed in the Geological Museum, where it now is. On measurement the fragment was found to be nineteen feet in length, not more than three and a half inches in circumference; of a palish pink colour, exceedingly strong and tough. The fisherman estimated that more than ten feet of this arm were left attached to the body, so that its entire length must have been thirty feet. Towards the extremity it broadened out like an oar and then tapered to a fine, tongue-like point. This part was thickly covered with suckers, having horny, toothed edges, the largest of them over an inch in diameter, the smallest not larger than a split

pea. Their number was estimated at one hundred and eighty. All these suckers, acting together, would establish such a grasp on an object as it would be impossible to escape from. The fishermen described the body of the monster as being of immense size, but under the influence of terror, their account would be greatly exaggerated. Subsequent discoveries of perfect specimens, however, render it certain that the body must have been over ten feet in length, and showed that this was one of the two long tentacles; the other eight arms being shorter and thicker.

Only a fortnight after this event, a perfect specimen was taken in a net at Logie Bay, three miles from St. John's. Mr. Harvey had again the good fortune to hear of the capture and to obtain possession of the animal. He had it measured and photographed, and described it minutely in various newspapers and periodicals. An engraving, copied from the photograph, and a description, appeared in the London *Field*, and the accounts made the rounds of the press in Britain and America. Everywhere the discovery was regarded by naturalists as of great importance, as it was the first perfect specimen of a creature hitherto regarded as fabulous.

The mode of its capture was curious. During the hauling in of a herring net the creature got somehow entangled in the folds, and became powerless. It struggled desperately, and before three men could drag it into the boat, they were obliged to kill it by cutting off the head. It proved to be a gigantic cuttle-fish or calamary; and is called by the fishermen a "big squid." The two long arms or tentacles were found to measure each twenty-four feet, and to be three inches in circumference; the eight shorter arms were each six feet in length, and at the point of junction with the central mass, were ten inches in circumference. The longer arms broadened at the extremities, and were there covered with suckers as in the

Conception Bay specimen. The shorter arms had their under sides covered through the entire length with a double row of suckers, and each tapered to a fine point. The total number of suckers was estimated at eleven hundred. The ten arms radiated from a central mass two and a half feet in diameter, in the middle of which was a strong horny beak, shaped precisely like that of a parrot, and in size larger than a man's clenched fist. The eyes were destroyed, but the eye-socket measured four inches in diameter. The body was between seven and eight feet in length, and five feet in circumference. The tail was fin-shaped, and about two feet across.

This specimen was forwarded to Professor A. E. Verrill, of Yale College, New Haven, one of the most eminent living naturalists of America. He made a very careful study of the animal, and has given an exhaustive account of it in a series of papers in the "American Journal of Science" and the "American Naturalist," all the different organs being figured in excellent engravings, and a restoration of the creature being also given. To his admirable account those who wish for a full description of the now famous devil fish must be referred. The details are highly interesting, and prove, once more, that "fact is often stranger than fiction."

Professor Verrill has distinguished two species of the giant cephalopods: one he named *Architeuthis Harveyi*, "as a well-merited compliment to the Rev. M. Harvey, who has done so much to bring these remarkable specimens into notice; the other he called *Architeuthis monachus*." In the "Popular Science Review," for April, 1874, there appeared a highly interesting article, by W. Saville Kent, F.L.S., on these gigantic cuttles, in which the writer proposed to name the species *Megaloteuthis Harveyi*, "in recognition of the great service to science rendered through Mr. Harvey's steps taken to preserve these valuable specimens." Mr. Frank Buckland,

in his "Logbook of a Fisherman and Geologist," has a paper on the subject; he also constructed a wooden model of the devil fish for his museum.

Since 1873 several specimens of this creature have come ashore, generally after heavy storms. The largest heard of was one cast ashore in Thimble Tickle, Notre Dame Bay, the body of which was reported, on good authority, to have been twenty feet in length, the tentacles forty feet. Another was found at Three Arms, Notre Dame Bay, with a body of fifteen feet long. A perfect specimen was obtained at Catalina, in 1877, nine feet two inches in length of body; circumference of body, seven feet; tentacles, thirty feet; short arms, eleven feet. This specimen is now in the New York Aquarium. In 1881 another specimen with a body eleven feet in length was obtained at Portugal Cove. It is now in Worth's Museum, New York. All these instances prove that in the seas around Newfoundland these gigantic cephalopods are abundant. They seldom approach the shore, so that the depths of the ocean in certain places may contain shoals of them. Mr. Saville Kent says, in the article previously referred to: "Summing up the whole, we are forced to admit that this group of cephalopodous mollusks contains representatives of enormous dimensions distributed in the seas throughout the globe, and embracing in all probability many distinct genera and species. Such is the formidable size of these giant calamaries that they vie even with the cetacea in magnitude, and in this respect yield to no other animals now existing. It further appears obvious that the numerous tales and traditions that have been current from the earliest times, concerning the existence of colossal species of this race, though in some instances unscrupulously exaggerated, had, in all probability, in the main a background work of fact, and can be no longer passed over as the mere fabrications of a disordered mind, as we have hitherto been inclined to accept them."

Professor Verrill says: "The pen of our *Architeuthis Harveyi* seems to resemble that of the ancient genus *Tendopsis*, found fossil in the jurassic formations, and contemporaneous with the huge marine saurians, *ichthyosaurus* and *plesioraurus*, etc., the sea-serpent of those ancient seas. May there not also be huge marine saurians still living in the North Atlantic, in company with the giant squids, but not yet known to naturalists? Such a belief seems quite reasonable when we consider how many species of great marine animals, both among cephalopods and cetaceans, are still known only from single specimens, or even mere fragments generally obtained only by chance."

Should this eminent naturalist's opinion be well founded, then our Newfoundland devil fish may prove to be first cousin to the sea-serpent, and perhaps may introduce one day this relative who has tantalised and eluded the grasp of so many mariners, and may yet prove to be no more a myth than the devil fish which has now an acknowledged place in the halls of science.

Herr T. A. Verkrutzen, the German naturalist, already mentioned in these pages as the introducer of the Leonberg dog, spent a portion of two summers in dredging and collecting mollusca around the shores of the island. He also visited the Banks, in a fishing vessel, for the same purpose. The result was a collection of the mollusca of Newfoundland of great value to science, by an able and accomplished naturalist, who is a master in conchology. He very kindly presented to the Geological Museum of St. John's a collection embracing specimens of ninety-two different species of mollusca, which he had collected and identified. He also printed a small pamphlet containing a complete list of his discoveries. His collection cost him much time, labour, and money, and his is the only account of the mollusca of Newfoundland yet published.

CHAPTER X.

VEGETABLE KINGDOM.

Forest trees—Evergreens—The Labrador tea-plant—Wild berries—
Flowering plants and ferns—Wild flowers and vegetables.

IN the chapter on "Forest Timber," an account will be given of the more valuable trees of the country, and the extent of the forest growths. It will be there shown that in the valleys of the interior are magnificent forests of great extent of pine, spruce, birch, juniper, larch, etc., furnishing ample materials for a large timber trade, as well as for shipbuilding purposes. The white pine is often found from seventy to eighty feet in height, and over three feet in diameter. The spruces and larches are of the best quality for shipbuilding purposes, while the yellow birch is pronounced equal in durability to the English oak. The latter, especially on the western side of the island, frequently attains a great size both in girth and height. The oak, beech, maple, chestnut, and walnut are not found in Newfoundland. A kind of dwarf maple is found in the interior. The American mountain ash grows to a large size, and is very abundant, the aspen, the balsam poplar, the dogwood thrive well, and the willow family is well represented and attains a large size. The recumbent or ground juniper and the recumbent Canadian yew are plentiful. The alders attain but a stunted growth. The English hawthorn has

been introduced and thrives well, but is not extensively cultivated.

The evergreens are in considerable variety. The most remarkable is the Labrador tea-plant, growing in swamps to the height of three feet, the leaves of which are used by Indians and hunters in place of tea. The ground laurel is a low running shrub, with leaves nearly two inches in length, on long stalks, rough, leathery, and shining. Its white fragrant flowers grow at the ends of the branches. There is a great variety of recumbent trailing evergreens. The *Kalmia* family abounds in the swampy grounds, its beautiful clusters of red and pale rose-coloured flowers being very agreeable to the eye.

One of the most characteristic features of the country is the immense variety and abundance of berry-bearing plants. These cover every swamp and open rocky tract, and furnish excellent fruit for preserves. Over many thousands of uncultivated acres they carpet the soil. The principal varieties are the hurtleberry—called in the vernacular “hurts”—the whortleberry in several kinds, the cranberry, partridgeberry, bake-apple berry. The wild strawberry and raspberry are most abundant, and make a delicious preserve. The maidenhair, or capillaire, is a little trailing plant belonging to the family of the felices or ferns. It bears a little fruit, white, and like an ant’s egg, which contains so much saccharine matter as to be lusciously sweet when made into a jam or preserve. Berry-picking is quite an industry at a certain season, and might be indefinitely expanded.

Of the wild cherries, the choke-cherry is most abundant, and often forms an ornamental tree in gardens. The fruit is pendulous and grape-like, the flowers of a yellowish white colour. There is also a kind of wild prickly gooseberry.

The flowering plants and ferns are in such variety that

a small volume would be required for their description. Henry Reeks, F.L.S., F.Z.S., in a paper read before the Linnean Society in 1869, enumerated three hundred and seventy-one species, besides varieties of flowering plants and ferns, in Newfoundland, and he only visited the western side of the island. He says, of these, six, besides *Calluna vulgaris* and *Batrachium Lunaria*, are new to the flora of North America, while three of them, to which I have provisionally given names, appear not to have been previously described. He enumerated fifteen species of ferns in this paper, and thirty-eight species of *Gramineæ*, or grasses.

Only a few of the wild flowers can be mentioned here by their popular names. The tribe of lilies are developed in great beauty and magnificence. The iris dots every marsh with its rich blue flowers, and the blue-eyed grass assists the rich display. The dog's tooth, heartsease, lily of the valley, Solomon's seal, Jacob's ladder, columbine, wild lupine, bell-flowers, etc., are abundant. The pitcher plant is one of the most remarkable productions of the swampy grounds. Its leaves are tubular, or pitcher-shaped, and filled with about a wine-glassful of pure water. The flower is purple, large, and handsome, shaped like a lady's saddle, and surrounded with a number of pitchers, the lids of which expand or shut, according to the necessities of the plant. The pitchers are lined with inverted hairs, bending downward, permitting insects to enter readily enough, but preventing their escape. The pitcher plant is one of the carnivorous order, and digests the flies which enter its leaves.

The grasses are very rich and abundant, some magnificent specimens being found. The red and white natural clover is found in great abundance, also near the sea, the vetch grows in vast quantities.

All the common English flowers thrive well in sheltered gardens, even the dahlia flourishing with a little care in winter. Perennials do better than annuals.

Garden vegetables of all kinds grow exceedingly well, and are of excellent quality. The potatoes produced in the island are unsurpassed elsewhere. Cucumbers, vegetable marrows, melons, cabbages, cauliflowers, broccoli, beans, parsnips, carrots, peas, etc., grow luxuriantly. The garden strawberry, raspberry, gooseberry, are as good as in any other country. On the eastern side of the island the soil and climate are not favourable to the growth of pears, apples, plums, etc., though these are grown and ripened occasionally. In the sheltered valleys of the interior there is no reason why apples, cherries, pears, damsons, and other kindred fruits, should not be grown successfully, as they are in the valleys of Nova Scotia.

CHAPTER XI.

NEWFOUNDLAND AS A SPORTING COUNTRY.

Fishing and shooting—The willow grouse, or ptarmigan—Opening of the season—The wild goose and black duck—Deer-stalking—Caribou shooting—Lord Dunraven on exploration and sport—The moose and the caribou.

IN many respects, Newfoundland may be regarded as the very paradise of sportsmen. Its countless lakes and ponds abound with trout of the finest description, and are the abodes of the wild goose, the wild duck, and other fresh-water fowl. The willow grouse or ptarmigan, the rock ptarmigan, the curlew, the plover, the snipe, are found in the proper season, all over the island, on the great "barrens," or in the marshy grounds, in immense numbers. The sea-pigeons and guillemots, or "murrs" and "turrs" as they are called in the vernacular, are seen all around the shores and islands. The large Arctic hare, and the American hare, called a "rabbit" by the natives, are to be met with, especially the latter—in abundance. Above all, the noble caribou or reindeer, in vast herds traverse the island in periodical migrations from north to south, and furnish the highest prizes for the sportsman. Finer salmon streams than those of Newfoundland naturally are, could be found nowhere; but by want of due protection, they have unfortunately degenerated. Still the enthusiastic

angler can find, in many places, excellent sport, and speedily fill his basket. For more adventurous sportsmen there are the bear and the wolf, though both are scarce and difficult to find. The beaver and the otter present attractions to some, and can be found by the lonely lakes of the interior. When the country is rendered more accessible by railroads, the island will, in the autumn months, attract sportsmen and tourists from other lands in increasing numbers.

The finest sport, perhaps, is the ptarmigan shooting, which begins on the 1st of September. These fine birds, called erroneously "partridge" by the inhabitants, are the willow grouse (*Lagopus albus*). They are quite equal to the Scotch grouse, and resemble them so closely that it is difficult to make out any specific difference between the red grouse, gorcock or moorcock of Scotland and those of Newfoundland. As a table bird they are unsurpassed in richness and delicacy of flavour. A brace of them weighs, in season, three to three and a half pounds. In September, after feeding on the wild berries, they are in excellent condition. In certain localities, and especially at some distance from the settlements, they are in great abundance. To a sportsman there can be nothing more enjoyable than a day's ptarmigan shooting over the breezy "barrens" in fine autumn weather. The air is then cool and bracing. The scenery is varied and charming. The surface of the country is dotted with bright lakelets on which float the white and yellow water-lilies; the low rounded hills are covered to the summits with the dark green spruce; "the barrens," or open spaces clear of wood, where the game is to be sought, are clad in the sober brown of autumn; the scent of the wild flowers is delicious, and near the coast glimpses of the restless Atlantic are obtained from the higher grounds away in the far distance.

In summer the plumage of the ptarmigan is brownish

ash-gray in colour, mottled and barred with dusky spots. This colour, when the frost sets in, gradually disappears as in the Alpine hare; and at length, when the snow falls it is almost pure white. These remarkable changes effected, as in the northern hare, without loss of substance, fit it admirably for its situation, as the sportsman, if he has not a dog used to game, may almost walk over the bird, without putting it up, when the snow is on the ground. The ptarmigan is feathered and haired down the legs and between the toes, and may be distinguished at a considerable distance, by the red about the eye. These fine birds are found all over the island, and it is no uncommon thing for a sportsman to bag, in a day, from a dozen to twenty brace.

In addition to the ptarmigan, the sportsman meets with the wild goose, which breeds in the most secluded ponds, and brings its young ones down the brooks at the latter end of June and beginning of July. They are then full-grown. The black duck is also found in fresh water during summer. Its plumage is a dark sombre brown; it is abundant in some places, but difficult to approach. Of all table-birds the black duck is considered the finest. The curlew, in their southern migration, arrive from Labrador late in autumn, and after feeding there on the wild berries they are almost balls of fat, and in flavour very delicious. The wild goose of Newfoundland is a remarkably fine bird, easily domesticated, but does not breed when tamed. It is about the size of a common goose, but with a more swan-like form, and has a black ring round its neck. It is a variety of *Anser canadensis*.

While neither reptile, serpent, nor any noxious creature is known to exist in Newfoundland, Nature has bountifully stocked the island with noble herds of caribou, or reindeer, finer than those of which Norway and Lapland can boast, specimens of which are found at times to weigh over six

hundred pounds. The vast number of deer-paths which, like a network, seam the surface of the interior in all directions, show that the number of deer must be enormous. Their migrations are as regular as the seasons between the south-eastern and north-western portions of the island. The winter months are passed in the south where "browse" is plentiful, and the snow is not so deep as to prevent them reaching the lichens amid the lower grounds. In March, when the sun becomes more powerful, so that the snow is softened by its rays, permitting them to scrape it off and reach the herbage beneath, the reindeer turn their faces towards the north-west and begin their spring migration. They do not move in large bodies, for in that case they could not graze freely; but in herds of from twenty to two hundred each, which are connected by stragglers or piquets, the animals following one another in single file a few yards or feet apart.

The whole surface of the country is now alive with deer, as herd follows herd in rapid succession, each led by a noble stag as tall as a horse, and all bending their course in parallel lines towards the hills of the west and north-west. Here they arrive from the middle to the end of April, and amid the rocky barrens and mountains, where their favourite mossy food most abounds, they browse till October. In May or June they bring forth their young in these solitudes, where they meet with a profusion of mountain herbage, and where, as compared with the lowlands, they are free from the persecution of flies. So soon, however, as the frosts of October begin to nip the vegetation, they turn towards the south and repeat their long march in the same manner, pursuing the same paths as when on their northern migration. Thus, for unknown periods, have these innumerable herds been moving along the same route, unless when interrupted by the Indians or the irregularities of the seasons. Their movements are

generally in parallel lines, unless where the narrow necks of land separating lakes, or the running waters or straits uniting them, or intervening chains of hills cause them to concentrate on one point. It was at such points that the Red Indians were accustomed to wait for the deer and slaughter them in great numbers. They also constructed deer-fences along river courses, with openings or passes at intervals for the deer to reach the river and swim across. Here, when in the water, they were killed, or struck down at the narrower parts of the fence by those who were on the watch.

September and October are the months for deer-stalking in Newfoundland. Some knowledge of the country and the assistance of Micmac guides are requisite. There are favourite hunting grounds known to the initiated, where this exciting sport can be enjoyed in perfection. One of the best of these is on the "Barrens," overlooking Grand Lake, opposite the northern end of the great island. From this island the deer cross in large numbers, when setting out on their southern migration, and collect in herds on the hills over the lake. The "White Hills," in the neighbourhood of Hall's Bay, is another favourite stalking ground. Inland, from various settlements on the southern shore, late in the autumn the deer can be hunted with much success.

The best account of caribou shooting in Newfoundland is to be found in "Sporting Notes in Newfoundland, by Captain Kennedy, of H.M.S. *Druid*."* The substance of this little pamphlet, which is written with much spirit and with all the enthusiasm of the genuine sportsman, appeared in the *Field* newspaper at various times. Captain Kennedy says of the Newfoundland deer: "In general appearance the caribou somewhat resembles a gigantic goat; the body is heavier and more clumsy than that of the red deer, the legs shorter

* Published by Withers, St. John's, Newfoundland.

and stouter, feet broader, head more cow-like, eyes smaller, ears shorter, and nostrils larger. The skin is brown in summer, brown and white in autumn, and white in winter. It is extremely thick and beautifully soft, being covered with thick wool underneath and long white or mottled hairs over all. This gives it a soft springy touch, unlike the wiry hair of the red deer. The antlers of the caribou stag are palmated, sweeping backwards, and of magnificent proportions, the brow antlers meeting over the nose, like a pair of hands clasped in the attitude of prayer. In all respects the animal is admirably provided to resist the inclement climates he is destined to inhabit. His short strong legs carry him over ground such as no horse could traverse, and his broad foot prevents him from sinking deep into the snow. A popular delusion is that the palmated horns of the caribou are given him to scrape away the snow to reach the lichen upon which he feeds. I am certain that it is nothing of the kind, and I can prove it. The horns are supplied solely for the purpose of fighting. The deer turns up the snow with his nose, which is covered with hard skin for the purpose. But the proof that the horns are not intended or used for scraping the snow is that when the snow is on the ground the deer have not got any horns. The stags shed their horns in November, after the rutting season, and they attain their full growth in August. In September they are clear of the velvet, and all ready for action, and well they use them. During the rutting season, which commences about the third week in September, and lasts a fortnight, terrible battles take place, and it is rare to find a full-grown stag whose antlers are not battered about the brow-antlers especially, and the animal himself often badly wounded about the neck and forelegs. On these occasions the deer generally kneel down and butt each other. In defending themselves against wolves they use their forelegs with good effect. Unlike the rest of the

deer tribe the female caribou carries antlers, but not always. She brings forth her young in May, when two years old, retaining her horns till then. Barren deer shed their horns in winter. A full-grown caribou hind is about the size of a red deer stag; and a full-grown stag in his prime, say from six to ten years old, will weigh 500 lbs. clear, against say twenty stone of a red deer stag."

Captain Kennedy does not think well of rod-fishing for salmon, owing to the fact that many of the best salmon rivers have been ruined by barring, sweeping with nets, traps, weirs, or mill-dams. Sea-trout fishing, he says, is excellent, if at the right spot at the right time. Still he describes some splendid fishing excursions, which he enjoyed on several occasions.

Lord Dunraven has given an interesting account of a brief hunting excursion in the island, in "The Nineteenth Century" for January, 1881. He says, "Newfoundland is not much visited by Englishmen. I know not why, for it is the nearest and most accessible of all their colonies, and it offers a good field for exploration and for sport. The interior of a great part of the island, all the northern part of it, in fact, is almost unknown. The variety of game is not great; there are no moose or small deer, and bears are, strange to say, very scarce; but caribou are plentiful, and the Newfoundland stags are finer by far than any to be found in any portion of the continent of North America. The caribou or reindeer are getting scarce, as they are also in every other accessible place. Constant travel across the island interferes with their annual migration from north to south and from south to north. They are no longer to be seen crossing Sandy Pond in vast herds in the spring and fall, but no doubt they are still pretty plentiful in some remote parts of the country. The shores of Newfoundland are indented with numerous and excellent harbours; the interior is full of lakes, and is traversed by many streams navigable for canoes.

Fur is pretty plentiful, wild fowl and grouse abundant, and the creeks and rivers are full of salmon and trout."

In "Forest Life in Acadie," * Captain Campbell Hardy, R.A., in a special chapter on Newfoundland, says: "I know of no country so near England which offers the same amount of inducement to the explorer, naturalist, or sportsman as Newfoundland. To one who combines the advantages of a good practical knowledge of geology with the love of sport the interior of this great island, much of which is quite unknown, may indeed prove a field of valuable and remunerative discovery, for its mineral resources, now under the examination of a Government geological survey, are unquestionably of vast importance, and quite undeveloped. As a field for sport, likewise, Newfoundland is but little known. Some half-dozen or so of regular visitors from the continent, one or two resident sportsmen, and the same number from England, comprise the list of those who have encamped in its vast solitudes in quest of its principal large game—the caribou—which is scattered more or less abundantly over an area of some twenty-five thousand square miles of unbroken wilderness."

Captain Hardy, in a description of moose-calling, says: "Few white hunters have succeeded in obtaining the amount of skill requisite in palming off this strange deceit upon an animal so cautious and possessing such exquisite senses as the moose. It is a gift of the Indian, whose soft, well-modulated voice can imitate the calls of nearly every denizen of the forest." The following notes on their method of stalking the moose are as graphic as they are interesting:

"September is the first month for moose-calling, the season lasting for some six weeks. I have seen one brought up as late as the 23rd of October.

"The moose is now in his prime; the great palmated

horns, which have been growing rapidly during the summer, are firm as rock, and the hitherto protecting covering of velvetlike skin has shrivelled up and disappeared by rubbing against stumps and branches, leaving the tines smooth, sharp, and ready for the combat.

“The bracing frosty air of the autumnal nights makes the moose a great rambler, and in a short time districts, which before would only give evidence of his presence by an occasional track, now show countless impressions in the swamps, by the sides of lakes, and on the mossy bogs. He has found his voice too, and, where moose are numerous, the hitherto silent woods resound with the plaintive call of the cow, the grunting response of her mate, and the crashings of dead trees, as the horns are rapidly drawn across them to overawe an approaching rival.

“This call of the cow-moose is imitated by the Indian hunter through a trumpet made of birch bark rolled up in the form of a cone, about two feet in length; and the deceit is generally attempted by moonlight, or in the early morning in the twilight preceding sunrise—seldom after. Secreting himself behind a sheltering clump of bushes or rocks, on the edge of the forest barren, on some favourable night in September or October, when the moon is near its full, and not a breath of wind stirs the foliage, the hunter utters the plaintive call to allure the monarch of the forest to his destruction. The startling and strange sound réverbérates through the country, and as its echoes die away, and everything resumes the wonderful silence of the woods on a calm frosty night in the fall, he drops his birchen trumpet in the bushes, and assumes the attitude of intense listening. Perhaps there is no response; when, after an interval of about fifteen minutes, he ascends a small tree, so as to give greater range to the sound, and again sends his wild call pealing through the woods. Presently a low grunt, quickly repeated, comes from over

some distant hill, and snappings of branches, and falling trees, attest the approach of the bull; perhaps there is a pause—not a sound to be heard for some moments. The hunter, now doubly careful, knowing that his voice is criticised by the exquisite ear of the bull, kneels down, and, thrusting the mouth of his ‘call’ into the bushes close to the ground, gives vent to a lower and more plaintive sound, intended to convey the idea of impatience and reproach. It has probably the desired effect; an answer is given, the snappings of branches are resumed, and presently the moose stalks into the middle of the moonlit barren, or skirts its sides in the direction of the sound. A few paces farther—a flash and report from behind the little clump of concealing bushes, and the great carcass sinks into the laurels and mosses which carpet the plains.”

In regard to the caribou, Captain Hardy says: “It is only to be approached by the sportsman with the assistance of a regular Indian hunter. In old times the Indians possessed and practised the art of calling the buck in September, as they now do the bull-moose, the call-note being a short hoarse bellow; this art, however, is lost, and at the present day the animal is shot by stalking, or ‘creeping’ as it is locally termed; that is, advancing stealthily and in the footsteps of the Indian, bearing in mind the hopelessness of success should sound, sight, or scent give warning of approaching danger. As with the moose, the latter faculty seems to impress the caribou most with a feeling of alarm, which is evinced at an almost incredible distance from the object and fully accounted for, as a general fact, by the size of the nasal cavity, and the development of the cartilage of the septum. As the caribou generally travels and feeds down wind, the wonderful tact of the Indian is indispensable in a forest country, where the game cannot be sighted from a distance as on the fjelds of Scandinavia or Scottish hills. Of course, however, on the plateaux of Newfound-

land and Labrador, and on the large caribou-plains of Nova Scotia and New Brunswick, less Indian craft is brought into play, and the sport becomes assimilated to that of deer-stalking.

“It is almost hopeless to attempt an explanation of the Indian’s art of hunting in the woods—stalking an invisible quarry ever on the watch and constantly on the move, through an ever-varying succession of swamps, burnt country, or thick forest. A review of all the shifts and expedients practised in creeping, from the first finding of recent tracks to the exciting moment when the Indian whispers, ‘Quite fresh ; put on cap,’ would be impracticable. I confess that, like many other young hunters, or like the conceited blundering settlers, who are for ever cruising through the woods, and doing little else (save by a chance shot) than scaring the country, I once fondly hoped to be able to master the art, and to hunt on my own account. Fifteen years’ experience has undeceived me, and compels me to acknowledge the superiority of the red man in all matters relating to the art of ‘*venerie*’ in the American woodlands.

“When brought up to the game in the forest, there is, also some difficulty in realising the presence of the caribou. At all times of the year its colour is so similar to the pervading hues of the woods, that the animal, when in repose, is exceedingly difficult of detection ; in winter, especially when standing amongst the snow-dappled stems of mixed spruce and birch woods, they are so hard to see, and their light gray hue renders the judging of distance and aim so uncertain, that many escape the hunter’s bullet at distances, and under circumstances, which should otherwise admit of no excuse for a miss.”

Part III.

THE FISHERIES.

CHAPTER I.

THE HISTORY AND CONDITION OF THE COD-FISH INDUSTRIES.

Export comparisons—The earliest fishermen on the Newfoundland coasts—The West of England men—Driving out settlers—The rivalry of France and England—French and American fishing enterprises supported by bounties—Statistical records of population—The rise and progress of the cod fishery—The Great Banks—Want of organisation and scientific observation—Number of persons engaged in the staple trade—Value of the fisheries to France and England—The American catch of codfish on the Banks—Newfoundland and the Dominion of Canada—European cod-producing countries—The “catch” in Norway—Newfoundland compared with the principal sea fisheries of the world.

THE fisheries of Newfoundland constitute the grand staple industry of the country. The trade of the colony depends mainly on the exportation of fish and oil. In one department of industry Newfoundland is in advance of all other countries. Her cod fisheries are the most extensive the world has ever seen. If, for the purpose of comparison, we take the five years from 1871 to 1875, the average annual export of cod-fish from Newfoundland during this period was 1,333,009 quintals, of 112lb. weight. During the

same years the average export of cod-fish from the Dominion of Canada was 785,425 quintals; and that of Norway, 751,382 quintals. The cod are taken on the shores of the island, on the Banks, and along the coast of Labrador. The Bank fishery is now chiefly prosecuted by the French and Americans, Newfoundlanders occupying themselves mainly with the shore and Labrador fishery. The aggregate annual catch of cod at present by the three nationalities in the North American waters, is estimated at 3,700,000 quintals. The number of cod-fish captured to make up this weight of dried fish, allowing forty fish for a quintal, would reach 150,000,000. Thus prolific in cod are the encompassing seas of the island. The value of 3,700,000 quintals, at \$4, would be \$14,800,000.

The cod fishery has been prosecuted during the last three hundred and seventy-eight years; but, notwithstanding the enormous drafts every year, the fishing-grounds show no signs of exhaustion, and, to all appearance, the supply of cod is as abundant as ever. Very soon after Cabot's discovery of the island, and his report of the abundance of cod in the waters, the Basques, the most enterprising fishermen of those days, began to fish on the coast. The island was discovered in 1497, and in 1504, according to Père Fournier, these Basques were busy drawing cod from the waters, and had given the name *Baccalaos*, or *Codlands*, to Newfoundland, Nova Scotia, and Cape Breton, the countries adjacent to the fishing-grounds. Thus, though discovered by English navigators, other nationalities were the first to profit by the riches of those seas; and for a long period the fishermen of the Basque provinces, of Normandy and Brittany, were alone engaged in the cod fishery on these coasts.* The English at that time were mainly occupied with a lucrative

* In the name "Port-aux-Basques," a fine harbour near Cape Ray, these Basque fishermen have left a relic of themselves in Newfoundland.

fishery on the coasts of Iceland, much nearer home. In Purchas' "His Pilgrims," a letter is given which was written by John Rut, master of an English ship, from the harbour of St. John's, to King Henry VIII. It bears the date of August 3rd, 1527. Among other things the writer informed His Majesty that he found in the harbour of St. John's eleven ships from Normandy, one from Breton, and two from Portugal, all engaged in fishing. It was not long, however, before the English fishermen discovered the value of those fisheries, for, in 1540, vessels from London, Bristol, Bideford, and Barnstaple were engaged in fishing on the Banks of Newfoundland. In proof of this, Hakluyt gives an extract from an Act passed in the reign of Edward VI. "against the exaction of money, or any other thing, by any officer, for licence to traffic in Ireland or Newfoundland." In 1578, some new light is thrown on the condition of the fisheries, as Hakluyt gives a letter written to him by M. Antonie Parkhurst, gentleman, containing a report on Newfoundland, in which the writer says that England had then fifty ships engaged in the fishery, but that France and Spain had each a hundred and fifty, and Portugal fifty vessels. When Sir Humphrey Gilbert took possession of the island, in 1583, he found thirty-six ships in the harbour of St. John's engaged in fishing, of which sixteen were English. In 1610 The Company of Planters of Newfoundland, composed of the Earl of Northampton, Lord Bacon, and many others, made an unsuccessful attempt at a settlement in the island. Even at that early period, as we have already seen, Lord Bacon, from his knowledge of the value of its fisheries, declared that "it contained richer treasures than the mines of Mexico and Peru."

English merchants and fishermen, chiefly from the West of England, had by this time established stations all along the eastern coast; but the fishery was mi-

gratory, the fishermen returning to England at the close of each season. In 1615 Captain Whitbourne was sent out by the Admiralty to establish order along the coast, and he found one hundred and seventy English vessels engaged in fishing. The numbers rapidly increased, for in 1626 Devonshire alone sent one hundred and fifty vessels to the fishery, and England had begun to monopolise the fish trade of Spain and Italy. At the same date three hundred and fifty families had, in spite of every discouragement, settled in the various harbours of the island. The French, too, had greatly extended their fishing operations, and rivalled the English in their successful pursuit of the cod. So eager were they to share in this lucrative industry, that in 1635 the French agreed to pay a duty of five per cent. on the produce for permission to dry fish in Newfoundland; and, in 1660, they founded a colony in Plaisance or Placentia Bay. The importance of the fishery was further evidenced in 1663, when, in order to encourage it, an Act was passed exempting it from tax or toll. Then followed the long and melancholy struggle of ninety years, already described in the historical part of this volume, between the merchant adventurers, who obtained charters from successive British governments, and the resident population, who, notwithstanding stern prohibitory laws, continued to increase. During the whole period society was in a wretched state, owing to the oppressive laws prohibiting settlement. Matters came to a crisis in 1676, when, through the influence of Sir Joshua Child, the principal merchant connected with the fisheries in England, an order was obtained for rooting out the entire settlers, and Sir John Berry was despatched to burn their houses and drive them out. This officer remonstrated against the inhuman order, and it was annulled before much injury was inflicted.

— Both England and France were now fully aware of the vast importance of the island and its fisheries, and each struggled hard to retain a hold upon both, more especially as it was felt to be the key to open or close access to Canada. The treaty of Ryswick, in 1698, restored all the possessions of each power in the island, but that of Utrecht, in 1713, transferred the sovereignty of Newfoundland and the adjacent islands to Great Britain. The French, however, obtained by the same treaty certain fishing privileges, to which they have tenaciously clung ever since, and which have proved the source of constant disputes, and greatly retarded the prosperity of the colony.

The rapidly-increasing value and importance of this fishery may be estimated from the fact that even so early as 1698, no less than 265,198 quintals of dried cod-fish were sent to market from the island, nearly half of which quantity was caught by the resident population. The number of ships then employed in fishing or carrying fish was two hundred and fifty-two; and the number of boats three hundred and ninety-seven. The French were still more active in the fisheries, as in 1721 they had four hundred ships employed; and rivalled the English in supplying the Mediterranean and Spanish markets. They sustained the industry by a system of high bounties. Both nations regarded the Newfoundland fisheries as highly important, in a national point of view, as they proved to be the best training school for a hardy courageous race of seamen, and thus to both nations they were nurseries for supplying their navies with sailors. In the case of England, there can be no question that these Newfoundland fisheries were the first nurseries for that fearless race of seamen who won her early maritime supremacy, and made her the world's great trader. On this point Mr. McGregor, in his valuable work on "British America," says: "Newfoundland, although

occupying no distinguished place in the history of the New World, has notwithstanding, at least for two centuries and a half after its discovery by Cabot in 1497, been of more mighty importance to Great Britain than any other colony; and it is doubtful if the British Empire could have risen to its great and superior rank among the nations of the earth, if any other power had held the possession of Newfoundland; its fisheries having ever since its commencement furnished our navy with a great proportion of its hardy and brave sailors."

— Whatever may be thought of the national policy pursued in granting to the French, and afterwards to the Americans, such extensive privileges in connection with the Newfoundland fisheries, it is evident that these concessions placed the colonists at a great disadvantage. Both French and Americans sustained their fisheries by large bounties, while Newfoundland fishermen had to compete with them, in their own waters, without any such assistance. The concessions to the French had the practical result of closing one half the island against settlement and the cultivation of the soil, and thus greatly retarded the growth of the population. It is not wonderful, therefore, to find that the Bank fishing, in which formerly many hundred fishing vessels from the shores of Newfoundland took a part, has long been abandoned to the French and Americans. In 1815 there were four hundred British vessels engaged in the Bank fishery; in 1845 it became practically extinct. An attempt has been made of late, with encouraging results, to restore this fishery; but only time will tell the issue of the effort. The Newfoundland fisheries have long been carried on only along the shores of the island, and on the coasts of Labrador. With such energy and success have these industries been pursued under all disadvantages, arising from French and American bounties, that at present

their annual value, all fishery products included, may be estimated at from six to eight millions of dollars; and they constitute the main source from which a population of 180,000 derive their support. They do not, however, expand with the increasing population; and hence, to provide for the future, the long dormant resources of the island are at length about to be turned to account. The great cod fishery, though many more hands are employed in it than formerly, has long been absolutely stationary. For thirty years it has occasionally risen above, and at times fallen below, a million quintals; and had it not been for the discovery of mines and greater attention to agriculture, destitution would have driven away great numbers of the inhabitants. The railway now under construction will revolutionise matters and create new industries.

Having thus sketched the history of the Newfoundland fisheries, we subjoin the following statistics of the cod fishery, in order to show its growth from the earliest periods and its condition at the present time.

The earliest record is for 1696, and is as follows :

Residents	293
Fishermen	2,028
Total population	2,321
Number of boats	431
Number of quintals of cod caught in the harbours occupied by the British .	220,700

The following is an abstract of the trade and population two years later, in 1698 :

Number of planters	284
Number of their children	462
Number of their servants	1,894

Number of boats owned by them	397
Quintals of fish made by them	101,152
Number of ships fishing and carrying fish . .	252
Their tonnage	24,318
Number of seamen employed	4,244
Quintals of fish caught by ships	114,770
Quintals of fish purchased by merchants . . .	157,848
Quintals of fish carried to market	265,198

The returns for the following sixteen years seem to indicate a decline in the cod fishery, the average exportation for the first three years of that period being 154,370 quintals, and for the last three 102,363 quintals.

A remarkable increase in the catch of fish took place in 1763, and in the following years the progress was fully sustained, as the following statistics show :

Year.	Quintals exported.
1763	348,294
1764	470,118
1765	493,654
1785	591,276
1787	732,015
1788	948,970
1790	649,092
1792	552,260
1795	500,000
1800	382,000
1805	625,519
1810	884,474
1813	891,360
1814	917,762
1815	1,086,266
1820	901,159

1825	.	.	.	.	973,464
1835	.	.	.	.	712,588
1845	.	.	.	.	1,000,233
1850	.	.	.	.	1,089,182
1854	.	.	.	.	774,117
1860	.	.	.	.	1,379,804
1863	.	.	.	.	1,012,321
1870	.	.	.	.	1,164,535
1872	.	.	.	.	1,221,156
1873	.	.	.	.	1,369,205
1874	.	.	.	.	1,609,724
1875	.	.	.	.	1,136,235
1876	.	.	.	.	1,364,068
1877	.	.	.	.	1,029,064
1878	.	.	.	.	1,074,646
1879	.	.	.	.	1,387,770
1880	.	.	.	.	1,419,505
1881	.	.	.	.	1,583,132

In connection with the foregoing returns the population of the island at various periods must be taken into account. The statistics given above include the quantities of cod taken by the whole number of fishermen, both those who came in fishing vessels and returned to England at the end of the season, and those resident in the country. As the population increased the fishing industries fell more and more into the hands of those who resided in the island, and at length the migratory fishery ceased entirely. In 1763 the resident population was 13,112; in 1792, 15,253; in 1789, 19,106; in 1825, 55,719; in 1832, 60,008; in 1855, 122,638; in 1869, 146,536; in 1874, 161,449; in 1882, estimated population 185,000.

Naturally we should expect to find as the population grew, and more persons were employed in the fisheries, the

quantities of fish caught would increase in proportion. But the foregoing statistics prove that this has not been the case. In 1855, with a population of 122,638, the quantity of cod taken amounted to 1,107,388; in 1880, with a population of nearly 183,000, the quantity of cod taken was 1,419,505. For thirty years the catch has occasionally fallen below a million quintals, but only during two or three years has it greatly exceeded a million quintals. In 1874, an exceptional year, it rose to 1,609,724 quintals, which were the highest figures ever reached; and in 1880 the catch amounted to 1,419,505 quintals. The grand staple industry must be regarded as stationary, though greatly increased numbers are engaged in it, and improved appliances have been of late introduced for the capture of the cod.

The question arises—Have the limits of the cod fishery been reached? Are there fewer cod in the water than formerly, owing to the heavy drafts made on the prolific race by the increasing numbers of fishermen? There can be no doubt that there are localities which show signs of exhaustion, either from over-fishing or other causes, such as the destruction of the food of the cod. Some of the bays, notably Conception Bay, where cod were once abundant, are now comparatively unproductive fishing-grounds. But this exhaustion is confined to a limited area; and the more extensive fishing banks along shore, and the Great Banks far out at sea, show no signs of depletion. The Great Banks, six hundred miles in length and two hundred in breadth, the home and breeding-grounds of the cod, have been fished for three centuries and a half without showing any symptoms of a falling off in the quantities taken. The enormous fecundity of the cod forbids the idea of exhaustion; and the quantities taken by man are infinitesimal when compared with the destruction caused by their natural enemies. The

Fishery Commissioners of England, after an exhaustive inquiry into the matter, declare that there is no falling off in the supply of fish around the shores of Great Britain, notwithstanding the immense and increasing drafts on them; and in consequence, have recommended the removal of all restrictions on the fishing industries. It is difficult to see why the Newfoundland fisheries should ever fall into a state of depletion, when other British waters, with far heavier drafts, are as prolific as ever.

The stationary condition of the Newfoundland cod fishery is not caused by a falling off in the quantity of cod in the waters, but is largely owing to the imperfect and antiquated methods of taking them which still obtain. Science has not been called in to aid this important industry as has been the case in Norway. Newfoundland has no fishery bureau. Improvements are very slowly introduced. The hook-and-line is depended on far too extensively. Fishing from small punts with the baited hook, close in-shore, is the method followed by large numbers of the poorer class of fishermen. The merchants show no spirit or energy in procuring information regarding what other countries are doing, or by inducing fishermen to use improved fishing gear. The preservation of bait by ice is only attempted on a small scale, the aid of the telegraph and the thermometer has not yet been obtained. Above all, the vicious "supplying system," by which advances in food and clothing, at high prices, are made to the fishermen at the commencement of each season, is destructive to the industrious efforts of those who are thus never out of debt, and often on the brink of famine; and tends to undermine their self-respect and honesty. Were there a well-organised fishery bureau, under the guidance of a skilled scientist and practical men, and were the improvements of the other fishing countries

introduced here, and the supplying system curtailed or abolished, the cod fishery, as well as the other fisheries, by the application of skill and capital, might be indefinitely increased. Under the present system, it is not likely to make further advances. There have been some improvements, but much remains to be done. Newfoundlanders have every natural advantage in inexhaustible supplies of cod either close to their doors or on the Banks, a day's sail from their shores, or on the Labrador coast, at no great distance. To the inhabitants of warm countries the dried cod furnishes a palatable article of food, and many of them regard it as indispensable. Catholic countries alone spend annually about half a million sterling in the purchase of cod taken in North American seas. So far from declining in value, the price of Newfoundland cod has advanced from fifty to seventy-five per cent. within the last fifteen years. While there is a difficulty often in finding a market for English manufactured goods, the demand for cod-fish never fails; and, as railways extend in Brazil, in Spain, in the Mediterranean countries, so as to permit its conveyance to the interiors, the demand increases. Thus it is evident that a cod-producing country possesses in this industry a source of prosperity which can never fail, and which the fluctuations of trade, or the caprices of fashion, cannot much affect. The extraordinary fecundity of the cod secures the fisheries against exhaustion.

The cod fishery of Newfoundland is the grand staple industry, all the other fisheries—of the seal, salmon, herring, etc.—amounting in the aggregate in value to but one-fifth of the whole. Four-fifths of the entire returns of the fisheries arise from the cod fishery.

In proof of this we may take the latest complete returns, those for the year ending July 31st, 1881. The products of

the cod fishery exported that year, inclusive of Labrador, were as follows :

	Dollars.
1,583,123 quintals dried cod, at \$3 20 c.	5,066,020
1,516 „ green „	1,516
4,127 tuns cod oil, at \$180	445,716
144 „ refined cod-liver oil, at \$180	25,922
1,040 barrels cod-roes, at \$3	3,120
43 packages of tongues and sound, at \$1	43
300 barrels cods'-heads, at \$1	300
	<hr/>
Total value of exports of the cod fishery	5,542,635
To this must be added the local consumption of cod-fish, at the rate of 1½ quintals per head, or 270,000 quintals at \$3 20c.	864,000
	<hr/>
Total value of cod fishery in 1881	6,406,635

The value of the other fisheries—of the seal, salmon, herring, etc.—for 1881 was \$1,429,871. The value of the whole exports, copper ore included, for 1881 was \$7,648,574.

It is interesting to note the number of persons employed in taking this quantity of cod-fish. The latest census, that of 1874, showed that out of a population of 161,449 there were 26,377 able-bodied fishermen in the colony, 45,845 persons engaged in catching and curing fish, 1,197 vessels of a tonnage of 61,551 tons, 8,902 fishing-rooms in actual use, and 18,611 boats employed in the shore fishery. At the present date there are about 53,000 persons engaged in catching and curing fish out of a population of 180,000. The same men are employed in the seal and herring fisheries as in the cod fishing, the seal fishery occurring in spring before the cod make their appearance, and the herring in the autumn and winter.

We shall now endeavour to estimate the extent and value of the French and American Newfoundland cod fisheries. For some three hundred and fifty years, France has carried on a cod fishery on the Banks of Newfoundland, and also along the western and northern shores of the island. Each year a fleet arrives at St. Pierre, in April, from France. After purchasing a supply of bait, for which they are dependent on the Newfoundland fishermen, who realise about \$100,000 per annum by its sale, they proceed to the Banks and the stations along shore. Each vessel makes three trips from St. Pierre to the Banks. The produce of the first two voyages is taken ashore at St. Pierre and dried, and that of the third is taken direct to France in a green state. The fishery is sustained by a bounty of eight shillings and four pence sterling per quintal. It has been for years in a state of decline, and without the bounties would perish. In 1839, according to *Le Constitutionnel*, as quoted by Sir R. Bonnycastle in his work on Newfoundland, the French cod fishery, in Newfoundland waters, employed 600 ships, 13,000 men, and 50,000 tons of shipping, furnishing France with 12,000 able seamen—being one-fourth of the whole number required for her navy at that time. In 1848, according to the report of Captain Loch, of H.M.S. Alarm, “there were 360 French Banking vessels, of from 150 to 300 tons each, carrying from 16,000 to 17,000 Frenchmen; which vessels caught annually 1,200,000 quintals of fish on the Banks.” In 1852, Perley’s report was, in substance, the same. In 1865, James S. Hayward, Esq., of H.M. Customs, Newfoundland, visited St. Pierre, and obtained access to the French records. His report, which is quite reliable, shows a very striking decline in the French fishery. He found that in 1864, there were employed in the fisheries ninety-eight square-rigged vessels, carrying 2,742 men, and 579 small craft and boats, carrying 4,541 men: making a total of

7,223 engaged in the fisheries. The catch that year was : Dried cod-fish, 196,997 quintals ; green cod, 46,940 quintals. Allowing twenty quintals per man for the last trip, the produce being taken to France green, we have 54,840 quintals ; and the Northern fishery, not reported at St. Pierre, would probably yield 100,000 quintals. We have thus, as the total catch along the shores and on the Banks, by the French, in 1864, 398,797 quintals. In a favourable year it is possible that the catch may approach half a million of quintals—a striking decline since 1848. This fishery has not advanced since 1864, as the latest returns obtained, those for 1874, show that there were that year, 847 vessels, and 5,621 men employed in the fishery. In this return are included the schooners from St. Pierre, and boats not decked, employed at the local fishery about St. Pierre. In 1868 the cod-fish export from St. Pierre was 217,645 quintals. The French Newfoundland fisheries may be estimated at present as averaging from 400,000 to 500,000 quintals annually ; the number of men employed being 5,000 to 6,000.

The following return shows the number of men and vessels employed from 1867 to 1874 :

	Vessels.	Men.
1867 . . .	804 . . .	7,178
1868 . . .	774 . . .	6,552
1869 . . .	806 . . .	6,452
1870 . . .	833 . . .	6,397
1871 . . .	665 . . .	5,295
1872 . . .	865 . . .	5,620
1873 . . .	899 . . .	6,036
1874 . . .	847 . . .	5,621

Boats and schooners are included in the above return.

The French returns give the value of their Newfound-

land fisheries as 8,300,000 francs in 1871, and 10,500,000 francs in 1872. In the *Revue des Deux Mondes* for November, 1874, a writer states that these fisheries bring some 15 to 20 million francs to French commerce, and employ 9,000 sailors. This statement is not borne out by their own returns. The history of the French Newfoundland fisheries shows a steady decline since 1850. From 1841 to 1850 the average tonnage employed in their fisheries annually was 18,000; the average number of men 11,500. The decline, therefore, amounts at present to one-half. After "fatal Waterloo," the French, in order to restore their naval power and create sailors, gave immense bounties to those who engaged in the Newfoundland fisheries, amounting to about \$70 per man. Being sustained by such bounties the Newfoundland fishermen could not compete on the Banks with the French, the outfit for this fishery being very expensive. The result was that the British Bank fishery declined rapidly, so that in 1845 it was completely extinct. Once it employed 400 vessels. As a commercial speculation the French Bank fishery is not successful; and were it not for the bounties it would be abandoned. It is well known that the French fishermen pursue these foreign fisheries largely for the bounties they enjoy, the fish being, in many instances, a secondary consideration.

There are no available statistics, as far as we are aware, to show what is the American catch of cod-fish on the Banks. Formerly a large number of American fishing vessels used to frequent the Labrador coast, but at present very few are seen there, and American fishermen confine their efforts mainly to the Banks when in pursuit of cod. According to the Annual Report of the chief of the Bureau of Statistics, etc., the amount of dried cod-fish received into the Customs' Districts of the United States during 1874 was 850,732 quintals, valued at \$3,694,483; and in 1875 the quantity of dried cod-fish was 756,543 quintals, valued at \$3,661,496.

The greater portion of this catch was, we believe, taken on the Banks. The American cod fishery shows a marked decline between the years 1850 and 1867. In the former year the tonnage of the United States employed in the cod fishery was 136,654; in 1867 it was 36,700. The decline has been most rapid since 1863. Whether this fishery has rallied since 1867 we have no statistics to determine.

The following Table shows the comparative value of the cold-water sea fisheries of the United States, the Dominion of Canada, and Newfoundland. The returns include not only cod but all fish, such as mackerel and herring, taken in the waters around the coasts :

Year.	United States.	Dominion of Canada.	Newfoundland.
	Dols.	Dols.	Dols.
1870 .	5,313,967	7,000,000	7,260,298
1871 .	11,428,410	8,000,000	8,086,081
1872 .	9,526,647	9,570,116	6,954,528
1873 .	8,348,185	10,754,988	8,138,965
1874 .	9,522,553	11,681,886	8,511,710
1875 .	10,747,579	10,347,886	7,845,328
1876 .	9,756,683	11,019,451	7,687,877

From this Table it appears that the combined catch of the Dominion of Canada and Newfoundland is nearly double in value the mean annual yield of the sea fisheries of the United States. The greater part of the latter are carried on in waters off British-American coast-lines.

Of European cod-producing countries by far the most important is Norway. It is the great rival of Newfoundland in the cod markets of the world, and its competition is very keen, especially in recent years, during which the Norwegians have made great advances, by the aid of science, in the modes of capturing and curing cod. The following Table exhibits the comparative condition of the Norwegian

and Newfoundland cod fisheries from 1846 to 1865, showing the average annual catch during groups of four years :

Years.	Norway. Cod exported. Quintals.	Newfoundland. Cod exported. Quintals.
1846-1850 . .	537,450 . .	980,336
1851-1855 . .	605,737 . .	953,858
1856-1860 . .	666,076 . .	1,220,154
1861-1865 . .	751,382 . .	1,056,551

That the cod fishery of Norway, though fluctuating during certain periods, is increasing in value, is evident from the report of M. Friele, presented at the Paris Exposition of 1878. In that report the returns are given as follows :

Years.	Cod.	Value in dols.
1873 . .	49,500,000 . .	4,240,000
1874 . .	47,500,000 . .	4,060,000
1875 . .	53,000,000 . .	4,300,000
1876 . .	38,000,000 . .	3,600,000
1877 . .	70,000,000 . .	(about) 6,630,000

The yield in Norway in 1877 of 70,000,000 cod-fish must be regarded as exceptional, being by far the most abundant on record. If we allow fifty cod-fish to a quintal, then the Norway catch in 1877 was 1,400,000 quintals. The last two years have witnessed a failure in these fisheries, which has had the effect of enhancing the price of Newfoundland cod-fish, the catch in Newfoundland being at the same time above an average. In 1877 there were employed in the Loffoden cod fishery—which is the principal one—21,287 men and 4,567 boats. The average gain of each fisherman was \$120 during the season, which lasts from the beginning of February to the middle of April,

being a winter fishery. Finmark is the summer cod fishery of Norway.

Although the Newfoundland cod fishery does not show any marked advance in the quantities taken during the last thirty years, the increase in the market value of dried cod-fish has been enhanced to the extent of from fifty to seventy-five per cent., so that there has been a steady progress in the value of the products. The following Table shows the progress of the value of the whole products of the Newfoundland fisheries during each group of five years, from 1852 to 1876 inclusive, the main increase arising from the cod fishery :

Group of Five Years.	Average Value of Exports from Newfoundland. Dollars.
1852-1856	5,166,129
1857-1862	6,132,392
1862-1866	6,080,445
1867-1871	7,011,407
1872-1876	7,847,661

The following are the values of the exports of Newfoundland for the years named :

Years.	Dollars.
1877	7,625,441
1878	6,591,807
1879	7,168,924
1880	7,131,095
1881	7,648,574
Average for the last five years .	7,233,168

The last-named return in the foregoing Table is for the year ending July 31st, 1881, and is taken from the report of the St. John's Chamber of Commerce. The Custom House returns for 1881 extend to December 31st, 1881, and

show a most extraordinary advance in the value of the fisheries for the whole of that year. The value of the whole exports for 1881 was no less than \$9,365,304. The value of fishery products exported in 1881 was thus greater by no less than \$2,234,209 than those of 1880. Thus 1881 was by far the most successful year in regard to the products of the fisheries which is on record, the values exceeding those of previous years by nearly two millions and a quarter of dollars. Excluding the catch of cod-fish on Labrador from the returns of 1880 and 1881, the exports of dried cod stood as follows :

Years.	Quintals.	Dollars.
1880 . .	985,134 . .	3,282,963
1881 . .	1,173,510 . .	5,125,275
	Increase in 1881 . .	<u>1,842,312</u>

Thus the increase in the values of the exports in 1881 arose largely from an increase in the quantity of cod-fish taken, but also from an advance in the price, which, owing to the failure of the Norwegian fisheries, was considerable. Other things combined to swell the value of the exports for 1881. The value of the products of the seal fishery was greater by \$302,570 than that of 1880, which had been much below the average. The value of the copper ore exported was also greater by \$106,180 than that of 1880. We must therefore regard 1881 as being quite an exceptional year, and one whose results are not likely to be equalled for years to come. The seal fishery of the spring of 1882 has proved one of the very worst on record, the catch not exceeding 150,000 seals. The cause of the falling off was the masses of heavy ice which beset the shores for many weeks, impeding the movements of the vessels. This will of course cause a corresponding falling off in one item of the exports for 1882.

From the foregoing statements it is evident that the

cod fishery of Newfoundland is greater than that of any other cod-producing country in the world, the Norway fishery being next in value. The average value of the Newfoundland products of the cod fishery may now be reckoned at \$500,000 per annum; and adding to this the value of the local consumption, we must place the entire annual value at \$6,364,000.

It may be interesting to compare the principal sea fisheries of the world in regard to their respective value. The following Table may be regarded as presenting a fairly correct estimate of the annual value :

	Total Value in Dollars.
British European sea fisheries	34,090,000
British American sea fisheries :	20,193,596
United States	13,030,821
France	12,166,666
Norway	6,250,219
Russia (European sea fisheries)	2,425,156
Russia (Asiatic fisheries)	10,896,625
Netherlands	1,635,725

CHAPTER II.

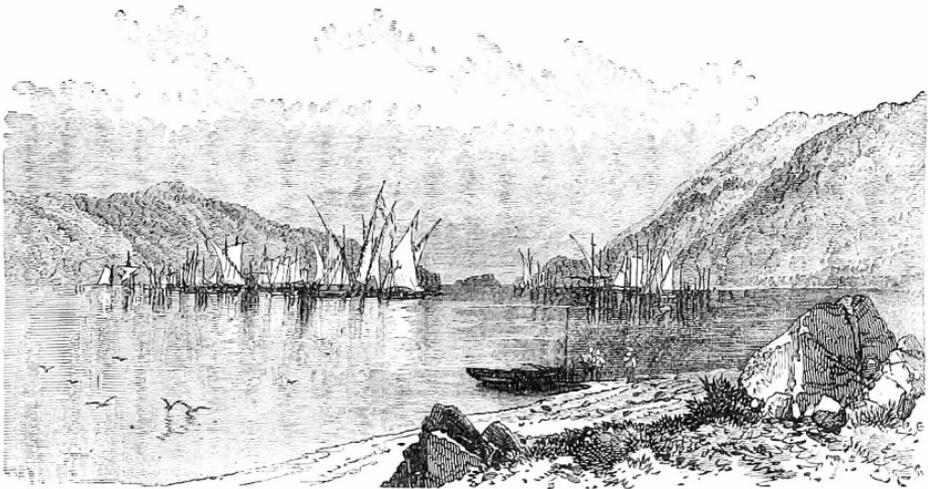
NATURAL HISTORY OF THE COD, ITS DISTRIBUTION, MOVEMENTS, SPAWNING, AND MODE OF CURE.

Cold-water seas and the Arctic current—Nature's laws of compensation—Food of the cod—The Labrador current—An old theory exploded—A submarine plateau—The fishing season—Caplin and squids—Process of curing the cod—Operators at work—Cod-liver oil—Fishing tackle and methods of taking the cod.

OF the three leading kinds of commercial food-fishes—the cod, the herring, and the mackerel—the cod has the widest range. On the east coast of America, it is found, from the Polar regions on the north to Cape Hatteras on the south, being most abundant on the coast of Labrador and Newfoundland, and on the great banks lying to the south and west. On the western coast of America, in the North Pacific Ocean, its boundary runs from Northern China, at Chusan, northward along the west coast of Japan and the Kurile Islands to the southern extremity of Kamtschatka, and across to the Aleutian Islands, by Kodiak, Sitka, and the islands of the west coast of North America to San Francisco. In the Old World the cod has an extensive geographical range, being most abundant in the neighbourhood of the Loffoden Islands, Norway, Finmark, Iceland, the Faroe and British Islands.

Its northernmost limit is in general seventy-seven degrees north latitude, and the southernmost, in the Atlantic, thirty degrees north latitude. It is thus found on the coasts of both continents, and on the line where the Arctic and North Atlantic Oceans meet. This may be called the domain of the *Gadidæ*, which naturalists tell us embrace nine genera and forty-one species.

Cold-water seas are essential to the life of the commercial food-fishes. In the tropical seas, or even in



A NEWFOUNDLAND FISHING FLEET BEFORE THE DAYS OF STEAM.

the warm waters of the Gulf Stream, they could not exist, any more than the Arctic hare could thrive in the Torrid Zone. The Arctic current which washes the coasts of Labrador, Newfoundland, Canada, and part of the United States, chilling the atmosphere, bearing on its bosom huge ice-argosies, is the source of the vast fish wealth which has been drawn on for ages, and which promises to continue for ages to come. Wanting this cold "river in the ocean," the cod, seals, herrings, mackerel, halibut, hake, etc. which now crowd the northern seas, would be entirely absent. The great

fishing interests are thus as dependent on the Arctic current, as the farming interests on the rain and sunshine which ripen the crops. Here is an illustration of Nature's great law of compensation. While the bleak shores of these northern regions are almost tenantless wildernesses, the encompassing seas are swarming with vast varieties of marine life.

The Arctic current rushes down from the Spitzbergen seas, laden with ice-fields and icebergs, sweeps round Cape Farewell, the southern point of Greenland, flows north as far as Cape York, and being here deflected westward, it mingles with the ice-laden river coming from the Arctic regions through Davis Strait. It now flows south, and receiving a fresh accession of strength from Hudson's Strait, it rushes along Labrador and the Newfoundland shores, till it encounters the warm waters of the Gulf Stream moving eastward. Here it is divided into two parts, one wedging itself between the Gulf Stream and the coast, the other shooting underneath the warm waters of this second river of the ocean. From Labrador southward it is usually called the Labrador current; and the area which it occupies on the coasts of North America is the great feeding and spawning ground of the commercial deep-sea fishes.

It is not altogether owing to its temperature that the Labrador current is favourable to the development of the commercial fishes, though that is essential to their growth. This cold current brings with it the food on which these fishes thrive, and the supply is one that can never fail. So far from being unfavourable to the production of life, the Arctic seas and the great rivers which they send forth are swarming with minute forms of life, constituting, in the words of Professor Hind, "in many places a living mass, a vast ocean of living slime; and the all-pervading life which exists there affords the true solution of the

problem which has so often presented itself to those engaged in the great fisheries—where the food comes from which gives sustenance to the countless millions of fish which swarm on the coasts of Labrador and Newfoundland, and in Dominion and United States waters, or wherever the Arctic current exerts an active influence.” In the Arctic seas the waters are characterised by a variety of colours, and it is found that if a fine insect net be towed after a ship it becomes covered with a film of green in green water, and with a film of brown in brown water. These films are of organic origin. “It is,” says Hind, “a living slime, and where it abounds there also are to be found swarms of minute crustaceans, which feed on the slime, and in their turn become the food of larger animals.” Dr. Brown has shown that the presence of this slime spread over a hundred thousand square miles provides food for myriads of birds that frequent the Arctic seas in summer, and also furnishes sustenance to the larger marine animals, up to the giant whale. This “slime of the ocean” appears to be most abundant in the coldest water, and especially in the neighbourhood of ice. The ice-laden current from Baffin’s Bay and the Spitzbergen seas carries myriads of icebergs which ground in countless numbers on the coast of Labrador, and “render possible there the existence of all these forms of marine life, from the diatom to the minute crustacean, from the minute crustacean to the crab and prawn, together with molluscous animals and starfish in vast profusion, which contribute to the support of the great schools of cod which also find their home there.” Thus, then, the great battalions of icebergs carry with them the slime-food on which minute crustaceans live; and these in their turn furnish food for the herring which swarm on the Great Banks, where this food is abundant, and the herring, with multitudes of other forms, are devoured by the cod. When the cod is assimilated by man this great circle of Nature is complete.

There is a vast area on the shores of North America occupied by the Labrador current, and constituting the home of the cod and other commercial fishes. By far the greatest area of this cold water subtends the coasts of the British American provinces, within the hundred-fathom line of soundings. It is computed that while the cold-water area subtending the coast of the United States is about 45,000 square miles, that subtending British American shores is 200,000 square miles. The following Table, given by Professor Hind, shows the comparative extent of coast-line washed by the cold current :

	Miles.
United States, north of Cape Hatteras	1,070
Newfoundland	2,000
Labrador, as far as Nain	360
New Brunswick	545
Nova Scotia	1,170
Quebec	1,164

Thus while British America has a coast-line of 5,239 miles of fishing ground, the United States have but 1,070. Hence the superior value of British North American fisheries.

There is another important consideration. The homes of the deep-sea commercial fishes are in the vicinity of the coasts washed by the cold-water seas, and these are the great storehouses of the commercial fish supplies, and the real and only mainstay of the deep-sea fishery industries of both British America and the United States. The old theory regarding the extended migrations of the cod and herring to the Arctic or other distant regions and back is now entirely exploded. These fish are now known to be local in their habits, and to be confined to a limited area in their movements. They are governed in their movements by the presence or absence of food, the spawning instinct, and the temperature of the water. Their general movements are in schools, from the deep to the shallower and

warmer waters of the coast, for spawning, or in search of food, returning by the same route in a direct line to their *habitat*. The law which governs fish life is that they return to the place of their birth for reproductive purposes. Hence all round the coasts there are at different places what may be called colonies of fish, differing from each other, and each having a range of movement from the deep to the shallower waters, and *vice versá*. To the spot where the young first issued from the ovum they return when mature to repeat the story of their birth. Further, in passing from the spawning grounds to the deeper waters where they spend the winter, the cod and other fish follow a definite line of migration, and that generally the shortest and most direct route. Most of the schools around the Newfoundland coast are believed to winter at no great distance from the shore. Thus the cod taken along any stretch of coast-line is really indigenous to the adjacent sea area.

The eminent naturalist, Professor Sars, has proved that the cod drops its spawn free into the sea, at a considerable distance from the bottom. The spawn does not sink, but goes through all its stages of development swimming free in the sea, quite near the surface. The eggs are transparent, and have a specific gravity so near that of sea-water that they float near the surface, and are hatched in about sixteen days. The male fish, in spawning, swims deeper than the female, and the milt being of less specific gravity than the sea-water, floats upon the surface as soon as it is poured out. The young cod in its first year grows to be about a foot in length. When six months old it goes off from its birthplace into deeper water. It is not reproductive till its fourth year.

The remarkable submarine plains at some distance from the shores of Newfoundland, where the finest cod-fish are taken, and where they are most abundant, are not, as was long believed, masses of sand, borne thither by the Gulf

Stream and the River St. Lawrence. They form a rocky submarine plateau, whose eastern and southern borders descend steeply to a great depth. The Great Bank extends over fully nine degrees of latitude from north to south; from west to east it covers in some places five degrees. The depth of water varies from fifty to three hundred and sixty feet. Beyond the Grand Bank to the eastward lies the Outer or False Bank, upon which the sea is from six hundred to nine hundred feet in depth. To the west there are several smaller banks. At the west end of the Great Bank soundings have shown a depth of nine thousand feet. The depth around the bank is from ten thousand to fifteen thousand feet. The water on the bank is not warmer than that surrounding it at a depth of three hundred to six thousand feet, namely, 39·2 to 42·8. The fishing-grounds do not extend over the whole bank, but have an extent of about two hundred miles in length and sixty-seven miles in breadth. For nearly four hundred years this "cod meadow" has been fished by large fleets of various nations, without showing any decrease in productiveness.

The cod taken on the Banks is larger and finer in quality than the fish taken along the shores of the island or on Labrador. An average of thirty Bank cod, when dried, make a quintal. The price is higher than that of shore fish. It is a prevalent opinion among fishermen, and until recently was also held by naturalists, that the cod taken in deep water, on banks and reefs, at a considerable distance from as well as close to the land, is a different species from the cod taken in coastal waters. The researches of Sars into the natural history of the cod have exploded that opinion, and proved that the shore and Bank cod are really the same species. The Bank cod is merely the mature full-grown cod that has reached its fourth year or upwards, its habits at that age leading it to prefer the Banks to the shore as feeding-grounds. The

two-year-old and three-year-old cod remain on the shore all the year, passing to and from the shallower water. When four years old their reproductive instincts are developed, and after spawning they retire far from the coast, and are found on the submarine slopes and valleys of the Great Banks. On the Labrador coast and on Finmark great numbers of small cod are taken, from eighteen to twenty-two inches in length; and these are probably schools in their second or third year, which in a season or two, when mature, will change their mode of existence and become Bank fish.

The cod begins to appear on the coasts of Newfoundland each year about June 1st, being drawn there mainly by the great master instinct which pervades all animated existences. Local variations in the time of arrival, amounting to days and even weeks, occur; and these are dependent on temperature, which determines the movement towards the land of the various forms of marine life on which the cod feeds. On the same cause the time of spawning depends. Professor Hind, from a series of careful observations on the movements of the cod, has deduced the following law: "Over an area extending northerly from Conception Bay for seven hundred miles, the cod approach the shore about one week later for every degree of latitude we advance to the north." In Notre Dame Bay and Southern Labrador they appear about June 20th, and on Northern Labrador from the 20th to the 28th July. In August and September cod-fishing is going on simultaneously "throughout a length of coast-line extending from latitude $47^{\circ} 30'$ to latitude $58^{\circ} 30'$, or more than seven hundred miles in one continuous line. Hence it appears that the migrations of the schools of this fish are merely from deep-water winter feeding-grounds to the nearest coast, and from the coast to the nearest deep-water feeding-grounds again. The coast migrations during the summer

months appear to be of equally limited extent, and schools of cod frequenting any particular coast may be said to be indigenous to it." The fishing season on the Newfoundland coast lasts about one hundred and forty-three days; on Southern Labrador, eighty-seven days; and on Northern Labrador, fifty-two days.

The arrival of the cod on the coast, about the 1st of June, is heralded by the appearance of the caplin. This is a beautiful little fish, about seven inches in length, which arrives in vast multitudes, swarming in enormous schools, in every bay and creek, and on every fishing-ground around the island. They approach the shores to spawn, and continue for about six or seven weeks, when they disappear, and retire to some deep-sea valleys of the shore, where they remain till the summer of the following year. As they press in on the shore in vast masses, the greedy cod follows behind, feasting on the rich banquet, devouring its prey in myriads. The caplin furnishes the best bait for the fishermen; and the caplin schooltime is his richest harvest season. Vessels engaged in fishing on the Banks run in to the harbours at intervals for fresh supplies of caplin as bait, which is preserved in ice. Some idea of the immense shoals of caplin that fill the bays may be formed from the fact, that a man standing on shore with a casting-net will often fill a cart with them in an hour. With small seines a couple of men can fill a small boat in an hour or two. Thousands of cartloads of caplin are purchased by farmers, who mix them with earth and bog, and thus form a most fertilising compost. If any means could be devised to cure them, like sardines, which they resemble, caplin would become of considerable commercial value, as they have a very delicate flavour when fresh. In a calm moonlight night in June, when fish are plentiful, and the waters all alive with marine forms, the silvery sides of the cod may be seen flashing in the moonbeams, as the fish leap out of

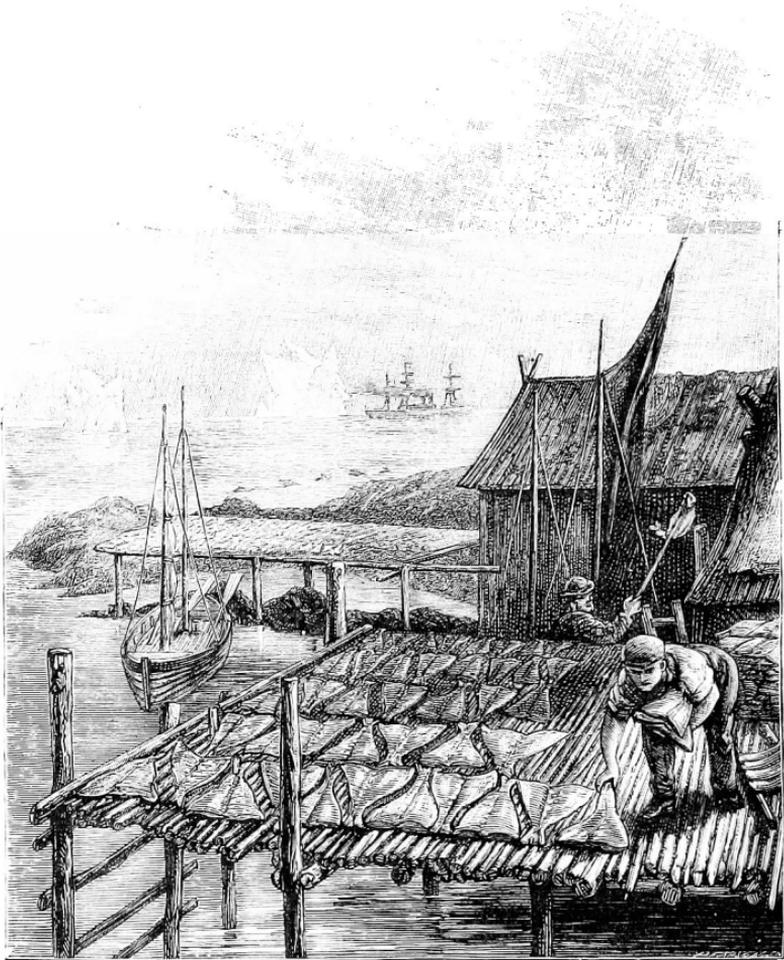
the water, and dash upon their prey, the little caplin flying in all directions, and in evident terror often flinging themselves on the beach. The world of waters, it would seem, is no more free from terror, pain, torture, and death, than the land. Surrounded by ravenous foes, watching for their assaults, flying for dear life, fishes, it may be easily conceived, form a part of "the creation that groaneth and travaileth in pain."

No sooner do the caplin retire from the coast than a new school appears, which also supply food for the cod, and valuable bait for the fisherman. These are the squids, or small cuttle-fish. The usual time for the appearance of the squids is about the 1st of August. They also remain for six or seven weeks, and are followed by the herring in the end of September and October. Without these bait-fishes the fishermen could do little in capturing the cod.

In order to form an idea of the process of curing, we shall take a Newfoundland cod-fish, at the time when it is drawn from the water, and follow it through the different stages till it reaches the exporting merchant's store.

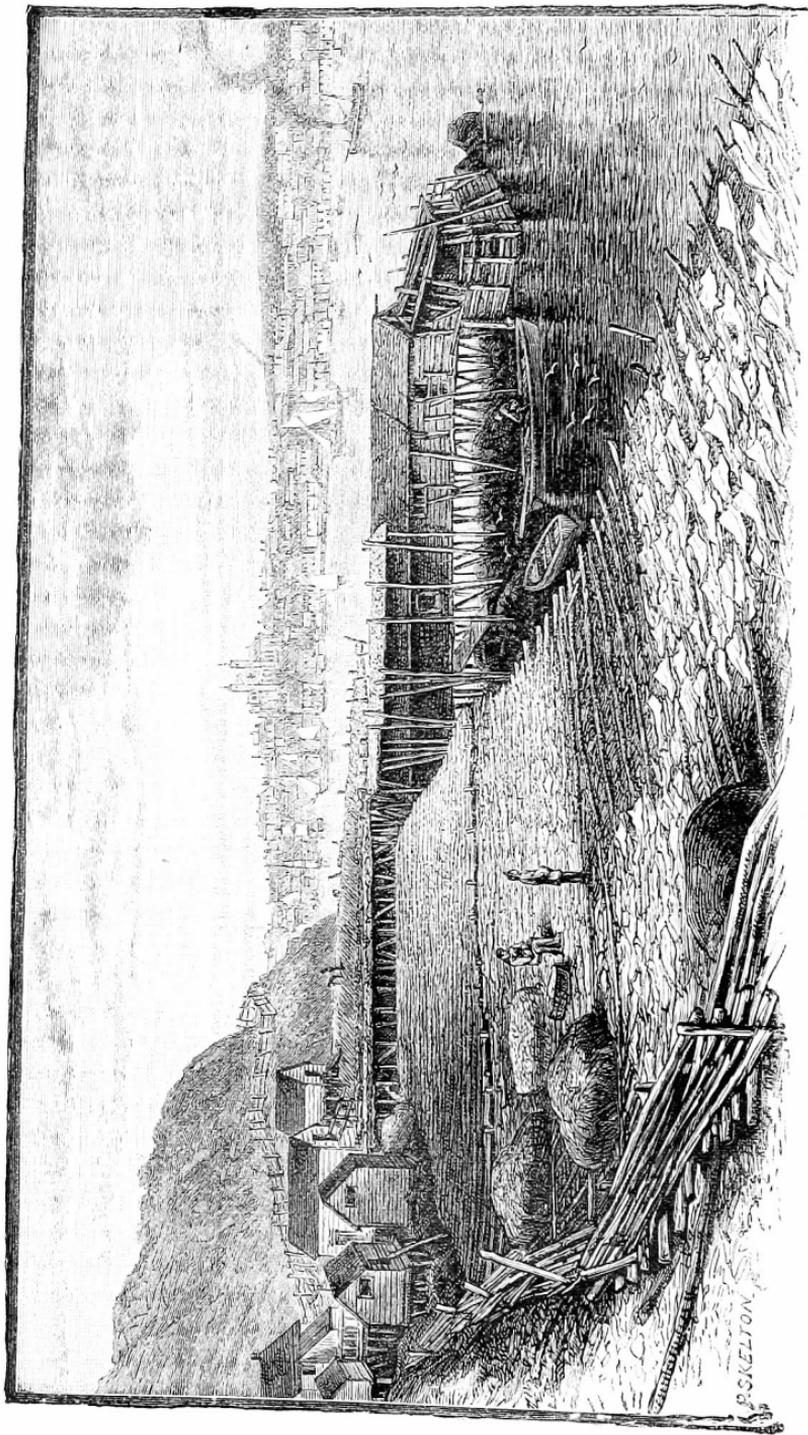
When the fisherman's boat, laden with the day's catch, reaches his "stage"—a rough covered platform, projecting over the water, and supported on poles—the fish are flung one by one from the boat to the floor of the stage, with an instrument resembling a small pitchfork, and called a pew. The cod is now seized by the "cut-throat," armed with a sharp and pointed knife, with one stroke of which he severs the attachment between the gill-covering and the belly, and inserting the knife in the opening thus made, slits the abdomen to the vent. He then makes a cut on either side of the head at the base of the skull, and passes it to the "header." This operator first extracts the liver, which is dropped into a vessel by his side, to be converted into cod-liver oil. He then wrenches off the head, removes the viscera, which

are thrown into a vessel, to be preserved along with the head for the farmer, who mixing them with bog and earth thus forms a fertilising manure. The tongues and sounds,



FISH-FLAKE. COD SPREAD OUT. BOAT LANDING COD.

or air-bladders, are also taken out, and, when pickled, make an excellent article of food. The fish now passes to the "splitter," who places it on its back and, holding it open with his left hand, takes a splitting-knife in his right, and cuts along the left side of the backbone to the base of the



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ST. JOHN'S HARBOUR—FISH-CURING.

tail. The fish now lies open on the table, and with a sharp stroke of his knife, the "splitter" severs the backbone at a short distance from the extremity, and catching the end thus freed, lifts it slowly, and following along its side with his knife, quickly cuts it from the body. The "salter" now takes hold of the fish, and having carefully washed away every particle of blood, he salts it in piles on the floor of the fish-house. After remaining the proper length of time in salt, it is taken from the heap, washed, and carried to the "flake," where it is spread out to dry. The flake consists of a horizontal framework of small poles, covered with spruce-boughs and supported by upright poles, the air having free access beneath. Here the cod are spread out to bleach in the sun and air, and during the process require constant attention. In damp or rainy weather, or at the approach of night, they are piled in small heaps with the skin outward. When thoroughly dried they have a whitish appearance, and are then ready for storing. In due time they reach the merchant's wharf or store, where they are weighed and "culled," or assorted, into four different kinds, called Merchantable (the best), Madeira, West India (intended for the consumption of the negroes), and Dun, or broken fish, which will not keep, and is for home use. The dried cod intended for Spain, Italy, Brazil, or any other hot country, is packed by screw-power in "drums," or small casks. To some countries it is shipped in bulk.

The cod-liver oil, so famous as a remedy in cases of scrofula and consumption, is extracted from the liver of the cod. The process is very simple as followed in Newfoundland. The fresh livers, when carefully washed, are subjected to a moderate heat in a vessel around which warm water circulates. The oil is dipped out and filtered three times, through bags of thin blanketing or stout calico. After the third filtering the oil comes out with a beautiful transparency and almost inodorous. It is then barrelled for

exportation. Great care is required during the process, in regard to cleanliness, and the application of the proper degree of heat. No adulteration is practised in Newfoundland, whatever may be done elsewhere. This refined cod-liver oil is usually sold for about a dollar per gallon in the island. In 1881 it was worth a hundred and eighty dollars per tun. Common cod oil is used for tannery and other purposes, and is worth a hundred and eight dollars per tun.

The cod is the most useful of all fish. No part is valueless. The head is sometimes cooked and eaten. More frequently in Newfoundland, it is along with the intestines, converted into manure. The offal and bones of the cod, when steamed, dried, and ground, are converted into a fish guano, which is almost equal as a fertiliser to the Peruvian guano. From the swimming bladder isin-glass is made. The roe is exported to France, and used as ground bait in the sardine fishery. The tongues and sounds are a delicate article of food. The Norwegians give the head, with marine plants, to their cows, for the purpose of increasing their milk; while the Icelanders use the vertebræ bones and ribs for a similar purpose.

The apparatus used by the Newfoundland fishermen are the hook-and-line, the seine, the cod-net or gill-net, the cod-trap, and the bultow. The simplest and least expensive mode of fishing is the hook-and-line, or hand-line. The best bait is the caplin. Too large a proportion of the Newfoundland fishermen depend on this hand-line fishing, from small punts near the shore. It is least expensive, but also least remunerative; and poverty, in a vast number of instances, forbids the use of the improved methods, which, however, are gradually extending. When very fat, the cod does not bite readily, and the hook-and-line men do best when the fish is thin and towards the end of the season. When spawning, the cod does not take the bait well; and it is then that the seines, nets,

and traps are specially serviceable. The nets and seines are suspended in the water from floats of cork or wood. The Norwegians now use almost exclusively hollow glass floats, covered with knotted tarred cord as a protection. They are found to be a great improvement on the old buoys. Bultows are used extensively on the Great Banks, and also very largely round the shores and at the entrances of the bays. The bultow is simply a set-line mode of



COD-FISHING WITH HOOK AND LINE.

fishing, and is called in some places a "trawl-line." It is a vast improvement on the hand-line, as several hundreds of hooks are baited, and each is attached to a fine line of hemp or cotton. These short lines are suspended at intervals on a long line, carrying over one hundred hooks which are dropped from the boats and secured by buoys and anchors, and left all night and taken up in the morning. On the Banks, many miles are covered by these bultows, which are secured by suitable moorings, to prevent their being carried away by the strong currents

which usually prevail on the Banks. They are overhauled each day and the fish taken off.

The countries to which the Newfoundland cod is exported are Brazil, Spain, Portugal, Italy, the West Indies, the United States, and Great Britain. Brazil and Spain are the colony's best customers.

CHAPTER III.

THE SEAL INDUSTRY.

Ancient methods of taking seals—Perils and hardships of the hunters
—The beginning of the season—Steamers and sailing vessels—
Battling with the ice—Impressive scenes—The Aurora Borealis
—How a sealing ship is fitted—The hunters at work—How the
seals are killed and packed for port—Converting the seal for
market—Oil and leather.

NEXT to the cod fishery, the most valuable of the Newfoundland fisheries is that of the seal. While the cod fishery has been prosecuted for three hundred and eighty years, the seal fishery is not more than eighty years old. Until the beginning of the present century, the attention of the people was absorbed in the capture of cod. L'Abbé Raynall tells us that as early as 1763 some English fishermen used to repair to certain parts of the island during winter, for the prosecution of the seal fishery. This was entirely an inshore net fishery, and must have been carried on upon a small scale. The fishermen placed their nets between the shore and the islands or rocks lying at a short distance from it, and the seals, in passing these narrow places, were caught. In the *Scots Magazine* for March, 1764, it is stated that a valuable whale fishery had also been discovered and prosecuted during the preceding three years, in the Gulf and River

of St. Lawrence. The New England people sent from fifty to eighty vessels to take part in this fishery, which appears to have been very valuable. In Fortune Bay whales continued to be taken for many years, and are still captured; but this fishery is now unimportant. Up to 1774 vessels went to the seas around the island in pursuit of the walrus—morse, or sea-horse, as it is indifferently named. In the returns of the admirals who commanded on the station, we find entries of sea-cow oil, skins, and teeth, each year from 1767 to 1774, after which they do not occur. The value ranges from 1,000*l.* to 2,300*l.* per annum. The walruses have long since disappeared. A wanderer is still, however, occasionally captured by the seal-hunters.

Another mode of killing seals was by shooting from large boats, which sailed about the middle of April. At that time of year the "whelping ice" had passed many weeks, and the young seals having taken to the water, only a few stragglers came within range. As late as 1795 the whole catch of seals only amounted to 4,900 per annum. A great step in advance was made when the sealing boats gave place to small schooners of from thirty to fifty tons, carrying twelve or fourteen men, the outfit of each vessel costing about 75*l.* They did not at first leave port till after March 21st, to avoid the equinoctial gales, or, "St. Patrick's brush," as it was called, and were often too late for the young seals, though they met plenty of ice. Soon, however, they learned to start somewhat earlier. In 1807 there were only about fifty vessels from all the ports in the island, of from thirty to sixty tons, engaged in the seal fishery. This industry, however, proved so remunerative that its growth was very rapid. In 1805, 81,088 seals were taken; in 1815, 126,315; in 1820, 213,679; in 1822, 306,982; in 1830, 558,942; in 1840, 631,385; in 1842, 344,683; and in 1844, 685,530 seals, the largest number

ever taken in one year. In 1857, there were nearly four hundred vessels, of from eighty to two hundred tons burthen, engaged in the seal fishery, their united crews numbering 13,600 men, the total catch of seals that year being close on half a million, worth \$1,700,000. Since that date the catch of seals has not increased, and has varied greatly from year to year. In 1860, it amounted to 444,202 seals; in 1862, 268,426; in 1871, 537,094; in 1872, 278,372; in 1873, 526,000; in 1874, 398,336; in 1877, 451,678; in 1880, 223,795; in 1881, 447,903; and in 1882, about 156,000 seals, being the smallest number on record since 1818. The cause of this last failure was the continuous blockade of the coasts and bays by heavy ice, impeding the movements of the vessels. The average annual value at present of the seal fishery is about \$1,100,000, being about an eighth part of the entire exports. The number of men employed is from 8,000 to 10,000.

Thus, beginning with a few nets, there followed the sealing boats and the little schooners, carrying each a dozen men, until the industry was prosecuted with vessels of 200 or 250 tons, and crews of forty or fifty men. At length all-conquering steam entered the field, and in 1863 the first steamer took part in this fishery. Since then the number of steamers has rapidly increased, and the number of sailing vessels has still more rapidly diminished. The day is not very distant when this industry will be carried on solely by powerful steamers. In 1866 there were 177 sailing vessels and five steamers; in 1871 there were 201 sealing vessels and thirteen steamers; their united crews numbering 9,791 men. In 1873 there were eighteen steamers, and at present there are about twenty-five, some of them of 500 tons burthen. They are strongly built, to stand the pressure of ice and cleave their way through the ice-fields, being stoutly timbered, sheathed with iron-wood,

and having iron-plated stems. They carry from 200 to 300 men. Of late years, six of the fine Dundee steamers that formerly took part in the Greenland seal fishery, now comparatively exhausted, have come out each season to Newfoundland, shipped crews there, and engaged in the fishery. They are among the finest of the sealing fleet.

There is always great excitement connected with the seal fishery. The perils and hardships to be encountered, the skill and courage required in battling with the ice-giants, and the possible rich prizes to be won, throw a romantic interest around this adventure. Not the seal-hunters alone, but the whole population, from the richest to the poorest, take a deep interest in the fortunes of the hunt. It is like an army going out to do battle for those who remain at home. In this case the enemies to be encountered are the icebergs, the tempest, and the blinding snowstorm. A steamer will sometimes go out and return in two or three weeks, laden to the gunwale, occasionally bringing home as many as thirty to forty thousand seals, each worth two and a half or three dollars. The successful hunters are welcomed with thundering cheers, like returning conquerors, and are the heroes of the hour. What tales they have to relate of perils in icy wildernesses, of narrow escapes from being crushed, of the cold plunge into the treacherous ice-chasm, of fierce combats with the "old Dog Hood!" No wonder the young Newfoundlander pants for the day when he will get "a berth for the ice," and share in the wild joys and excitement of the hunt.

According to law, no sailing vessel can be cleared for the ice before the 1st of March, and no steamer before the 10th of March; a start in advance of ten days being thus accorded to the vessels which depend on wind alone. As the time for starting approaches, the streets and wharves

of the capital assume an appearance of bustle which contrasts pleasantly with the previous stagnation. The steamers and sailing vessels begin to take in stores and complete their repairs. Rough berths are fitted up for the sealers; bags of biscuit, barrels of pork, and other necessaries are stowed away; water, fuel, and ballast are taken on board; the sheathing of the ships, which has to stand the grinding of the heavy Arctic ice, is carefully inspected. A crowd of eager applicants surround the shipping offices—powerful-looking men in rough jackets and long boots, splashing tobacco-juice over the white snow in all directions, and shouldering one another in their anxiety to get booked. The great anxiety is to secure a place on board one of the steamers, the chances of success being considered much better than on board the sailing vessels. The masters of the steamers are thus able to make up their crews with picked men. Each steamer has on board from one hundred and fifty to three hundred men, and it would be difficult to find a more stalwart lot of fellows in the royal navy itself. The second-rate and older men are obliged to content themselves with berths on board the sailing vessels, while many poor fellows are obliged to be left behind without employment. The steamers have an immense advantage over the sailing vessels. They can cleave their way through the “slob” and heavy ice-packs against the wind; they can double and beat about in search of the “seal patches;” and when the prey is found they can hold on to the ice-fields, while sailing vessels are liable to be driven off by a change of wind, and if beset with ice, are often powerless to escape. It is not to be wondered at that steamers are rapidly superseding sailing vessels in the seal fishery. They can make two, and even three, trips to the ice-fields during the season, and thus leave behind the antiquated sealer dependent on the winds. Before the introduction of steamers one hundred and twenty sailing

vessels, of from forty to two hundred tons, used to leave the port of St. John's alone for the seal fishery. Now they are reduced to some half-dozen, but from the more distant "outports" numbers of small sailing vessels still engage in this special industry.

The young seals are born on the ice from the 15th to the 25th of February, and as they grow rapidly, and yield a much finer oil than the old ones, the object of the hunters is to reach them in their babyhood, while yet fed by their mother's milk, and while they are powerless to escape. So quickly do they increase in bulk that by the 20th of March they are in perfect condition. By the 1st of April they begin to take to the water, and can no longer be captured in the ordinary way. The great Arctic current, fed by streams from the seas east of Greenland, and from Baffin's and Hudson's Bays, bears on its bosom hundreds of square miles of floating ice, which are carried past the shores of Newfoundland to find their destiny in the warm waters of the Gulf Stream. Somewhere amid these floating masses the seals have brought forth their young, which remain on the ice, during the first period of their growth, for five or six weeks. The great aim of the hunters is to get among the hordes of "white-coats," as the young harp seals are called, during this period. For this purpose they go forth at the appointed time, steering northward till they come in sight of those terrible icy wildernesses which, agitated by the swell of the Atlantic, threaten destruction to all rash invaders. These hardy seal-hunters, however, who are accustomed to battle with the floes, are quite at home among the bergs and crashing ice-masses; and where other mariners would shrink away in terror, they fearlessly dash into the ice wherever an opening presents itself, in search of their prey.

In the ice-fields the surface of the ocean is covered with a glittering expanse of ice, dotted with towering bergs

of every shape and size, having gleaming turrets, domes, and spires. The surface of the ice-field is rugged and broken, rising frequently into steep hillocks and ridges. The scene in which "The Ancient Mariner" found himself is fully realised :

And now there came both mist and snow,
And it grew wondrous cold ;
And ice, mast-high, came floating by,
As green as emerald ;

And through the drifts, the snowy clifts
Did send a dismal sheen :
Nor shapes of men, nor beasts we ken—
The ice was all between.

The ice was here, the ice was there,
The ice was all around ;
It cracked and growled, and roared and howled,
Like noises in a swound.

When a storm arises amid these icy solitudes the scene is grand and awful beyond all powers of description.

The unbroken swell of the Atlantic rolling in huge continuous ridges, heaves the pavement of ice on its mighty folds, and alternately lifts up the vessels as playthings on its broad domes, or swallows them up in its deep hollows. Speedily, by the upheaving of the waves, the ice-field, many hundreds of square miles in area, is broken up into countless floes, or smaller pieces. The whole mass opens and expands; and then the broken fragments are dashed against one another with resistless violence, and piled on each other, forming "hummocks," or hills of ice. Or, under pressure of the storm, it frequently happens that the ice is "rafted," as the sealers call it; that is, the fragments are piled in layers one over the other, to the height of thirty or forty feet, being lifted by the swell and hurled forward, as if from huge catapults. Woe to the unfortunate vessel that is

within the range of these fearful missiles! In this terrible war of elements, the thundering crashes, as the ice-giants meet and dash one another to death, the floes and bergs grappling with each other in the fray, and the roaring overhead of the blinding snowstorm, all combine to make up a scene of terrible confusion. At times the gigantic iceberg takes part in the contest, and borne along in its unswerving course by the deep-sea current, heedless of wind and wave, it smites the ice-field as with the hammer of Thor, rending and tearing the mighty mass, and sending its fragments flying in all directions. Frequently the ice acquires a rotary motion; and when we consider the immense weight of these ponderous masses, we may form some faint conception of the blow delivered by such a body when set in motion by the tempest. Scoresby calculates one at ten thousand millions of tons. Such are the scenes amid which the seal-hunters have to gather in "the precious things of the deep." Considering all the perils, it is surprising how few fatal disasters occur. During the seal-hunt of 1872 one hundred men perished, fifty of these having gone down in a single vessel called the *Huntsman*, on the coast of Labrador. In the same year, two steamers, the *Bloodhound* and *Retriever*, were crushed by the ice and sank, but their crews, numbering nearly four hundred men, managed to reach Battle Harbour, on Labrador, over the ice, after enduring great hardships. Another steamer, called the *Monticello*, also sank, in consequence of injuries received from the ice, but her crew were all saved.

Happily these terrible storms are not frequent. For the most part the sea is at rest, and then the ice-fields present a strange beauty of their own, which has a wonderful fascination. Beneath the mild light of the moon, and in contrast with the deeper blue of the sky, ice scenery is always most impressive. When the sun is shining brightly

it is too dazzling, and its monotony is wearisome. The moon, the stars, and the flickering aurora are needed to reveal all its beauty. During the calm that follows the storm, the evenings amid the ice-fields are often very lovely. The dry bracing atmosphere sends the blood dancing through the veins. The clouds have cleared away, unfolding a lovely sky, studded with stars, through which a brilliant moon sails in calm radiancy. The ice, by the pinions of the storm, has been opened in all directions, and the seal-hunters find themselves sailing gently through calm water, amid numerous fairy islets of glittering ice, with shining pinnacles and fantastic forms floating calmly around. Frequently, in such nights the auroral display is magnificent. An immense curtain of light is spread over the sky, having a border of the richest and most vivid colours, waving its folds like the canopy of an immense tent when agitated by the wind; green, blue, and red hues are seen colouring the aurora. Occasionally the whole sky is flushed with intense crimson, which, when reflected from the snow, gives it a blood-red hue. Then vast flame-curtains seem to open and close with inconceivable rapidity, and radiations of purple, pink, green, and orange sport about the heavens, swelling like waves upon a mysterious shore. Flashes of light in quick succession dart from side to side, the sky being one moment dark and the next lighted up with fitful gleams. Long converging pencils of light of various colours range themselves round a blank space near the zenith, and form a corona, and then suddenly vanish, leaving the upper sky unoccupied. Such is

The borealis race,
That flit ere you can mark their place.

We shall now look into the equipment of a sealing steamer, and then in imagination accompany her to the ice-fields, in order to form some idea of the hunt.

In the first week of March the roads leading from the various outports to St. John's begin to be enlivened by the appearance of the sealers, or, as they are called in the vernacular, "soilers," their enterprise being designated "swile huntin'." Each of them carries a bundle of spare clothing over his shoulder, swinging at the extremity of a pole six or seven feet in length, which is called a "gaff," and which serves as a bat or club to strike the seal on the nose, where it is most vulnerable. The same weapon serves as an ice-pole in leaping from "pan" to "pan," and is also used for dragging the skin and fat of the seal over the fields and hummocks of ice to the side of the vessel. To answer these various purposes the "gaff" is armed with an iron hook at one end and bound with iron. Some of the men, in addition, carry a long sealing gun on their shoulders. These are the "bow" or "after gunners," who are marksmen, to shoot old seals, or others that cannot be reached by the "gaff." The outfit of the sealers is of the simplest description. Sealskin boots reaching to the knee, having a thick leather sole well nailed, to enable them to walk over the ice, protect the feet; coarse canvas jackets, often showing the industry of a wife or mother in the number of patches which adorn them, are worn over warm woollen shirts and other inner clothing; sealskin caps and tweed or moleskin trousers, with thick woollen mits, complete the costume, which is more picturesque than handsome.

In the forecastle, or other parts of each ship, rough berths are constructed. The sealers have to furnish themselves with a straw mattress and blanketing. The men are packed like herrings in a barrel, and as a rule they never undress during the voyage. In the rare event of putting on a clean shirt it goes over its predecessor, without removing the latter, a method which saves time and trouble, and is, besides, conducive to warmth. The owner of the vessel supplies the provisions. In sailing vessels half



A NEWFOUNDLAND SEAL-FISHERY EXPEDITION—HUNTERS AT WORK.

the proceeds of the voyage are divided as wages among the men, but in steamers only a third is thus distributed. The captain gets a certain number of cents per seal.

The food of the men is none of the daintiest, and no one who is at all squeamish about what he "eats, drinks, and avoids" need attempt to go "swile huntin'." The diet consists of biscuit, pork, butter, and tea sweetened with molasses. On three days of the week dinner consists of pork and "duff," the latter item consisting of flour and water with a little fatty substance intermixed "to lighten it." When boiled it is almost as hard as a cannon-ball. On the other four days of the week all the meals consist of tea, sweetened with molasses, and biscuit. Such is the rough fare on which these hardy fellows go through their trying and laborious work! When, however, they fall in with seals, their diet is improved. They cook the heart, liver, flippers, and other parts, and feast on them *ad libitum*, and generally come ashore in excellent condition, though the odour that attends them does not suggest the "spicy breezes which blow soft from Ceylon's Isle." When out on the ice it is a common practice to string upon their belts a dozen or two of seals' kidneys, and eat them raw as appetite prompts. The hearts of seals are treated in the same way. The use of fresh seal meat in this fashion is highly conducive to health, and the best preventive of scurvy. Very little sickness occurs among the men while leading this rough life. They are often out for eight or ten weeks without seeing land, and enduring the hardest toils. When seals are taken in large quantities the hold of the vessel is first filled, and then the men willingly surrender their berths, which are packed full of "white-coats." In fact, every nook and corner is crammed with the precious fat; and the sealers sleep where they can—in barrels on deck, on a layer of seals, or in the coal-bunks. It is marvellous to see men, after eight or ten weeks of such a life, leap

ashore hearty and vigorous. Their outer garments are polished with seal fat and the blood of their victims, and it is advisable to keep to windward of them till they have procured a change of clothing.

The experiences of a sealing voyage are various, being influenced by the ever-shifting condition of the ice and the direction of the winds. The grand aim of the sealers is to reach that portion of the ice which is the "whelping-grounds" of the seals, while yet the young are in their plump oleaginous babyhood. The position of this icy-cradle is utterly uncertain, being dependent on the movements of the ice and the force of winds and waves. It has to be sought for amid vast ice-fields. At times, in endeavouring to push her way through, the vessel is caught in the heavy ice; and then the ice-saws are called into requisition to cut an opening to the nearest "lead" of clear water, that she may work her way north. But the heavy Arctic ice may close in under the pressure of a nor'-easter, and then no amount of steam power can drive her through. Howling night closes in; bergs and floes are crashing all around, and momentarily threatening her with destruction; the wind roars through the shrouds, driving on its wings the arrowy sleet and snow, sharp as needles, which only men of iron can stand. Thus locked in the embrace of the floe the luckless vessel is drifted helplessly hundreds of miles, till a favourable wind loosens the icy prison walls. It is no uncommon occurrence for a hundred vessels to be thus beset by heavy ice through which no passage can be forced. Some are "nipped," some crushed to atoms, and the men have to escape for their lives over the ice. Others are carried into the great northern bays, or borne in the heavy "pack" up and down on the ocean for weeks, returning to port "clean," that is without a single seal. There are seasons when the boldest and most skilful captains fail. At other times, by a turn of good fortune,

a vessel "strikes the seals" a day or two after leaving port, and finds herself in the middle of a "seal patch" sufficient to load the *Great Eastern*. The whole ice for miles around is covered thick with the young "white-coats," and in a fortnight from the time of the departure she returns to port loaded to the gunwale, her very decks being piled with the skins and fat of the seals.

When approaching such an El Dorado as this, the excitement on board may be imagined, as the welcome whimpering of the young harp seals is heard. Their cry has a remarkable resemblance to the sobbing or whining of an infant in pain, which is redoubled as the destroyers approach. Young hunters who now ply their gaffs for the first time are often almost overcome by these baby lamentations. Compassion, however, is soon gulped down. The vessel is "laid to," the men eagerly bound on the ice, and the work of destruction begins. A blow on the nose from the gaff stuns or kills the young seal. Instantly the sculping-knife is at work, the skin with the fat adhering is detached with amazing rapidity from the carcase, which is left on the ice still quivering with life, while the fat and skin alone are carried off. This process is called "sculping," a corruption no doubt of scalping. In skinning, a cut is made through the fat to the flesh, a thickness of about three inches, from the throat to the tail. The legs, or "flippers," and also the head are then drawn from the inside, and the skin is laid out flat and entire, with the layer of fat adhering to it; and in this state the skin is called the "pelt," or "sculp." It is generally about three feet long and two and a half feet wide, and weighs from thirty-five to fifty pounds. The hunter nicks two holes along the edge of each side of the skin, and then lays them one over the other, passing the rope through the nose of each pelt, and then lacing it through the side holes in such a manner that, when pulled tight, it draws them in a compact

bundle. Fastening the "gaff" in this bundle, he puts the rope over his shoulder and hauls it over the ice to the ship. Five or six pelts are reckoned a heavy load to drag over rough or broken ice, sometimes for one or two miles. If the ice is loose and open the hunter has to leap from pan to pan.

Fancy two or three hundred men on a field of ice carrying on this murderous work, their persons smeared with sanguinary evidence of the wholesale slaughter; the ice stained with gore and covered with the skinless carcasses of the slain; "the shivering seals' low moans" filling the air like the sobbings of infants in distress; the murderers every minute smiting fresh victims, or dragging the oleaginous prizes to the vessel's side! Then what a picture the vessel presents as the pelts are being piled on deck to cool previous to stowage below! One after another the hunters arrive with their loads, and snatch a hasty moment to drink a bowl of tea and eat a piece of biscuit and butter. The poor mother seals, now cubless, are seen popping their heads up in the small lakes of water and holes among the ice, anxiously looking for their young.

So soon as the sailing vessel reaches port with her fat cargo, the skinners go to work and separate the skins and fat. The former are at once salted and stored for export to England, to be converted into boots and shoes, harness, portmanteaus, etc. The old method of manufacturing the fat was to throw it into huge wooden vats, in which the pressure of its own weight and the heat of the sun extracted the oil, which was drawn off and barrelled for exportation. This was a tedious process. Latterly steam has been employed to quicken the extraction of the oil. By means of steam-driven machinery, the fat is now rapidly cut up, by revolving knives, into minute pieces, then ground finer in a sort of gigantic sausage-machine; afterwards steamed in a tank, which rapidly extracts the oil; and finally, before

being barrelled, it is exposed for a time in glass-covered tanks to the action of the sun's rays. By this process the work of manufacturing, which formerly occupied two months, is completed in a fortnight. Not only so, but by the steam process the disagreeable smell of the oil is removed, the quality improved, and the quantity increased.

The refuse is sold to the farmers, who mix it with bog and earth, which converts it into a highly fertilising compost. The average value of a tun of seal-oil is about a hundred and forty dollars. The skin of a young harp seal is worth from ninety to one hundred cents. The greater part of the oil is sent to Britain, where it is largely used in lighthouses and mines, and for lubricating machinery. It is also used in the manufacture of the finer kinds of soap.

CHAPTER IV.

NATURAL HISTORY OF THE SEAL.

Mothers and cubs—Maternal instinct—Teaching the young to swim—The hood seal and the harp—The “dog” seal under attack—Migrations of the harps and hoods—Localities where they are found—On the march—Danger of extermination—Statistics of the take of seals since 1805.

THE maternal instinct appears to be peculiarly strong in the female seal, and the tenderness with which the mothers watch over their offspring is most touching. When the young seals are cradled on the ice the mothers remain in the neighbourhood, going off each morning to fish, and returning at intervals to give them suck. It is an extraordinary fact that the old seals manage to keep holes in the ice open, and to prevent them freezing over, in order that they may reach the water. On returning from a fishing excursion, extending over fifty or a hundred miles, each mother seal manages to find the hole by which she took her departure, and to discover her own snow-white cub, which she proceeds to fondle and suckle. This is certainly one of the most remarkable achievements of animal instinct. The young “white-coats” are scattered in myriads over the ice-field. During the absence of the mothers the field of ice has shifted its position, perhaps many miles, being borne on the current. Yet each mother-

seal is able to find her own hole, and to pick out her own cub from the immense herd, with unerring accuracy. It is quite touching to witness their signs of distress and grief when they return and find only a pool of blood and a skinless carcase, instead of their whimpering little ones.

The seal brings forth but one cub at a birth, and that but once a year. When born the young are covered with a thick whitish fur. At six weeks old they begin to "dip," or take to the water; and it requires as many trials to enable a young seal to swim properly, as in the case of a young bird learning to fly. Just as the eagle "stirs up her young," and encourages them to use their wings, so it is said the mother seals tumble their babies into the water, and give them swimming lessons. When they are in danger from "rafting" ice, or fragments of floes dashed about by the wind, and likely to crush them, the self-sacrificing affection of the mothers leads them to brave all dangers, and they are seen helping their young to places of safety in the unbroken ice, sometimes clasping them in their fore-flippers and swimming with them, or pushing them forward with their noses.

At the end of six weeks the young shed their white woolly robe, which has a yellowish or golden lustre, and a smooth spotted skin appears, having a rough darkish fur. They have now ceased to be "white-coats," and become "ragged-jackets." The milk on which they are sustained is of a thick creamy consistency, yellowish in colour, and very rich and nutritious. While the mothers are thus guarding and suckling their young the males take the opportunity of enjoying themselves, and are seen sporting about in the open pools of water. The old male harps appear to be indifferent about their young. The male hood seal, on the other hand, assists his mate in her maternal guardianship, and will fight courageously in defence of her and the young.

In the seas around Newfoundland and Labrador there

are four species of seals—the bay seal, the harp, the hood, and the square flipper. The bay seal is local in its habits, does not migrate, but frequents the mouths of rivers and harbours around the coast, and is never found on the ice. It is frequently taken in nets, but commercially is of small importance. The harp seal—*par excellence*, the seal of commerce—is so called from having a broad curved line of connected dark spots proceeding from each shoulder, and meeting on the back above the tail, and forming a figure something like an ancient harp. The old harp seals alone have this figuring, and not till their second year. When twelve months old the males are hardly distinguishable from the females, and during that season they are called “bed-lamers.” In the second season the male assumes his harp.

The hood seal is much larger than the harp. The male, called by the hunters “the dog-hood,” is distinguished from the female by a singular hood or bag of flesh on his nose. When attacked or alarmed he inflates this hood, so as to cover the face and eyes; and it is strong enough to resist seal shot. It is impossible to kill one of these creatures when his sensitive nose is thus protected, even with a sealing gun, so long as his head or his tail is toward you; and the only way is by shooting him on the side of the head, and a little behind it, so as to strike him in the neck and the base of the skull. The young of this species have not the thick woolly coat of the harp seals, and from their colour they are called “blue-backs.” The hoods bring forth their young two or three weeks later than the harps, and are generally found farther from the shore on the ice-fields, and also more to the north. The two species live apart, and are never found mingled, unless by some accidental convulsion of the ice. The male and female of the hood are usually found together, and it is a rule among the

hunters to kill the male first; and if they fail in this, and kill the female, the dog becomes furious, inflates his hood, while his nostrils dilate into two huge bladders. His appearance now is terrific, and with uncouth floundering leaps he rushes on his foe with tremendous fury. Instances have occurred where a fight between an old dog-hood, and five or six men, has lasted for an hour; and sometimes a hunter is fearfully torn and even killed in the encounter. It is related that on one occasion two hunters attacked a pair of hoods, and imprudently killed the female. The dog immediately inflated his hood, and rushed at them furiously. They fought him with their gaffs till nearly exhausted, and a terrible death threatened both. As a last desperate resource one of them resolved to dash in upon the infuriated brute, while the other stood ready for the emergency. Drawing his jack-knife, the hunter rushed on the dog, and stuck it by a well-planted blow into the inflated hood. Instantly the air escaped, the shield was rendered useless, and a blow or two on the nose from the gaff of the other despatched him.

The square flipper seal is the fourth kind, and is believed to be identical with the great Greenland seal. It is from twelve to sixteen feet in length. It is occasionally taken on the ice off the Newfoundland coast, generally on the eastern edge of the fields, but so few are obtained that it has no commercial importance. By far the largest "catch" is made among the young harps, though some seasons great numbers of young hoods are also taken.

Much difference of opinion prevails regarding the migrations of the harps and hoods, for that they have regular migratory movements cannot be doubted. They are found on the ice from the middle of February till May. Then they commence their northerly movement, in company with their young. Crantz, in his "History of Greenland,"

mentions their arrival in June on that coast in enormous herds from the south, attended by their young. In the Greenland seas they appear to spend two or three months, and as the early winter sets in with September they begin their southern migration, keeping ahead of the ice as it forms, and moving towards the coast of Labrador, feeding in its fiords and bays as they move. Small detachments seem to lead the way, like pioneers. Behind them moves the great army in one vast continuous mass. It occupies days in passing certain points, and appears to fill the sea as far as the eye can reach. This great army on its march may well impress the beholder with an idea of the vast number of seals, on whose ranks the hunters have for more than eighty years been making systematic onslaughts without any apparent reduction of the supply. Having reached the Straits of Belle Isle, separating Newfoundland from Labrador, one division enters the Gulf of St. Lawrence, the other moves along the eastern shores of the island, feeding in the bays and inlets, but still rapidly moving south, till about the close of the year, when the Great Banks are reached. This is their southern headquarters, as the Greenland Sea is their northern. The Banks are ever swarming with fish, and on these the seals feast till the end of February, when the northern migration to meet the ice, on which their young are to be brought forth and cradled, begins. By the 15th or 20th of February they have encountered the great ice-argosies descending on the Arctic currents, and there the young are produced.

Some apprehension is felt lest the employment of steamers should ultimately destroy the seal fishery, or so reduce the numbers of the seals as to render the adventure unremunerative. On the other side it may be argued that the "catch" of seals is not greater now than before the employment of steamers. For more than sixty years the

seals that frequent these coasts stood an annual draft of from a quarter to half a million of seals without showing any sensible diminution of numbers or symptoms of exhaustion. The draft is not greater since the introduction of steamers. Why, then, should any apprehensions be entertained? The real danger lies in the practice, which has greatly increased since steamers have been used, of making two and even three trips to the ice-fields, the second and third being in pursuit of the old breeding seals, which are sometimes slaughtered in large numbers, after the heavy draft on the young. To destroy the mature breeding seals in this way is greatly to be deprecated, and is certainly "killing the goose that lays the golden egg." If continued, it will in all probability seriously diminish the number of seals, and in the end may lead to an extermination of the species. Ere long, it may be hoped, a law will be passed prohibiting the destruction of old seals. Were this done, the fishery might be preserved for an indefinite period. At a time when all other northern countries are idle and locked in icy fetters, here is an industry that can be plied by the fishermen of Newfoundland, and by which, in a couple of months, a million (and at times even a million and a half) of dollars are won. It is over early in May, so that it does not interfere with the summer cod fishery nor with the cultivation of the soil. This, of course, greatly enhances its value.

TABLE SHOWING THE NUMBER OF SEALS TAKEN IN THE YEARS
NAMED.

Year.	No. of Seals.	Year.	No. of Seals.
1805 . . .	81,088	1846 . . .	265,169
1810 . . .	118,080	1847 . . .	436,831
1815 . . .	126,315	1848 . . .	521,604
1817 . . .	49,048	1849 . . .	306,072
1818 . . .	145,072	1850 . . .	598,860
1819 . . .	280,817	1851 . . .	511,630
1820 . . .	213,679	1852 . . .	534,378
1821 . . .	227,193	1853 . . .	521,780
1822 . . .	306,982	1854 . . .	398,873
1823 . . .	230,410	1855 . . .	293,083
1824 . . .	202,091	1856 . . .	361,317
1825 . . .	295,352	1857 . . .	496,113
1826 . . .	292,007	1858 . . .	507,624
1829 . . .	357,523	1859 . . .	329,125
1830 . . .	558,942	1860 . . .	444,202
1831 . . .	686,836	1861 . . .	375,282
1832 . . .	508,407	1862 . . .	268,426
1833 . . .	360,155	1869 . . .	359,821
1835 . . .	—	1871 . . .	537,094
1836 . . .	384,321	1872 . . .	278,372
1837 . . .	351,620	1874 . . .	398,366
1838 . . .	375,361	1876 . . .	500,000
1839 . . .	437,501	1877 . . .	451,678
1840 . . .	631,385	1878 . . .	409,658
1841 . . .	417,115	1879 . . .	457,855
1842 . . .	344,683	1880 . . .	223,793
1843 . . .	651,370	1881 . . .	447,903
1844 . . .	685,530	1882 . . .	(estimated) 165,000
1845 . . .	352,702		

CHAPTER V.

SALMON.

Occasional abundance of fish at St. John's—Want of efficient regulations for protecting the fisheries—Commander Knowles recommends active measures on the part of the Government—The law of the salmon—Suggestions for improving the fisheries—Local laws and proclamations—Other “game fish.”

THE export of preserved salmon from Newfoundland does not constitute a large or important item. The average value of the pickled and fresh salmon exported during the last ten years, has been about \$106,000 per annum. The chief mode of curing the salmon, until very recently, was salting; and the catch has not varied greatly for many years, though of late there has been a tendency to increase. In 1842 the export was 4,715 tierces; in 1869, 7,039; in 1871, 3,977; in 1880, 6,765; in 1881, 3,689 tierces. Within the last eight or nine years the method of preserving it, after being cooked, in hermetically sealed tins, and also exporting it fresh in ice or in refrigerators, has been introduced, and has proved successful. Of tinned salmon 34,584 lb. were exported in 1880, and 20,000 lb. in 1881.

The quality of the Newfoundland salmon is excellent. The best judges indeed admit that no finer quality is produced elsewhere. It is captured for the most part in nets, in the

coves, bays, and at the mouths of the rivers. The season for taking salmon is brief, not exceeding six or seven weeks, and commencing generally in the last week of May. It is frequently so plentiful in St. John's during this short season, that it often sells for four or five cents per pound, so that all classes feast on this delicious fish. At the same time it is selling in London and New York for one-and-sixpence or two shillings sterling per pound. There are no finer salmon rivers than those of Newfoundland. How comes it, then, that this source of wealth is so imperfectly turned to account? Why are the countless brooks and streams that fall into the sea, around two thousand miles of coast, now for the most part valueless?

The answer is that the proper preservation of the salmon has been neglected, and human ignorance and the greed of immediate gain have wasted and destroyed what might at this moment be a source of national wealth. "Barring" the rivers and brooks with nets at the time when the fish are ascending to spawn; constructing weirs, traps, and dams; sweeping the pools with seine nets; and night-spearing, have been carried on for long periods by ignorant and reckless persons, till, at present, in many rivers the salmon are almost exterminated, and only grilse of four or five pounds weight are found in the streams. In vain have laws been passed prohibiting these destructive practices; in such a thinly-populated country they could not be effectually enforced, especially in the more distant localities. The captains of the men-of-war engaged in the protection of the fisheries are active in repressing these ruinous practices; they destroy any nets or weirs which they find stretching across the mouths of the rivers; but the offenders are for the most part cunning enough to take up their nets at the approach of these vessels, and no sooner are the ships out of sight than the nets are replaced. Mr. Murray, writing in 1875, said: "An atrocious system,

originally introduced by some greedy speculators, has been perpetuated by subordinates from time to time, until many rivers which formerly produced hundreds of tierces of salmon and sea-trout annually, are now almost or quite destitute of either. Some years ago the annual catch on the Exploits varied from three to five hundred tierces, while that on the Gander River ran from five hundred to a thousand tierces. Now, the annual catch on the former rarely exceeds twelve tierces, of both varieties, all told; or in the Gander, over fourteen or fifteen tierces. Thus, while in Canada and other progressing countries, where efforts are being made not only to conserve what there is, but to propagate more such fish, by the introduction of spawn from all parts of the world, Newfoundland, with the finest salmon waters in the world, will, unless some stringent means are taken for their protection, in a few years be left without a fish."

Commander Knowles, who was engaged in the protection of the fisheries in 1873, says: "I cannot conclude my report without again referring to the state of the salmon fishery on this coast, both in the rivers and in the bays and creeks of the island, which through the cupidity, selfishness, and I may add ignorance, on the part of the fishermen, is slowly, but very surely, becoming exterminated. In the bays, fleets of nets are sometimes laid down, sometimes twenty and forty, and even fifty, at a time, and every inlet stopped; and if the fish should, by any chance, be able to escape the first barriers, the rivers are so obstructed by weirs, traps, chains, and nets, the latter frequently stretched right across, and at close intervals, that it is a wonder that the fishery has not long since come to an end. Some of the river obstructions are generally removed before the anticipated arrival of a man-of-war, only to be replaced when she leaves the neighbourhood; and I would strongly recommend that

some active measures should be at once taken by the Government to stop this deplorable state of affairs before the salmon fisheries of Newfoundland become a thing of the past."

It is the law of salmon, as of all fish life, that the mature salmon return to the place of their birth in order to perform the grandest act of their nature—the perpetuation of the species. The "procreant cradle" of the salmon is the head-waters of some river or brook, often many miles from the ocean. When at from one to two years of age, the parr, the young of the salmon, change into smolt, they experience an irresistible longing to visit the ocean, and, prompted by instinct, they start for the far-off sea, braving all the dangers of the journey. Very wonderful it is to find a fish born in the solitudes of some mountain stream, when only two years of age, drawn irresistibly to the sea, as if fascinated by the music of "many-voiced" ocean, heard at the distance of hundreds of miles. Its foes are numerous—the trout and voracious pike in the river, the porpoise, seal, coal-fish, and other greedy monsters, at the mouth of the stream await its coming. Should it escape these, the young salmon finds in the salt water the nutriment it has been longing for, and for three months it grows rapidly. Then it seeks once more the place of its birth, as if drawn by home-longings, and never makes a mistake, never enters the wrong stream, but unerringly ascends the river it descended. It is now a *grilse*, four or five pounds weight, but is yet virgin and immature, and has not come to spawn. After spending five or six weeks in the parent waters it again seeks the ocean, and returns a full-grown salmon, from ten to fourteen pounds in weight, and now it comes to "repeat the story of its birth." It is evident, from all this, how inevitably the closing of the mouth of the rivers by nets or other contrivances, at the time when the salmon are

ascending to spawn, must speedily depopulate the waters of "the monarch of the brook." If the spawning salmon belonging to a particular river are all, or nearly all, taken year after year, the fish are exterminated. If, as is generally the case, a few escape and ascend, they are insufficient to sustain the stock, which gradually diminishes and finally disappears. This is the process which is now unhappily going on in the noble salmon rivers of Newfoundland.

It is not yet too late to preserve and increase what is left, in several of the rivers, by proper laws strictly enforced; and of course, by artificial means, it is possible to re-stock all the streams. Were this done, the island would become one of the finest salmon-producing countries in the world; and, under proper restrictions, a very considerable rental might be drawn by leasing the rivers. Three rivers in Scotland—the Tweed, the Tay, and Spey—yield a rental of 50,000*l.* sterling per annum from their salmon alone. How much then might be drawn from the hundreds of salmon streams falling into the bays of an island having a coast-line of two thousand miles! The value of the salmon taken in New Brunswick is estimated at 160,000*l.* sterling per annum. At the mouth of the St. John River, New Brunswick, 40,000 salmon are taken annually, a large portion of which are sent fresh to the United States, and command remunerative prices. In every case proper protection is found to increase the quantity of salmon taken. From Newfoundland a most lucrative business in the exportation of fresh salmon to England and the United States might be established, were an end put to the existing barbarous practices and the rivers re-stocked.

Salmon fishing in the rivers of Newfoundland, in the present condition of affairs, cannot be recommended. Only grilse, four or five pounds in weight, and sea-trout are

to be found up the rivers. A large salmon is hardly ever taken in the river waters. In his "Sporting Notes in Newfoundland," Captain Kennedy, who has had a large experience, tells us that "salmon fishing with the fly is disappointing in Newfoundland, and must be so until steps are taken to protect this noble fish. Notwithstanding local laws and proclamations, the rivers of this country are disgracefully abused by nets set across their mouths, and in the pools, traps, weirs, and dams, till the wretched fish are almost exterminated. The result is that all the large breeding fish are captured, and only a few grilse escape. They occasionally rise to the fly, and good sport may sometimes be had. But the best sport is with the sea-trout, which arrive on the coast about the 20th July, and take the rivers in thousands. Excellent sport may be obtained from these game fish, which run from one pound to four pounds or even larger. Very heavy river trout are also to be caught in any of the streams around the coast."

At present the chief salmon fisheries are in Bonavista Bay, Gander Bay, Bay of Exploits, and White Bay. It is believed by many that the salmon taken in these localities are not indigenous, but are on their way to their native rivers in Labrador or elsewhere. In their migrations they follow the shores of the island, and are taken in nets in favourable places. If they belonged to the rivers of the island, it is argued, some of them would make their way up the rivers occasionally to spawn; but they are never taken there, always in the sea. This matter, however, must be regarded as unsettled at present, as also the question whence come the grilse of four and five pounds, which alone are taken in the rivers? More careful investigation will be needed to settle these points.

CHAPTER VI.

THE HERRING AND OTHER FISHERIES.

Movements of the herring—Bait for cod—Frozen fish exported to America—The Labrador herring and the Shore herring—Chief seats of the fishery—Statistics of the average catch—Exports and annual value—Mackerel, halibut, haddock, and lobsters.

THE Newfoundland Herring Fishery has not received that attention which its value and importance demand. That it admits of indefinite expansion no one acquainted with the subject will deny. In fact if it were prosecuted with skill and energy, its value need not fall far behind the cod fishery. Along the coast of Labrador, in Bonne Bay and Bay of Islands, on the Gulf Coast of Newfoundland, in Fortune Bay, and many other localities, herrings may be said to swarm in countless millions, though not every year to the same extent or in the same place. Herring are taken at various points around the island at all seasons of the year. They are capricious in their movements, and will sometimes abandon a certain long-frequented part of the sea-board for a number of years, and return again after a longer or shorter period. Their movements prove that they are a local or home fish, their migrations, like those of the cod, being from deep

to shallow water, and *vice versa*. Naturalists now regard as mythical those long migrations of the herring to the Polar Regions and back, which used to be currently believed.

Their movements are limited in area on the Newfoundland coast, where they appear at certain seasons and retire during the remainder of the year into deeper waters within the sixty-fathom line of soundings. Vast numbers of them winter on the ledges and banks of the Atlantic coast, but, as at Bay of Islands and Bonne Bay, some schools return, after a short interval, in November, and winter in the deep-water bays. In Fortune Bay also this is the case, and there an extensive winter fishery is carried on. The schools which appear in April and early in May spawn in those months and are comparatively valueless as articles of food, but of great value as bait for cod and other fishes. It is this school from which the fishermen of Newfoundland obtain their earliest supplies of bait, and which they sell as bait to the French in enormous quantities, at St. Pierre and Miquelon, for use by their Bank fishing vessels. By the application of ice these early herrings might be preserved in abundance, as bait. During the winter the herring are taken in Fortune Bay in gill nets, and are exported to the American markets in a frozen state. At that season they are in excellent condition. The Fall herring is the marketable fish, and it is then that they are taken on the Labrador coast, where they appear early in September.

There are two varieties of herring taken on the shores of the island—the Bank (called also the Labrador) herring, and the Shore herring. They are probably the same species, differing only in age, the Bank being the full-grown fish, and measuring on an average thirteen and a half inches, while the Shore is eleven inches long. The herring does not reach maturity till the third year, but it spawns in its

second year, and at that period is known as the Digby herring in the Bay of Fundy. The Shore herring spawns in September and October, and comes on the shore in April. The spawning time of the Bank or Labrador herring varies according to locality. On the Labrador coast it appears to be in the autumn.

The chief seats of the herring fishery are Fortune Bay, St. George's Bay, Bay of Islands, Bonne Bay, and the whole coast of Labrador.

Fortune Bay is the centre of productive winter herring fishery. According to the most reliable accounts, the herring strike the shore about the first week in December, and take up their quarters in the deep arm about the 1st of January, where they remain under the ice until about the 20th of March. From the latter date till the 20th of April they are usually abundant and quite near the shore; they then go into deep water and remain there till the 5th or 10th of May, when they make their appearance in every cove and harbour for the purpose of spawning. The season lasts till the 5th of June, and is not completely over till the 1st of August, when they retire into deep waters to recuperate. The quantity taken in Fortune Bay is estimated at from 25,000 to 30,000 barrels per annum. Much of the catch is sold as bait to the French and Americans.

St. George's Bay has a summer herring fishery. The herring are thin and far inferior to those in the Bay of Islands. They are taken in May. Captain Brown in his "Fishery Report for 1871" says: "The herring in St. George's Bay are abundant and the catch unlimited. Every man takes as many as he thinks he can cure. This year about 30,000 barrels are ready to go to Halifax." The average catch is estimated at 20,000 barrels per annum.

The Bay of Islands winter fishery is the most valuable next to that of Labrador. The fish are the Bank or

Labrador herring, and of the finest quality. They are taken chiefly in Humber Sound, and even up the Humber River to a considerable distance. The nets used are two and three-quarters and three inch mesh. The fishery commences in October and ends in May, broken only when the ice is forming and breaking up.

When the Bay is frozen, the herrings are taken in nets which are put down in holes and drains cut through the ice. Two men will often take from two to eight barrels per day. In 1864, when the total population was only 118 families, the catch for the season was 30,500 barrels. Were this splendid fishery properly worked it might be increased tenfold. In 1868, 50,000 barrels were exported from the Bay of Islands; and in 1870, 60,000—value \$120,000. The herring are exported mainly to Canada and the United States, where they sell for \$4 or \$5 per barrel. The method of cure, though improved of late, is still imperfect. Bonne Bay has a similar fishery on a smaller scale. On the coast of Labrador is the largest and most valuable herring fishery carried on by Newfoundlanders. The herring are taken here in September and the early part of October, and are considered the richest and finest in regard to quality. The catch varies greatly, but the average does not fall far short of from 60,000 to 70,000 barrels. Only a portion is exported, the local consumption by the fishermen being considerable.

It is difficult to estimate correctly the quantity of herring taken annually on the coasts of the Island and on Labrador, inasmuch as the exports show only a portion of the whole, and do not exhibit what is sold as bait or cured for home consumption. The last census (taken in 1874) gave the following enumeration of the number of barrels of herring taken in that year :

	Barrels.
Herring cured in the Electoral districts . . .	75,297
„ „ on the French Shore (St. George's Bay, Bay of Islands, Bonne Bay). . .	93,825
„ „ on Labrador	16,000
Total cured	185,382
Add to the above the number sold to the French as bait	70,000
Sold to the Americans	16,000
Total number of barrels of herring caught	271,382

The exports for the year 1874 show that 189,956 barrels of pickled herring were exported, and 8,300 of frozen herring, making a total of 198,256, and leaving 73,126 barrels for home consumption.

The value of the herring exported from Newfoundland may be gathered from the following returns made in the years named :

Year.	Value of herring exported. Dollars.
1869	242,804
1871	449,838
1874	578,168
1877	538,736
1878	200,296
1880	229,100
1881	269,556
Total in seven years	2,508,498

This would give as the average annual value of the exported herring in those years, \$358,359. The value of the herring sold to the French and Americans as bait may be safely estimated at not less than \$150,000 per annum. Allowing 73,000 barrels for home consumption at \$3 per barrel, the

value would be \$219,000. We have, therefore, as the total value of the annual catch of herring \$727,359.

Professor Hind estimates that the aggregate number of barrels of herring caught in the Dominion of Canada and Newfoundland waters annually exceeds 800,000 barrels; and that, allowing for the quantity used for manure, the quantity used for bait and destroyed by barring, the quantities of this fish drawn each year from British American waters is fairly represented by 1,000,000 barrels.

The vast importance, therefore, of this fishery is evident, not only in regard to its intrinsic value, but as one on which other fisheries are dependent for their very existence. In Newfoundland it may be described as being yet in its infancy. There is considerable improvement within the last few years in the process of curing, which, however, is still rude, insufficient, and in many instances so grossly careless that large quantities are annually spoiled and fit only for manuring land.

Of other kinds of fish taken in Newfoundland waters, the quantities are insignificant. Fifty years ago mackerel were abundant, but this capricious fish has disappeared for nearly half a century. At times high hopes of its return are awakened. Thus, in 1880, 5766 barrels of pickled mackerel were exported; but in the following year only 181 barrels were taken. In 1877 only fourteen barrels were exported; in 1874, forty-seven barrels; in 1871, 1374. It is not impossible that this valuable fish may one day return to its old haunts. Only a few hundred-weight of halibut and haddock are taken in Newfoundland waters. Within the last three or four years the exportation of preserved lobsters has increased rapidly. At various points lobster factories have been established, and appear to be multiplying. In 1881, 1,299,812 pounds of preserved lobster, in tins, were exported, and 46,428 pounds of frozen lobsters; the total value being \$111,408.

CHAPTER VII.

THE FISHERIES AS AFFECTED BY INTERNATIONAL TREATIES.

Privileges of the French—Concurrent rights—Unfounded claims—Sir William Whiteway's mission to London—Settlement of the "French Shore" question—Fishery rights still in dispute—Lord Palmerston and the French Government—England and the United States—Various interpretations of American rights—"The Reciprocity Treaty" and the 'Treaty of Washington.

AMONG Britain's forty colonies the position of Newfoundland is in one respect unique. The sovereignty of the entire territory belongs exclusively to Great Britain, but the French have the right of fishing along more than half the entire shore of the island, and of using that portion of the coast for such purposes as may be necessary in the prosecution of their fishery. In addition to this important privilege, the French have ceded to them possession of the two small islands of St. Pierre and Miquelon, at the entrance of Fortune Bay, as a shelter for their fishermen, the only condition attached to the possession of them being that no fortifications are to be erected, and only such buildings as are necessary in carrying on the fishery. These rights have been secured to France, first by the Treaty of Utrecht in 1713, confirmed and modified by that of Paris in 1763, by that of Versailles in 1783, and by the Definitive

Treaty of Peace, Art. XIII., in 1814. The line of coast to which these claims apply extends from Cape Ray, at the south-western extremity of the island, around the western, northern, and north-eastern shores, to Cape St. John, being fully half the entire coast of the island, and that by far the most fertile and valuable portion.

How this unfortunate concession was originally made to France by British statesmen must be left to the pen of the historian to describe. To the colony of Newfoundland it proved to be most injurious, and retarded its prosperity more than all other causes combined. The practical effect has been to exclude the people from the use of the best half of the coast, whether for fishing purposes or agricultural settlements. It is true the French have no territorial rights, and are prohibited from forming any permanent settlements, or any erections excepting such as are required for fishery purposes during the season. It is also true that their right of fishing along the line of coast is not exclusive but concurrent; and that, notwithstanding the persistent and repeated attempts of the French so to interpret the treaties as to establish an exclusive right to the fisheries, such claim has never been recognised by England, and has been repeatedly and most emphatically repudiated by the colony itself. Still the French have exercised their rights with such stringency within the defined limits, and have shown such jealousy regarding them, that they have succeeded in practically preventing Newfoundland fishermen from using the concurrent right, which they justly claim, by fishing within the French bounds. Moreover, while England has never expressly prohibited her subjects from fishing along with the French within their limits, yet dreading, no doubt, the results of quarrels arising between the fishermen of the two nations when prosecuting their calling in the same waters, she has discouraged the exercise of the concurrent right, while still recognising its existence.

The policy of successive imperial governments has been to discountenance any attempts to fish along that portion of the shore on which the French have treaty rights. The consequence has been that the concurrent right has fallen into abeyance, and that for fishing purposes that portion of the coast has been closed against the people to whom the soil of the island belongs. And this is not all. The French have not only claimed and tried to enforce an exclusive right to the fishery, but they have preferred more extravagant claims to prevent the inhabitants of Newfoundland from occupying the land within the limits defined by the treaties, whether for agricultural, mining, or other purposes; thus virtually exercising sovereignty over half the island. It is true they did not pretend to a right of occupying the land themselves, except for fishery purposes, but they pursued, only too successfully, the "dog in the manger" policy of preventing anyone else from doing so. They preferred this claim on the ground that the occupation of the land by the people of the island would be an infringement of their fishery privileges. Here again the imperial authorities inflicted a cruel wrong upon the colony by temporising with these unfounded claims, and refusing to permit the local government to issue land grants in the disputed district, while at the same time they repudiated the French claims and declared the sovereignty of the territory to be vested solely in England. At length, in 1866, a despatch from Lord Carnarvon positively prohibited the issue of grants of land on that part of the island called the "French Shore." Meantime a numerous population had, in spite of all difficulties and prohibitions, settled on this shore. They were in the position of squatters, having no title to their property, and were left without the guardianship of law, or any of the ordinary appliances of civilisation. Their numbers at length reached from eight to ten thousand, and their condition became a source of great anxiety to

the local government. Both branches of the local legislature, first in 1867 and again in 1874, memorialised the home Government, and emphatically protested against the restriction on issuing land grants, and praying for permission to make such grants for agricultural, mining, and other purposes. All efforts proved fruitless till 1881, when Sir William Whiteway, premier of the government, was despatched as a deputy to London. His powerful representation of the flagrant injustice inflicted on the colony, and of the serious dangers of any longer delaying a settlement of the vexed question, at length prevailed. The imperial authorities decided on withdrawing the restriction on the issue of land grants, and permitting the local government to exercise territorial rights by making grants of land for agricultural, mining, or other purposes. This was welcomed by the colony, which had patiently borne the wrong so long in order that it might be peacefully settled, as a great and important boon, inasmuch as it permitted the settlement of this region and the utilisation of its fine natural resources. At the same time the imperial authorities sanctioned an Act providing for the representation of the residents of this region in the local parliament. Magistrates have been appointed, and due arrangements made for the administration of justice. Thus one great branch of the "French Shore question" has been satisfactorily disposed of. There now remains the question of concurrent or exclusive right to the fisheries to be decided. The whole region is now an integral part of Newfoundland, and the government are empowered to exercise territorial jurisdiction over the whole, subject of course to existing treaty rights. The boon granted in 1881 might as well have been conceded fifty years before, as the same reasons for the concession existed at the earlier date.

The people of Newfoundland maintain that the French claim to the exclusive right of fishery is not warranted by

the terms of the treaties; and they claim as their right that they shall not be molested in fishing on any part where they do not actually interrupt the French by their competition, and that there shall be no interference with their buildings or inclosures which do not actually interfere with the fishing privileges of the French. They are willing that a joint Naval Commission should be appointed to settle all disputed points, when the concurrent right is admitted by the French. Such is the position of the colony on this important question. There ought to be no great difficulty in settling it, as the value of the shores of Newfoundland to the French, as fishing stations, is every year becoming less. It is the Bank fishery which is the main consideration with the French. On the shores of Newfoundland the annual catch of the French does not exceed a hundred thousand quintals. The French, however, still maintain that the proper interpretation of the treaties gives them an exclusive right to the fisheries, and the British as emphatically repudiate such claims. Negotiations between the two nations on these disputed points are now in progress.

In regard to the justice of the claim put forward by the colony to a concurrent right to the fisheries, it was never better expressed than in Lord Palmerston's note of July 10th, 1838, in reply to Count Sebastiani's communication, in which he urged the British Government to disavow the claim of the British subjects to a right of fishery on the coasts in question, concurrent with the rights of the subjects of France. After a searching review of the treaties bearing upon the subject, and the construction placed upon them previously, Lord Palmerston closed his note in the following terms :

“It is true that the privilege secured to the fishermen of France by the Treaty and Declaration of 1783, a

privilege which consists in the periodical use of a part of the shore of Newfoundland, for the purpose of drying their fish, has in practice been treated by the British Government as an exclusive right during the fishing season, and within the limits prescribed; because, from the nature of the case, it would scarcely be possible for British fishermen to dry their fish upon the same parts of the shore with the French fishermen without interfering with the temporary establishments of the French for the same purpose, and without interrupting their operations. But the British Government has never understood the Declaration to have had for its object to deprive the British subjects of the right to participate with the French in taking fish at sea, off that shore, provided they did so without interrupting the French cod fishery; and, although in accordance with the true spirit of the Treaty and Declaration of 1783, prohibitory proclamations have been from time to time issued, on occasions when it has been found that British subjects, while fishing within the limits in question, have caused interruption to the French fishery, yet in none of the public documents of the British Government, neither in the Act of Parliament of 1788, passed for the express purpose of carrying the Treaty of 1788 into effect; nor in any subsequent Act of Parliament relating to the Newfoundland fishery; nor in any of the instructions issued by the Admiralty and the Colonial Office; nor in any proclamation which has come under my view, issued by the Government of Newfoundland, or by the British Admiral upon the station, does it appear that the right of French subjects to an exclusive fishery, either of cod-fish or of fish generally, is specifically recognised.

“In addition to the facts above stated, I will observe to your Excellency, in conclusion, that if the right conceded to the French by the Declaration of 1783 had been intended to be exclusive within the prescribed district, the terms

used for defining such right would assuredly have been more ample and specific than they are found to be in that document; for in no other similar instrument which has ever come under the knowledge of the British Government is so important a concession as an exclusive privilege of this description accorded in terms so loose and indefinite.

“(Signed) PALMERSTON.

“To His Excellency Count Sebastiani.”

To this conclusive statement of the British case no effective answer has been given, or ever will be given. Assured of the justice of her claims, Newfoundland can calmly await a peaceful solution of this long-standing difficulty. But there are limits to human patience. Again and again has a settlement been promised and hoped for, and disappointment followed. So far back as 1835 Mr. Robinson, in the House of Commons, when introducing a motion on the subject, stated in his speech that “the question arose out of the construction put upon a treaty entered into between England and France in 1813, and though so long a period as twenty-one years had elapsed, the Government had given no answer to the persons engaged in the fisheries as to how the treaty was to be construed. This was very strange, and he would ask the Government how long after twenty-one years were British subjects to wait before they were told whether they had a right concurrent with the French of fishing on their own coast. He protested against any further delay in adjusting this question. The French had an interest in having the settlement of the question indefinitely postponed, because whilst it was so they arrogated to themselves the right of interrupting all others fishing on the coast. France had no other right of fishing than that given by the Treaty of Utrecht, and that was nothing more than a permissive right to fish.”

Had Mr. Robinson been told that forty-seven years after (in 1882) his speech the question would be no nearer a settlement, to all appearance, than when he protested against further delay, he would doubtless have felt considerably astonished.

The treaties between Great Britain and the United States, bearing on the fisheries in British American waters—Newfoundland included—have been the subject of lengthened disputes and voluminous diplomatic correspondence, and the difference in opinion regarding their proper construction has given rise to much irritation and international jealousy. The Treaty of 1783, which recognised American independence, in its third article conferred upon the people of the United States the right to take fish of every kind on the Grand Bank and all the other banks of Newfoundland, also in the Gulf of St. Lawrence, and on such part of the coast of Newfoundland as British fishermen shall use, but not to dry or cure the same on that island, and also on the coast, bays, and creeks of all other of His Britannic Majesty's dominions in America; also liberty to dry and cure fish in any of the unsettled bays, harbours, and creeks of Nova Scotia, Magdalen Islands, and Labrador, so long as they remained unsettled. The rights guaranteed by this article were enjoyed till the war of 1812, which terminated the treaty of 1783. The Treaty of Ghent contained no reference to the fisheries, and disputes having arisen between the fishermen of the two nations, the Convention of 1818 was agreed on. Its first article provided that: "The inhabitants of the United States shall have forever, in common with the subjects of His Britannic Majesty, the liberty to take fish of every kind on that part of the southern coast of Newfoundland which extends from Cape Ray to the Ramean Islands; on the western and northern coasts of Newfoundland, from the said Cape Ray to the Quirpon Islands, on the shores of the Magdalen Islands"—

also on Labrador; also that: "The American fishermen shall have liberty forever to dry and cure fish in any of the unsettled bays, harbours, and creeks of the southern part of the coast of Newfoundland here above described, and of the coast of Labrador"—such right to terminate when any portions become settled. Further, the United States in this article agreed to "renounce any liberty heretofore enjoyed or claimed by the inhabitants thereof to take, dry, or cure fish on or within three marine miles of any of the coasts, bays, creeks, or harbours of His Britannic Majesty's dominions in America," and were only to enter such bays or harbours for shelter or to obtain wood or water.

Fresh disputes arose in connection with this convention, which in 1852 became rather serious. The chief point of contention was whether the three-miles limit was to be measured from headland to headland at the mouths of bays, so as to exclude American fishermen from fishing in bays, or whether, following the sinuosities of the bays, it was to be measured from their shores. The Americans strenuously contended for the latter interpretation, the British law officers sustained the former interpretation. To end these disputes what is called the Reciprocity Treaty was agreed to in 1854. By the terms of this agreement the entire sea fishery was thrown open to Americans, as well as certain rights to land and cure their fish. The Americans in turn gave British subjects reciprocal privileges on their eastern coasts and islands adjacent. This treaty was to remain in force "for ten years from the date at which it came into operation, and further until the expiration of twelve months after each of the High Contracting Parties shall give notice to the other of its wish to terminate the same." The Reciprocity Treaty was terminated in 1866, at the instance of the American Government. Interim arrangements were adopted which gave rise to further unpleasant complications, and in 1871

the Treaty of Washington was concluded. It dealt with the complications arising out of the "Alabama claims," and also with the fishery rights of both nations. It threw open the fisheries to Americans in almost the precise terms of the Reciprocity Treaty, and provided that "the inhabitants of the United States shall have, in common with the subjects of her Britannic Majesty, the liberty, for the term of years mentioned in Article 33rd of this treaty, to take fish of any kind, except shell-fish, on the seacoasts and shores, and in the bays, harbours, and creeks of the Provinces." The Americans agreed to give reciprocal privileges in their waters to British fishermen. Further, it was agreed that commissioners should determine the respective value of the fishery privileges thus granted. When these commissioners met in Halifax, five and a half millions of dollars were awarded to the Dominion and Newfoundland as compensation for the concessions made by them to the Americans, in throwing open to them fisheries of greater value than those conceded by the United States to British fishermen. Of this sum Newfoundland received a million dollars.

The recent "Fortune Bay Troubles" show that disputes are not yet ended in connection with the fisheries. The Americans proclaim their dissatisfaction with the provisions of the Treaty of Washington, and their intention of terminating it at the expiration of twelve years from the date at which it came into operation. Should this be done, a fresh arrangement will become necessary.

CHAPTER VIII.

LABRADOR.

The Fisheries—Boundaries—History of Labrador—Climate—Population—Belle Isle—The legend of the Isle of Demons—Picturesque scenery—Immense cod-fishing grounds—Esquimaux and Indians—Berry-bearing plants—Mineral products.

IN connection with the fisheries of Newfoundland it is necessary to give some account of Labrador, the great dependency of the colony, whose fisheries are now mainly carried on by Newfoundland fishermen. Since 1809 it has been in part under the jurisdiction of the island.

To Newfoundland the value of the Labrador fisheries is very great. More than a fourth of the entire export of the fishery products of the island is taken on the coast of Labrador. Had it not been for the new and extensive field for fishing industries presented on this shore, it is difficult to see how the population of Newfoundland could have subsisted, after they were driven from the Bank Fishery by the competition of French and Americans, who were sustained by large bounties. The average annual catch of Newfoundland fishermen, who spend the summer on Labrador, is from 350,000 to 400,000 quintals of cod-fish, 50,000 to 70,000 barrels of herring, and from 300 to 500 tierces of salmon. Besides, Canadian, Nova Scotian, and American fishermen frequent this coast in summer. The usual practice

with the Newfoundland fishermen is to proceed to Labrador about the end of June and remain till the first or second week of October. In many instances they take their families with them, in order to aid in handling the fish; and when there they reside ashore in temporary huts. It is in carrying on this fishery that the most serious loss of life occurs. The bleak coast is frequently swept by storms, even in summer; and in returning late in October in small, overcrowded, and sometimes overladen vessels, fatal disasters are too frequent.

The dimensions of the great peninsula of Labrador are enormous. The coast-line, from the Straits of Belle Isle, which separates Newfoundland from Labrador, to Cape Wolstenholme, is 1,100 miles in length. The greatest breadth is 600 miles, and the area about 420,000 square miles, being equal to the area of the British Isles, France, and Austria combined. It extends from 49° N. latitude to 63°, and lies between the 55th and 79th meridians. It is bounded on the east by the Atlantic; on the north and west by Hudson's Strait and Hudson's Bay; while its south-western boundary is the Bertiamits, Mistassini, and Rupert's Rivers.

Only the eastern portion of this immense territory is under the jurisdiction of Newfoundland; the remainder is now annexed to the Dominion of Canada. The boundaries between Newfoundland and Canadian Labrador are thus defined in the "Letters Patent constituting the office of Governor and Commander-in-Chief of the Island of Newfoundland": "We have thought fit to constitute order and declare that there shall be a Governor and Commander-in-Chief (hereinafter called our said Governor) in and over our Island of Newfoundland, and the islands adjacent, and all the coast of Labrador, from the entrance of Hudson's Straits to a line to be drawn due north and south from Anse Sablon on the said coast to

the fifty-second degree of north latitude, and all the islands adjacent to that part of the said coast of Labrador, as also of all forts and garrisons erected and established, on which shall be erected and established within or on the islands and coasts aforesaid (which said islands and coast, together with the Island of Newfoundland, are hereinafter referred to as our said colony), and that the person who shall fill the said office of Governor shall be from time to time appointed by commission under our sign-manual and signet."

In the Appendix to the "Journal of the House of Assembly" for 1864, page 613, the boundaries of the Newfoundland portion of Labrador are defined in the following terms: "The western limit of the government of Newfoundland is lat. $51^{\circ} 25' N.$; long. $57^{\circ} 9' W.$, and includes Blanc Sablon and the Woody Islands. The northern boundary is Cape Chudleigh in lat. $60^{\circ} 37' N.$; long. $65^{\circ} W.$ " Thus a line drawn due north and south, from Blanc Sablon to Cape Chudleigh, constitutes the boundary between the two jurisdictions. This portion of Labrador was not always attached to Newfoundland. The first annexation took place after the Treaty of Paris, 1763. While the flag of France waved over Canada, the French carried on extensive fisheries on the Labrador coast, near the Straits of Belle Isle, to which they attached the greatest importance. After the conquest of Canada by Britain, a company established in Quebec obtained a monopoly of these fisheries which lasted for sixty years, but was brought to an end in 1820. Until 1763, the fisheries of the whole southern and eastern shores of Labrador were placed under the Government of Quebec. Increased importance was given to the governorship of Newfoundland at that date by annexing to it the Atlantic coast of Labrador. Ten years after, in 1773, it was considered advisable to restore this portion of Labrador to Canada, owing to difficulties arising out of grants made to a number of persons under the rule of the French. In 1809

it was again transferred to the jurisdiction of Newfoundland, under which it has remained ever since. A Court of Civil Jurisdiction, on the coast of Labrador, was instituted in 1824. A special court of civil and criminal jurisdiction, called "The Court of Labrador," and presided over by one judge, appointed by the Governor in Council, secured the administration of justice. The Customs' duties levied on goods landed on Labrador are the same as in Newfoundland. The Hudson's Bay Company had formerly the exclusive right of trading with the Indians of that part of Labrador which had rivers flowing into the inlet from which the Company took its name, and which is designated East Main. In 1870, however, the Company surrendered all their rights of government, property, etc., in the whole of British North America; and these have been transferred to the Dominion of Canada, the Company being still at liberty to carry on their trade without hindrance, or any exceptional tax. Canada has thus jurisdiction over all the region of Labrador which does not belong to Newfoundland.

The northern Sagas relate that about the year 1000, Eric the Red and Lief his son, whom Humboldt calls "the discoverer of the New World," passed this way and saw the land which a previous navigator, Biorn, had seen fourteen years before, and named "Helluland," that is a land of slate, or naked rocks—a name which was also given by these Norsemen to Newfoundland. The modern discoverer of Labrador, however, whatever may be thought of the account given in the Sagas, was undoubtedly John Cabot, in 1497, the same date at which he discovered Newfoundland. In the historical portion of this volume it has been shown that the map, which was made by Sebastian Cabot, or under his direction, removed all doubt as to his "Prima Vista," and proved that it was near the eastern point of the present island of Cape Breton. Continuing his course thence, in a north-westerly direction, he fell in with the

Labrador coast, and then, altering his course easterly, he passed along the north coast of Newfoundland, and so homeward, through the Straits of Belle Isle. The Basques, who were among the most daring of early maritime adventurers, were soon employed in fishing on the Gulf shore of Labrador. Tradition has it that a Basque whaler named La Bradore, from the Kingdom of Navarre, penetrated as far as Labrador Bay (now called Bradore Bay), and gave his name to that locality, and as this bay was, in process of time, much frequented by Basque fishermen, the whole coast received the name of its first visitor. After the Basques came the Bretons, who founded the town of Brest, in Bradore Bay, about 1520. This was about three miles from Blanc Sablon Harbour, and at one time contained upwards of 1,000 residents. The ruins and terraces of this old town are still visible on this iron-bound coast. The French and English were the next visitors in pursuit of fish.

Although detached from Arctic lands, and notwithstanding that much of it lies between the same parallels of latitude as Great Britain, the climate of Labrador is rigorous in the extreme. The snow lies from September till June. In winter, the whole coast is blockaded by ice-fields drifting from Baffin's Bay and other outlets of the Arctic Ocean; while in summer the glittering icebergs, stranded or floating, impart a stern beauty to the storm-beaten shores. Perhaps no country on the face of the globe is less attractive, as a permanent residence of civilised man. Much of the surface of the country is covered with low mountains and barren plateaus on which are vast plains of moss interspersed with rocks and boulders. At the heads of the bays and fiords only, is there a large growth of timber; and here, and along the margin of some of the rivers, patches of cultivable lands are to be found. The Atlantic coast of Labrador is a grim and terrible

wilderness, more than a thousand miles in length, but still not without scenes of awe-inspiring beauty. The thunders of the Atlantic have been breaking upon its shores for countless ages; the frosts and storms of winter have been carving the rocks into the wildest and most fantastic shapes which the human imagination can conceive. When the interior is reached, it is found to consist of a vast table-land, which in one region is 2,240 feet above the sea-level. Professor Hind says of this table-land, "it is pre-eminently sterile, and where the country is not burned, caribou moss covers the rocks, with stunted spruce, birch, and aspen, in the hollows and deep ravines. The whole of the table-land is strewed with an infinite number of boulders, sometimes three and four deep; these singular erratics are perched on the summit of every mountain and hill, often on the edges of cliffs; and they vary in size from one foot to twenty in diameter. Language fails to depict the awful desolation of the table-land of the Labrador Peninsula."

Were it not for the fish that swarm in its waters, Labrador would be left to the few tribes of Indians and Esquimaux who roam over its desolate wastes; but such is the extraordinary wealth of the adjacent seas, that thousands of adventurous fishermen are annually found on its shores during its brief summer. This migratory population is estimated at 30,000. The fixed population consists of white inhabitants, who live in widely scattered settlements, on the Atlantic and St. Lawrence coasts, and at the posts of the Hudson's Bay Company. The northern coast is thinly peopled by wandering Esquimaux, among whom the Moravian missionaries have been labouring for more than a century with marked success. Nomadic tribes of Indians roam over the interior. These are branches of the great Algonkin race, whose area once extended from the Rocky Mountains to Newfoundland, and from Labrador

to the Carolinas, and are known as the Montagnais or Mountaineers, the Nasquapee, the Mastassini, and the Swampy Creek Indians.

The Atlantic coast of Labrador, in an economic point of view, is by far the most important and valuable portion of the country. Here, during the summer, some thirty thousand hardy fishermen are employed in the capture of the cod, the herring, and the seal. Of late years, too, tourists in search of the picturesque, artists sketching icebergs and coast scenery, sportsmen and anglers searching for game, and even invalids in pursuit of health have been finding their way in increasing numbers to the Atlantic shores of Labrador during its short but lovely summer.

The voyage from St. John's to the Atlantic coast of Labrador, should the weather prove favourable, is one of the most delightful to those who enjoy the grander and sterner aspects of nature. Sometimes the North Atlantic is found in a gentle playful mood, dimpling and laughing under the rays of a bright summer's sun as though it had never dashed a gallant ship to pieces. Overhead is a blue sky in which float masses of fleecy clouds. "Even in their very motion there is rest," so gently do these beautiful forms move across the azure dome, presenting an ever-shifting panorama of loveliness. Then, if we suppose the voyager sailing northward bound for Labrador, he will find himself gliding along a lofty sea-wall, with bold headlands and grim rocks frowning defiance at the ocean, while the waves are gently laving the base of the giant cliffs and playfully leaping over the jutting rocks along the coast. No scenes of softened beauty, no wave-kissed pebbly beaches, no upland slopes clad in forest emerald need be looked for; but there is the grandeur, massive, perpendicular cliffs, sometimes sculptured into shapes of stern beauty, or torn and jagged by the fierce frosts and tempests of winter and the ever-gnawing tooth of

time. The monotony of the rocky sea-front is broken at intervals by the lofty capes which project their extremities far seaward and mark the entrance of the great bays of Conception, Trinity, Bonavista, and Notre Dame. The mouths of these bays being crossed, the voyager at length approaches an important land-mark, Cape St. John, the northern headland of Notre Dame Bay and the boundary of the "French Shore." Here is perhaps the most magnificent scenery along the whole coast, a vast wall of rock from four to five hundred feet in height and six miles in length, whose summit presents every shape into which rocks can be torn or sculptured, grim, shaggy, and terrible precipices, up whose sides the great Atlantic rollers have been charging for centuries. On nearing the Cape, Gull Island is passed, a rugged barren islet, once the scene of a terrible tragedy. In 1867 a vessel was wrecked here in the month of December, and eleven unfortunates were left without food or shelter to perish by cold and hunger. One of them kept a diary, which is one of the most touching records of human suffering ever brought to light. Their agonies were prolonged for thirteen days, and no knowledge of their terrible fate was obtained till the following spring, when their remains were discovered.

At length the most northern point of Newfoundland is reached, Cape Bauld, the northern point of the Island of Quirpon, four degrees north of St. John's. From this point, at times, great processions of stately icebergs may be seen moving majestically with the current which rushes through the straits of Belle Isle from the far-off Arctic regions. Midway to the Labrador shore, and fourteen miles from Cape Bauld, is Belle Isle, nine miles in length and three in breadth, in the entrance of the straits of the same name. It is utterly barren, treeless, and desolate. A lighthouse is erected here, and a depôt of provisions is kept for the relief of shipwrecked mariners. When fog envelops

these seas, or the snow-flakes are hurled on the tempest's wing, a cannon is fired every half-hour to guide the bewildered mariner.

The islands of Belle Isle and Quirpon, owing no doubt to their grim forbidding aspect and the dangers from ice and storm encountered in those seas, were named by the early mariners, "The Isles of Demons," and, in old maps, are represented as covered with "devils rampant, with wings horns, and tails." The terror-stricken seamen of early times used to "hear in the air, on the tops, and about the masts, a great clamour of men's voices, confused and inarticulate, such as you may hear from a crowd at a fair or market-place; whereupon they knew that the Isle of Demons was not far off." There is a curious legend connected with Belle Isle, namely, that here Roberval, in 1542, put on shore from his fleet the Lady Marguerite, niece of the Viceroy of New France, and her lover, with whose conduct he had been scandalised on the voyage. The unhappy, but now penitent pair, were assaulted by the demons, but guarded by bands of saints. The lover died first, then the nurse and child, and the Lady Marguerite was left alone in the terrible wilderness. The smoke of a fire, at which she cooked her food, at length attracted the attention of some fishermen, who ventured to land on the haunted spot and rescue the lady after two years' residence among the demons.

Battle Harbour, near the entrance of the Straits of Belle Isle, is the first point on the Labrador coast touched at by voyagers. "It is a sheltered roadstead between Battle Island and Great Caribou Island, about half a mile in length and quite narrow." Battle Harbour is an important fishing centre, and is much resorted to by fishermen during the season. Near Battle Island, the easternmost land of the Labrador coast, the water is of great depth, and the place is noted for a remarkable ground-swell, which at times rolls

in from the eastward into St. Lewis' Sound. Admiral Bayfield describes it in the following terms: "I certainly never, in any part of the world, saw a heavier sea than that which at times rolls in from the eastward in St. Lewis' Sound, even as far up as the entrance of the inlet, round the River Islands and up the bays of the main to the westward of them. I never saw anything more grand and wildly beautiful than the tremendous swell which often comes in without wind, rolling slowly, but irresistibly in from the sea, as if moved by some unseen power, rearing itself up like a wall of water as it approaches the craggy sides of the islands, moving on faster and faster as it nears the shore, until at last it bursts with fury over islets thirty feet high, or sends up sheets of foam and spray, sparkling in the sunbeams, fifty feet up the sides of the precipices. I can compare the roar of the surf in a calm night to nothing less than the Falls of Niagara."

Leaving Battle Harbour, the voyager has now in sight the rugged coast of Labrador, deeply indented with bays and inlets, and having many fine harbours. The scenery now becomes grand and impressive. The great headlands, like sentinel giants, tower over the waters, sometimes grim and bare, while others are covered with the dark green of dwarf-spruce, or the paler green of mosses and shrubs. Then come monotonous miles of rocky precipices, up whose sides charge the watery battalions, urged from behind by the mighty swing of the Atlantic, and evermore flung back in spray and foam.

The most striking natural scenery here are the rocks at the entrance of Chateau Bay, which has within it the noble fiord of Temple Bay. Chateau gets its name from the rock formations at the mouth of this deep and narrow bay. Mr. Hallock says: "This castle is a most remarkable pile of basaltic rocks rising in vertical columns from an insulated bed of granite. Its height from the

level of the ocean is upwards of two hundred feet. It is composed of regular five-sided prisms, and on all sides the ground is strewn with single blocks and clusters that have become detached and fallen from their places. It seems like some grim fortress of the feudal ages from whose embrasures big-mouthed cannons were ready to belch forth flame and smoke. On the very verge of the parapet, a cross stood out in bold relief in the gleaming moonlight, like a sentinel upon his watch tower." Chateau was once a place of considerable importance. When the unfortunate Acadians were driven from their homes, a number of them took refuge on this bleak shore and fortified the post. The remains of these fortifications are still visible, consisting of batteries, magazines, etc.; but they are almost completely overgrown by thickets. "In 1763, a British garrison was located at Chateau, in order to protect the fisheries; but the place was captured in 1778 by the American privateer *Minerva*; and three vessels, and £70,000 worth of property, were carried away as prizes. In 1796, the post was again attacked by a French fleet. A long bombardment ensued between the frigates and the shore batteries, and it was not until their ammunition was exhausted, that the British troops retreated into the back country, after having burned the village. In 1535, the French exploring fleet, under the command of Jaques Cartier, assembled here."

Having passed St. Francis Harbour, Cape St. Michael, Batteau Harbour, and Indian Tickle, Sandwich Bay is reached, nine miles wide at the entrance and fifty-four in depth. Further north, Hamilton Inlet, or Esquimaux Bay, opens, the largest by far of the numerous inlets that indent this coast. The entrance is in lat. $54^{\circ} 23' N.$, long. $57^{\circ} 25'$, and 250 miles north of the Straits of Belle Isle. This great inlet is thirty miles wide at the mouth; but at Port Rigolette, a post of the Hudson's Bay Company,

fifty miles from the sea, it narrows to a mile in width. On both sides of these narrows, hills tower to the height of 1,000 feet, wooded with spruce from base to summit. At the termination of this channel the inlet again expands and forms Lake Melville, a salt-water lake, thirty miles in length and twenty in breadth. After narrowing again it forms another lake seven miles wide and twenty long, and at its extremity the head of the inlet is reached, one hundred and fifty miles from the sea. The scenery around the shores of Hamilton Inlet is wild and rugged, but above Rigolette becomes very fine. Along the south shore of Melville Lake are the weird and wonderful volcanic peaks of the Mealy Mountains, 1,500 feet in height. This mountain range is first visible one hundred miles to the south of Hamilton Inlet, running nearly parallel to the coast, and after skirting Lake Melville it strikes north-westerly and is lost in the hilly regions of the interior. At Rigolette two great arms stretch from the inlet—the one south-east running about forty miles, and the other having a course nearly parallel with the main bay and a length of sixty miles. Professor Hind estimates the surface covered by water including the arms of the inlet, at 1,700 square miles. It is studded with islands of all sizes, which, in foggy weather, render the navigation perilous. "The only level ground of any extent near the bay reaches from the head of it to the foot of the Mealy Mountains. It is difficult to conceive anything more beautiful than the tints that their summits assume when touched by the rays of the setting sun, long after he has disappeared from the eye, while every little ravine and inequality in their surface is chiselled out against the clear cold sky with wonderful vividness and precision."*

Not many tourists will care to proceed further north, along the coast of Labrador, than Hamilton Inlet. The

* Hind's "Labrador."

southern portion of the coast, as far north as Sandwich Bay, has been occupied as a fishing ground for more than a century; and during the last thirty years increasing numbers of fishermen have extended their operations as far north as Cape Harrison, or Webeck. In recent years, a considerable number of Newfoundland cod-fishers have ventured still further north, as far as Cape Mugford; and the probability is that Cape Chudleigh, at the entrance of Hudson's Strait, will be reached by these hardy adventurous fishermen before many years have elapsed, as the fish wealth of Northern Labrador is reported to be amazing. A succession of narrow but deep fiords, some of them extending fifty miles into the interior, indents this northern coast. Fine growths of timber are found at the heads of many of these fiords fit for the construction of fishing craft and all ordinary building purposes. The soil and climate, too, are favourable for the growth of potatoes and other vegetables. According to the report of Professor Hind, who visited this part of the coast a few years ago, "it is fringed with a vast multitude of islands, forming a continuous archipelago from Cape Aillik to Cape Mugford, averaging twenty miles in depth seawards. Outside these islands, and about fifteen miles seaward from them, are numerous banks and shoals which form the summer feeding grounds of large cod; and a second range of banks, outside the shoals, which are probably their winter feeding grounds." This island-studded area, exclusive of the banks and shoals, from Cape Harrison to Cape Mugford, Professor Hind estimated at 5,200 square miles, furnishing a boat-fishing ground for cod nearly as large as the combined area of the English and French boat-fishing grounds on the coast of Newfoundland. This immense cod-fishing ground has, as yet, hardly been touched. Professor Hind estimates the total area of the boat-fishery on North and South Labrador at 7,100 square miles. The great cod-

fishery of the future will probably be along Northern Labrador and over the adjacent banks. The Arctic current, which washes these shores, exerts a most beneficial influence on the fish life of those regions, as well as on that of the seas around Newfoundland, Canada, and a portion of the New England shores. The icy current flowing from the Arctic seas is, in many places, "a living mass, a vast ocean of living slime"; and this slime which accompanies the icebergs and floes, "accumulates on the banks of northern Labrador, and renders the existence possible there of all those forms of marine life—from the diatom to the minute crustacean, from the minute crustacean to the prawn and crab, together with molluscous animals and starfish in vast profusion, which contribute to the support of the great schools of cod which also find their home there." The same current which brings the slime and multitudes of minute crustaceans also carries on its bosom innumerable cod ova, and distributes them far and wide.

Northern Labrador, from Cape Webeck to Cape Chudleigh, is the proper home of the Esquimaux of this region. They call themselves "Innuits," which means "men," the term Esquimaux ("eaters of raw flesh") being applied to them by hostile tribes to the west. "They are of low stature, with coarse features, small hands and feet, and black wiry hair. The men are expert in fishing, catching seals, and managing the light and graceful boat called the *kayak*, which outrides the rudest surges of the sea; while the women are skilful in making garments from skins." It is estimated that the Esquimaux of Labrador number about 1,700 souls, scattered along 500 miles of coast. For more than a century, the Moravian missionaries have been labouring among these Esquimaux, and with such success that nearly all of them have been reclaimed from heathenism of the worst description and brought under Christian training. The practice of polygamy has ceased among

them, and they have become to a large extent peaceful and industrious, and are weaned from the wandering life to which they were addicted, living around the mission stations in winter, and at the fishing posts in summer. The missionaries trade with them, and export the products of their labours, giving them necessaries and comforts in exchange. Once a year a missionary ship arrives laden with provisions and stores of all kinds, and carries a return cargo of furs, fish, oil, etc. The brethren have four stations—Hopedale, Nain, Okkak, and Hebron. At each station there is a church, store, dwelling-house for the missionaries, and workshops for the native tradesmen. In addition to instructing them in the truths of Christianity, the missionaries seek to teach them those industrial arts which may contribute to their comfort, and form habits of steady application. In seasons of famine food is freely distributed from the mission stores. About twenty missionaries are resident on this savage coast. The hardships they have to endure may be estimated from the fact that the mean annual temperature at Nain is $22^{\circ} 52'$, and at Okkak $27^{\circ} 82'$. The thermometer marks 75° occasionally in summer, while spirits freeze in the intense cold of winter.

The white inhabitants of the Atlantic coast of Labrador are in widely scattered settlements south of Cape Harrison. Many of them are British sailors or their descendants, who prefer a rude, lonely, semi-barbarous life to the restraints of civilisation. Salmon and cod fishing are their main occupations, and the products of their industries are exchanged with traders on the spot for such commodities as they require. The winter is spent in trapping fur-bearing animals. At the various mercantile establishments along the coast a number of book-keepers, clerks, servants, and others are resident. The last census taken by the Government of Newfoundland, in 1874, gives the resident population from Blanc Sablon to Cape Harrison as 2,416. Of

these 1,489 belong to the Church of England; 476 to the Church of Rome; 295 are Wesleyans; 30 are Presbyterians; and 126 belong to other denominations. There are nine places of worship: four of the Church of England, three of the Church of Rome, and two of the Wesleyan Church. During the fishing season a steamer carrying mails and passengers plies fortnightly on the coast, connecting with the Newfoundland coastal mail steamer at Battle Harbour.

On the St. Lawrence coast of Labrador, from Port Neuf to Blanc Sablon, there is a considerable population, numbering in all about 4,400. These are mainly of Canadian or Acadian origin, and live chiefly by fishing and hunting. Many of them speak both French and English. Of the whole number 3,800 are Roman Catholics, and 570 are Protestants.

The Indians of the interior, both the Montagnais and Nasquapees, speak dialects of the Cree language. Their numbers are estimated at 4,000, but they are slowly disappearing. Game, on which they depend, is becoming scarcer every year, owing largely to destructive fires which have swept over vast areas destroying forests, berry-bearing shrubs, mosses and lichens, and converting whole districts into hopeless deserts strewn with naked boulders, where no animal life can exist. Some of the Nasquapee tribe are still heathen, but the Montagnais are nearly all nominally Roman Catholics. The zealous Jesuit missionaries of early times extended their labours from Canada to Labrador, and these have been specially successful among the Montagnais. Of late years they have been resumed, and are now systematically carried on. The Indians hunt over the interior, and at certain seasons visit the coast in order to exchange the products of the chase for clothing, ammunition, and other necessaries.

One of the principal features of vegetable life in Labrador is the berry-bearing plants, which in certain districts are found in great variety and abundance. These are chiefly partridge berries, bake-apple berries, raspberries, cranberries, hurtleberries, wild currants, and wild gooseberries. Mosses of every hue, wild flowers of the most delicate colours, ferns and tall wild grasses in immense variety, help to beautify the scene during the brief summer. At the heads of the fiords forest-growths of considerable size are found sufficient for fuel and building purposes. The trees are chiefly larch, black, white, and red spruce, birch, aspen, silver fir, willow, cherry, and mountain ash. Among the wild animals enumerated are reindeer in large numbers, black and white bears, foxes, martens, lynxes, otters, minks, beavers, musk-rats, hares, and rabbits. Among the birds are eagles, owls, ravens, hawks, falcons, ptarmigan, spruce partridges, curlew, gray plovers, sand-pipers and other waders, geese, ducks, gulls, divers, swallows, snipe, and pigeons.

The winter in Labrador, to those accustomed to it, is far from unpleasant. It is almost one continued stretch of cold dry bracing weather, broken at times by fierce snow-storms. Thirty, and even forty degrees below zero, is not an uncommon state of the atmosphere; but when the thermometer ranges so low there is generally a dead calm, so that the temperature is not specially disagreeable.

Of the rivers of Labrador those falling into the Gulf of St. Lawrence are the Moisie (two hundred and fifty miles in length), the Mingan, the Ounaneme, and the St. Augustine. Rupert's River, East Main, and Great and Little Whale Rivers fall into Hudson's Bay. The Eagle, the West, and East Rivers—all fine salmon rivers—fall into Sandwich Bay. The largest river in the peninsula is the Ashwanapi or Hamilton River, discharging its waters into Hamilton Inlet,

being nearly a mile and a half wide at its mouth. The valley through which this great river flows is in many places well wooded, and patches of fertile land are found at intervals on its banks. The Nasquapee or North-west River and the Kenamou also fall into Hamilton Inlet. Between Hamilton Inlet and the Gulf of St. Lawrence there is a canoe route, the distance being traversed in fifteen days. George's River, Whale River, and South River, or Koksoak, fall into Ungava Bay.

The Laurentian formation constitutes the great framework of the peninsula, and Lower Silurian beds, principally Potsdam, rest on the Laurentian at various points of the coast. Copper ore has been found at different places along the coast, and gold in small quantities has also been discovered. Labradorite, a beautiful felspar, is found in great masses on Labrador and elsewhere. It is celebrated for its beautiful lustre. Its surface, when seen at particular angles of vision, is frequently distinguished by an exquisite play of colours, charming the eye with changing lustre, and reflecting the most lovely grays, the most delicate blues, and the softest golden yellows. There are mountain ranges in Labrador largely composed of this felspar. According to Dana, the eminent American geologist, it is colourless to grayish and smoky brown, and usually with beautiful internal reflections. Its composition is silica, 53; alumina, 30·1; lime, 12·3; soda, 4·5. Ratio of protoxyd bases, alumina and silica, 1 : 1 : : 1½. Labradorite and anorthite differ from other felspars in containing proportionably less of silica, and being decomposable easily by acids. It is manufactured into cups, vases, and other ornaments.

The main value of Labrador lies in its fisheries. These are of immense and steadily increasing value. The following returns will show the present value of those fisheries.

Exports from Labrador for the year ending July 31st, 1880:

NEWFOUNDLAND HOUSES.

Dried cod-fish	393,436 qtls.
Green do. . . . .	. 144 „
Sealskins	1,096.
Seal oil . . . . .	. 50 tuns.
Cod oil . . . . .	. 76 „
Other oil . . . . .	. 1 „
Blubber . . . . .	. 17 „
Pickled salmon . . . . .	. 592 tierces.
Pickled herring.	16,970 brls.
Pickled trout . . . . .	. 14 „
Pickled mackerel . . . . .	. 459 „
Dried caplin . . . . .	. 58 „

EXPORTS BY LABRADOR HOUSES NOT CONNECTED WITH NEWFOUND-
LAND, FOR YEAR ENDING JULY 1ST, 1880.

Dried cod-fish	14,000 qtls.
Sealskins . . . . .	. 110.
Seal oil . . . . .	. 14 tuns.
Cod oil . . . . .	. 55 „
Refuse . . . . .	. 2 „
Blubber . . . . .	. 15 „
Pickled salmon . . . . .	. 400 tierces.
Salmon in tins	30,000 lbs.
Pickled herring . . . . .	. 700 brls.
Pickled trout . . . . .	. 40 „
Pickled mackerel . . . . .	. 200 „
Dried caplin . . . . .	. 160 „

EXPORTS BY TRADERS ON LABRADOR COAST FOR YEAR ENDING
JULY 1ST, 1880 (ESTIMATED QUANTITIES):

Dried cod-fish	526 qtls.
Cod oil	14 tuns.
Pickled salmon	757 tierces.
Pickled herring	2,612 brls.
Pickled mackerel	30 „

The foregoing statement shows that in that year the total export of dried cod-fish was 407,962 quintals, value at three dollars per quintal, 1,223,886 dollars; the export of herring 20,282 barrels, value at three and a half dollars per barrel, 70,987; the export of salmon 1,749 tierces, value 34,980 dollars.

For the year ending 31st July, 1881, the exports of the three great staples were as follows:

Dried cod-fish	419,997 qtls.
Pickled herring	33,330 brls.
Pickled salmon	957 tierces.

It must be remembered that the foregoing figures represent only the exports of the fishery products, and do not show the quantities consumed by the fishermen while employed, or afterwards during the winter at their own homes, which must be very considerable. Besides, about a fourth of the whole catch is sent to Newfoundland for shipment, and the Canadian and American fishermen who frequent these shores carry away with them the products of their labours, which are estimated to be about a ninth of the entire quantities taken. About 100 Canadian and Nova Scotia vessels are annually engaged in the Labrador fisheries. The number of American fishing-vessels visiting Labrador has declined of late years, and is now

comparatively insignificant. The Americans mainly devote themselves now to the bank fishery. When the quantities disposed of in the way described are added to the direct exports, the aggregate will be increased by more than one half. Altogether, from 1,000 to 1,200 fishing-vessels are employed each year on the Atlantic coast of Labrador, carrying more than 30,000 fishermen.

These valuable fisheries are each year falling more and more into the hands of Newfoundland fishermen. Canadians and Americans, coming from great distances, cannot compete with those who are but three or four days' sail from the coast of Labrador. Formerly there were a large number of Jersey houses at Labrador, but only three of these now remain. The English mercantile establishments have all withdrawn.

It has been computed by competent authorities that when the quantities of fish of all kinds taken on the Atlantic and St. Lawrence shores of Labrador, by the Esquimaux, by Newfoundlanders, Canadians, and Americans, are estimated, the aggregate values will not fall short of a million pounds sterling per annum.

The total population of Labrador is about 12,527, and is distributed as follows :

On the St. Lawrence Coast, from Port	
Neuf to Blanc Sablon	4,411
On the Atlantic Coast—	
White Population	2,416
Esquimaux	1,700
Indians of the Interior	4,000
	<hr/>
Total . .	12,527

Part II.

AGRICULTURAL RESOURCES.

CHAPTER I.

THE GEOGRAPHICAL SURVEY.

Difficulties of the past—The vagaries of Governor Milbanke—Value of the land now under cultivation—New discoveries of fertile belts—Lands suitable for settlement—Two million nine hundred and seventy-six thousand acres awaiting cultivation.

UP to a comparatively recent period, the belief was almost universal that Newfoundland was a “howling wilderness,” its interior a region of swamps, bogs, and rocks, and its climate such as to forbid the idea of attempting the cultivation of the soil. It is not difficult to account for these unfounded and erroneous impressions. It has been already shown that for nearly one hundred and fifty years, the laws enacted and enforced in the colony prohibited the occupation or cultivation of land under heavy penalties, and even the erection of houses, except such as were necessary for carrying on the fisheries. In vain did the resident inhabitants apply for permission to inclose and cultivate even small patches of land. The right to do so was sternly refused. The island was to be preserved as a station for the use of a small body of mer-

chants who carried on a migratory fishery. To prevent the increase of inhabitants, stringent orders were given to successive Governors not to make any grants of land, and to reduce the number of those who were already settled there, by withholding whatever might serve to encourage them to remain in the island. As Mr. William Knox forcibly expressed it in his evidence before a Parliamentary Committee, in 1793: "The Island of Newfoundland had been considered in all former times as a great English ship, moored near the Banks during the fishing season, for the convenience of the English fishermen. The Governor was considered as the ship's captain, and all those concerned in the fishery business as his crew, and subject to naval discipline." The treatment of the settlers was graphically described by Lord North in the following terms: "Whatever they loved to have roasted, the Governor was to give them raw, and whatever they wished to have raw, he was to give it to them roasted." Governor Milbanke, in one of his despatches which is still extant, expressed his astonishment how any Governor could imagine himself vested with power to grant land to persons in Newfoundland in the face of existing statutes, and declared that the possession of any land "ought to subject the holders to imprisonment or banishment from the country."

Another cause which retarded agriculture in Newfoundland was the delusion so systematically and perseveringly propagated by interested persons, that the soil of the island was hopelessly barren, and that all attempts at agricultural improvement must prove failures. The mercantile monopolists were most sedulous in impressing this belief on the English people and on successive English governments, simply because they wanted to keep the country as a comfortable "preserve" for their own advantage. For a long period they were successful in duping the world on this subject, until it became at length a settled belief

that this large island, with a healthy climate, and situated in a temperate latitude, presented insurmountable obstacles to agriculture. The people themselves, cooped up chiefly around the shores of the peninsula of Avalon, where the soil is poorest, knowing nothing of the interior, and being dependent on the fisheries, at length became persuaded that there was no soil to cultivate, and that the whole island was of the same character as the rocky margin of the sea.

As years rolled on this notion regarding the barrenness of the soil has been entirely dissipated. Experience proved that wherever judicious industry was expended on the soil it yielded excellent returns; and at the present moment those who have bestowed most attention on agriculture are the most prosperous and independent portion of the working classes. To the statement that the soil of Newfoundland is unfavourable to agriculture, it is sufficient to reply that the value of the land now under cultivation, together with the cattle, sheep, and horses, etc., which it sustains, is not less than two millions and a half of dollars, and the annual produce is \$612,350. This is the result of the limited effort made by the people in this direction around the various settlements on the shore, where the soil is poorest, and the harsh winds blowing over the ocean are most felt. What may not be accomplished, when the fertile belts of the interior, having a much finer climate, are peopled and cultivated. Even now, however, enough has been done to prove that the soil of the island, so far from being intractable and barren, yields on cultivation rich and abundant crops in great variety. The farther settlement has extended inland, especially around the heads of the different bays, where noble stretches of the finest land exist, the more evident become the capabilities of the soil to sustain an agricultural population.

The geological survey, as it advanced year after year, and made fresh discoveries of fertile lands, noble forests, and

mineral districts, has at length completely banished the old delusion founded on ignorance and prejudice, and revealed a country having very great agricultural resources, awaiting the operations of the strong arm of labour for their development. These conclusions no longer rest on mere conjecture, or the assertions of individuals whose judgments are not reliable. They rest on evidences collected by scientific men whose testimony cannot be disputed.

Before giving a detailed account of the several fertile belts of the island, we propose to present a general outline of the extent of the agricultural resources as ascertained by the geological survey. A very careful survey was made of the western coast, for a considerable distance inland, by Mr. Murray and his assistant. Their reports state, as the result, that the regions near and surrounding St. George's Bay, including the Codroy Valleys and Port-a-Port, contain seven hundred and thirty square miles, more or less suitable for settlement, "the most favoured tract being the coal-measure districts, where the surface is often flat or gently undulating over a great many acres." Bay of Islands, including the valley of the Humber, Deer Lake, and Grand Lake country, contains six hundred square miles suitable for settlement—being a total of thirteen hundred and thirty square miles in this single district of land "perfectly capable of being reclaimed and converted into fairly productive grazing and arable land." "These valleys," says the report, "are for the most part well wooded, producing, in many instances, large pines, juniper, or tamarack (the latter a species of larch), fine yellow birch, and other valuable timber. In the valley of the Humber this is especially the case, where a large area of country appears to be provided with all the necessary material for shipbuilding in a remarkable degree."

Passing now to the eastern coast, we come to the Gander country. On the Gander river and lake, with the tribu-

taries, and including the Gambo and Terra Nova valleys, together with the tracts at the heads of the bays, there are, according to Mr. Murray, seventeen hundred square miles available for settlement. The Exploits Valley and Red Indian Lake, together with the lands surrounding the estuary of the Exploits, contain sixteen hundred and twenty square miles. Thus we have a total, in these great valleys alone, of 4,650 square miles, or 2,976,000 acres, fit for settlement, and capable, when cultivated, of sustaining a very large population in comfort.

The foregoing comprise only the most extensive tracts of fertile land at present known, but in addition there are many smaller portions of excellent soil around the heads of all the bays, along the margins of the smaller rivers, and on several of the islands, such as Random Island, in Trinity Bay, which united constitute a large area. The Salmonier arm and river may be named as a district where there is a very considerable extent of good soil, but little of which is yet under cultivation. The peninsula of St. Mary's, the north side of Smith's Sound, in Trinity Bay, Goose Bay, in Bonavista Bay, are also fertile districts, each capable of sustaining a considerable agricultural population. When you add to these the land already under culture around the various settlements, and the extensive tracts of land throughout the whole peninsula of Avalon, which are admirably adapted for cattle and sheep raising, the area of the whole can scarcely be under 2,000,000 acres. Thus we have close on 5,000,000 acres well fitted for agricultural and grazing purposes. The savanna country of the interior, described by Cormack, which in all probability will one day be converted into cattle tracts or sheep walks, is not included in the foregoing estimate. It is probably about one hundred and twenty miles in length and ninety miles in breadth.

Having thus given a general outline of the agricultural districts and their extent, we propose now to take each in turn, and furnish a more detailed account of their capabilities, beginning with the Codroy valleys on the western coast.

CHAPTER II.

THE CODROY VALLEYS ON THE WESTERN COAST.

A well-wooded country—Wild grass—Grazing lands—A winter in Codroy Villa—Experiences of local farming—Building stone and minerals—Emigrants going West—A fertile oasis *en route* hitherto unknown.

THE Great Codroy River falls into the sea in latitude $47^{\circ} 50' 14''$, longitude $59^{\circ} 19' 55''$, between fifteen and sixteen miles north of Cape Ray, and about six miles south-easterly from Cape Anguille. There is a narrow gut between the sea and the expansive shallow estuary of this river. Banks of sand and gravel, which are continually shifting, render the entrance difficult and dangerous even for small craft; and in some places there are only eight or ten feet of water. Inside this gut there is an excellent harbour sheltered from all winds. On the coast, four miles south from the outlet of the Great Codroy River, is Larkin Point, immediately south of which the waters of the Little Codroy River are poured into the sea. The fine valley, which is drained by these two streams, is bounded on the south-east by the Cape Ray mountains, rising in some places to a height of two thousand feet, and on the northern side by the Cape Anguille range, whose highest elevations reach

one thousand three hundred feet, and "are richly covered by forest trees nearly to the summits."

Of the Codroy Valley, Mr. Murray says: "The area occupied by level or gently undulating land amounts, by rough measurement on the plan, to about seventy-five square miles, or about forty-eight thousand square acres; a very large proportion of which is available for settlement. For the most part the country is well wooded with stout mixed timber, consisting chiefly of spruce, balsam firs, yellow birch (frequently of large size), white birch, and tamarack. The islands and flats of the lower part of Great Codroy River yield a luxuriant growth of wild grass, affording an ample supply of admirable fodder for cattle. Notwithstanding the very rude process by which the land is cultivated, the crops of grass, grain, and roots which it yields highly testify to the excellence of the soil on which they are grown. Cattle and sheep are raised upon most of these small farms, producing most excellent beef and mutton, besides dairy produce of the very best description. The greater portion of the Anguille, and some portions of the lower slopes of the Cape Ray ranges are quite capable of improvement, and if cleared of timber and sown in grass would afford grazing land not easily surpassed in any country."

The surveyor-general of Newfoundland, who held office more than thirty years ago, after a visit to Codroy, said in his report: "The extent of land between the Great and the Little Codroy rivers, and on the north side of the former, may, from the examination made, be estimated to contain an area equal to seventy thousand acres. The whole of that space consists of a rich loam capable of the highest degree of cultivation, and fit for the production of any description of crop. Limestone is readily obtained, and can with little trouble be made to contribute to the support of the land where it is so abundantly found. Timber of the most

serviceable description covers, for the most part, the tract here referred to. Birch trees measuring from five to seven feet in circumference were found within a quarter of a mile of the shore, while others of a larger growth may be readily procured at a short distance from it. Among the birch are mingled spruce and fir of all sizes, suitable either for the erection of houses or the construction of vessels. From information obtained at Codroy, little doubt exists that coal may be procured, and that without much difficulty, toward the eastern end of the river. Lying to the northward of the valuable tract of land above referred to, is found a range of hilly ground, admirably adapted for grazing, its natural productions consisting of herbage, which early in the summer attains a height of between two and three feet." . . . "In closing the remarks on this river, it is doing no more than justice to say that it would be difficult to imagine a more beautiful or picturesque scene than the whole presents; and whether with reference to the soil around it, to its fisheries, or to its geographical situation, forming as it does part of the Northern Head, and therefore commanding the entrance to the Gulf of St. Lawrence, a more desirable and important place for a settlement could scarcely be found."

An intelligent farmer from Prince Edward Island was shipwrecked, a few years ago, at Codroy Island, and was compelled to pass the winter in Codroy Valley. On his return home, he published in a newspaper an account of his experience, from which the following is an extract: "You may judge of the richness of these Codroy lands by the fact, that at the homestead where I passed the winter, a farm of not more than fifteen acres of roughly-cultivated land, supported a stock of twenty head of cattle and thirty-five sheep, wholly upon hay. Along the 'intervals' I passed over rich fields where clover had been grown luxuriantly for more than thirty years, without manure,

and with no sign of decay or loss to the soil. Even the neighbouring uplands seem equally inexhaustible in fertility, giving no sign of wearing out, though they have been cropped, year after year, without manure, since they were settled. Indeed, the manure-heaps are considered an encumbrance by the farmers there. Observing large and unsightly heaps of stable manure, which had been accumulating for thirty years, as I was told, I asked one of the farmers why he did not turn the manure to account. He replied that their hay-fields had no need of manure, and as for their potato lands, any manure on them would choke the potatoes with clover. Indeed, these uplands are so rich, that there seems no doubt that they are of volcanic origin."

The Right Rev. Monsignor Sears, who has spent many years in this district, says: "As you ask in particular for the Codroy River, suffice it here to say, that the range of good land along its banks is sufficiently broad for all purposes of forming good farms. The 'interval' is from a mile to two miles wide. The valley of the Codroy is in most places computed at from ten to twelve miles wide, mostly composed of excellent land. The length of the valley is about forty miles altogether. There are of course some marshes, as in all countries, and some plots of stony ground, but nothing to impede farming operations on an extensive scale. In the 'interval,' and even the major part of the good upland, there are scarcely any stones. The wood is abundant and of excellent quality. The birch, which is plentiful, is an excellent article of fuel, besides its well-known use for shipbuilding."

Regarding minerals and other economical materials of the Codroy valleys, Mr. Murray says: "The coal rocks were perceived to be distributed along the base of the Cape Ray mountains wherever visited, from Trevain Brook to the upper forks of the Great Codroy. Near the junction of the

coal measures with the gneiss, on the Great Codroy River, some bands of a very ferruginous character were observed. These bands are of a reddish brown colour, are hard, brittle, and with conchoidal fracture, the broken surface presenting occasionally a metallic lustre." . . . "Some beautiful specimens of magnetic iron were procured from the neighbourhood of the Cairn Mountain, near Flat Brook, which, judging from the quantity distributed over the ground, is probably derived from a large and important mass in the neighbourhood." . . . "Gypsum," Mr. Murray adds, "abounds in the lower part of the carboniferous system, and is largely developed on the coast near Codroy and in Bay St. George. The vast masses which come out in the cliffs between Codroy Island and the Great Codroy River can hardly fail to prove, some day, of great value and importance." . . . "Admirable building stone is found on Codroy Island, in the section between the Great and Little Codroy rivers, and on the Great Codroy River. Some of the sandstone beds of the coal formation on the Great Codroy River would produce good scythe stones." Limestone beds, he also describes as "occurring on the coast near Codroy, and thence cropping out at intervals near the right bank of the Great Codroy."

A traveller from Cape Breton who recently visited this region says: "The land is scarcely surpassed by any of the Lower Provinces for its fertility. We travelled about twenty-four miles above this beautiful and romantic river. There is a range of good upland extending some nine miles above the settlement. This is studded with birch, spruce, and fir. Then commences what is called the 'Big interval.' This great tract of rich land I travelled for about fifteen miles either side of the river, some places extending over a mile in width. The extent and appearance of this splendid 'interval' struck me so forcibly that I stopped to examine carefully the nature of the soil. I could see along the banks that the soil was exceedingly good, and four feet in

depth, while the grass, balsam, and Balm of Gilead trees, and tall alders gave proof of its surpassing fertility." . . . "As I ascended the mountain, previous to coming into the valley of Bay St. George, I took a survey of this vast and magnificent valley, and the same grand and pleasing sight was presented to view, unbroken by barrens or rocks, till the sight was lost amid the dark and gloomy forest which, robed in its sombre green, seemed to mourn the neglect in which the vale below was left."

The foregoing statements prove that in the Codroy valleys there is a tract of exceedingly fertile land, of very considerable extent, easily reclaimed, having a favourable climate, enormous development of gypsum and limestone beds, with indications of coal and minerals and fine timber—in fact, that the valley is rich in all that can minister to man's comfort and material progress. From ten to twelve thousand people might find a comfortable home here. It is now occupied by a few hundreds of settlers; while thousands of emigrants are constantly passing within sight of it, to seek settlements in less promising regions, thousands of miles farther west.

CHAPTER III.

THE BAY OF ST. GEORGE AND THE WESTERN COUNTRY.

Capabilities of the district for settlement—Mr. Murray and Mr. Jukes on the productiveness of the soil—Vast tracts of unoccupied lands—Monsignor Sears gives the results of a settler's experiences—Room for thousands of farms on "The Barrens"—Dr. Bell on the climate—The Bay of Islands and the Humber district.

ABOUT thirty-five miles to the north of Codroy is the fine Bay of St. George. More properly it might be called a gulf, being forty miles wide at its entrance, and fifty miles in length. It is long and tapering, and receives at its head and along its southern shore numerous streams and rivers. A long low tongue of land runs out at the south side of the head of the bay, forming an excellent harbour. More than a quarter of a century ago the surveyor-general of the day paid a professional visit to this region, with the view of reporting on its capabilities. He estimated that it was capable of supporting in comfort from one to two hundred thousand inhabitants. "The soil," he said, "is deep and rich, and when the trees and stumps are removed from it no further obstacles exist to prevent the land being at once brought under the plough; while the husbandman has at hand limestone and gypsum sufficient for the most

extensive farming operations, and in addition to which help, a most valuable manure may be collected almost to any extent." He calculated that the expense of clearing ground here would not exceed forty shillings per acre.

Mr. Murray has estimated that the extent of land in St. George's Bay, available for settlement, is two hundred and twenty-five square miles, or one hundred and forty-two thousand eight hundred square acres. In addition to this he says: "On the north shore of the bay there is a considerable area of fine agricultural country, equal to nineteen thousand two hundred square acres." . . . "The present settlement of this fine region is limited to some straggling farms along the coast, on either side of the bay, on which excellent crops of grass, potatoes, and turnips are raised. Winter wheat has been successfully grown on the north side of the bay. The valleys around the bay are for the most part well wooded, producing in many instances large pines, juniper or tamarack, fine yellow-birch, and other valuable timber." . . . "North-eastward from the terminating point of the Cape Anguille Montains, the whole country between the coast and the Long Range is of a flat or undulatory character, densely covered with forest trees, except in such parts as have been swept by fire, or occasional tracts of marsh. The trees of this forest consist of white and yellow birch, spruce and balsam fir, poplar, and tamarack or larch." . . . "Much of the timber of this great plateau is very large. Trees of yellow and white birch are frequently met with, and particularly on the river flats, having a diameter of three feet and even more, many of which are tall and straight, resembling the hard-wood forests of Canada; spruces, balsams, poplars, and tamaracks also reach a maximum size, and seem to be of excellent quality." . . . "All these streams take their rise among the barren wastes of the Long Range Mountains, but the lower reaches of each, for distances varying from twelve to twenty miles, flow through richly-wooded and fertile

valleys, intersecting the plateau just described. These valleys, and much of the higher lands, now primeval wilderness, appear to be nearly in every respect well adapted for agricultural settlement. By deducting the tract occupied by the Anguille range of hills, amounting to two hundred and fifty-six square miles, which is too high and steep for ordinary tillage, although well suited as runs for sheep or cattle, the remainder of the block, viz. five hundred and sixty square miles, is certainly to a large extent reclaimable; and there can be but little doubt that the construction of roads, which must necessarily be the consequence of occupation, together with the clearing of the forest, will lead to mineral discoveries of vast importance to the colony." "Tracts of considerable extent upon the coast, and nearly all the valleys of the principal streams, bear a soil of the most fertile description, which is even already shown by the few and rudely cultivated spots here and there, where the produce in grass, green crops, and even cereals, are all first-class, both in quantity and quality. And this in a country where there is no evidence of a plough, a harrow, or a wheeled vehicle of any kind whatever!" "Large tracts of extremely fine land extend up the valleys for many miles. The richness of the soil at this part of the coast is probably due to the calcareous material derived from the adjacent mountains, together with the disintegration of the trappean rocks, of which the subsoil is composed."

So far back as 1840, the late Mr. Jukes, the distinguished geologist, visited St. George's Bay, and was much impressed with the beauty of its scenery and its agricultural capabilities. He described the country as "gently undulating, with a fine short turf, not unlike some English landscapes." From a rising ground, at a spot where he landed, he saw "a tract of low undulating land, covered with a rich sea of wood, stretching away into the interior for fifteen or twenty miles, backed by a range of

blue hills in the horizon, that rose toward the south-west, while toward the north-east they died away and coalesced with the hills at the head of the bay." The rich-looking valley with its bright waters winding away into the woods he describes as "completing a most lovely and most English picture."

The Very Rev. Monsignor Sears, who has spent many years on this coast, and done much for the improvement of the region and its people, says of St. George's Bay: "As the soil here is surpassingly productive, especially in the growth of various grasses, I believe there is no country in our latitude to surpass it for grazing sheep or cattle. Of course the land will have to be cleared before there is much facility for grazing, although in many places near the salt water there are large tracts already yielding grass. I find that all over Cape St. George, and the sea-coast in general, wherever the trees are removed, either by fire, wind, or other causes, a spontaneous growth of grass springs up. The grass is good for grazing; and even when protected yields a good crop of hay." Monsignor Sears gives an instance of a settler on a river running into the bay, who, having cleared one square mile of land, raised on this quantity, the following year, two hundred and forty tons of excellent hay. The river on which this settler is located is fifteen miles in length, and the land is equally good through its entire extent. In the more favoured localities he says there are meadows giving hay for the last nineteen years, without getting a particle of manure, and the nineteenth crop is better than the first. "To my own knowledge," he says, "there are plains on either side of the Bay of St. George, some thirty or forty miles long, and in some places fifteen or twenty miles wide, traversed by rivers, and quite as fertile as the one I have described. The hay is so good that it sold at St. Pierre for £8 per ton. The wood is abundant and of excellent quality, especially the birch for

fuel and shipbuilding. There is another tree here called the balm tree. It grows so luxuriantly on the 'Long interval' tracts of the river margins that, viewed from a distance, this fine-looking tree reminds one of the oak forests of the Old World, or the maple groves of the neighbouring colonies. The timber is very light, something like that of the aspen, and is as soft to cut as the cedar. For inside work it combines the gloss or polish of hard-wood with the facility of being worked or dressed peculiar to pine. It covers hundreds of acres, and grows to a size of three or four feet in diameter."

One more testimony regarding this region may be referred to—that of John Bell, M.A., M.D., of Montreal, who visited the west coast, and described it in the "Canadian Naturalist" for 1870. He says: "Along the river flats, in the valleys and on 'the barrens,' when these are drained and the country is a little more cleared, there will be room for thousands of farms, and the hills will afford walks for immense flocks of sheep, and pasture for countless herds of cattle, the surplus of all which will find a ready market at the ports and fishing stations, at the lumbering, manufacturing, and mining establishments which ere long will make this old and neglected colony one vast scene of active and profitable industry. The climate of the island is favourable to the development of its agricultural resources of every kind. Instead of the cold, foggy atmosphere which is generally supposed to hang over the island, quite the reverse is the case. The air is clear and warm, and the temperature during the year remarkably equable, the mercury in winter seldom falling below zero of Fahrenheit's scale, or in summer rising above eighty degrees; while the mean temperature of the year is about forty-four degrees. I never saw finer weather than during the two months I was on the island. It is only on the south-west

corner that fogs prevail to any extent, from the proximity of that part to the Gulf Stream."

In addition to its agricultural capabilities, Bay St. George has valuable fisheries near, and to these the attention of the inhabitants is largely directed. Herrings are abundant. Every man takes as many as he thinks he can cure. About thirty thousand barrels are exported annually. Cod, salmon, and smelt are also taken.

St. George's Bay is further noticeable as containing on its shores the most extensive and promising coal-field, which Mr. Jukes estimated to be twenty-five miles wide and ten miles in length. He found a seam of excellent Cannel coal here, three feet in thickness at the outcrop. We reserve further account of this coal-field for the chapter on the mineral wealth of the island. Magnetic iron has been found near Cairn Mountain, in St. George's Bay.

North of St. George's Bay extends the small peninsula of Port-a-Port, between it and the Bay of Islands. The few settlers here live chiefly by farming, the land being in many places well-wooded and good for agricultural purposes. The settlements are at West Point, Isthmus Cove, East Bay, and Fox Island. The inhabitants have a considerable number of cattle and sheep, and employ themselves during the winter months in making staves and herring-barrels, which they dispose of to traders going to the Bay Islands, where there is a large herring fishery. The best harbour is that of Piccadilly. The peninsula is but very imperfectly known. The mineral indications are of the most promising character. The ores of lead and copper have been met with in such quantities and positions as to warrant the expectation of the district being one day a mining centre. A lead mine was opened here a number of years since, under the most favourable auspices, but had to be discontinued, as the imperial authorities—influenced by the protests of the

French, who considered their fishery privileges invaded—prohibited the further working of this industry. This state of things has now ceased to exist, and mining grants can now be issued anywhere by the local government of the island.

About fifty miles from the north head of St. George's Bay, the Bay of Islands opens, being fifteen miles wide at its entrance, where it is studded with lofty islands. This fine region, only second in importance to Bay St. George in regard to its agricultural capabilities, its fisheries, and its mineral and timber wealth, contains as yet but few inhabitants, who are scattered along the banks of the Humber Sound and River. The bay is spacious and easy of access, its depth being about fifteen miles, and the anchorage safe and good on the southern side. There are several arms extending from its eastern side, but these are as yet little known. The most important, however, is that arm which is known as the Humber Sound, extending from the south-eastern part of the bay about twenty-eight miles easterly into the country, with a width of more than two miles. At its head is the mouth of the fine River Humber, the second largest river in the island. A range of hills called the Blo-mi-don Hills, from eight hundred to a thousand feet high, rises to the south of the Sound. On approaching the Humber their height and abruptness gradually level down until, on the banks of this noble river, they do not rise higher than three hundred feet, while they present to the eye a rich clothing of the most varied foliage, that goes down to the water's-edge. This, however, does not hold good on the first or lower course of the river, which passes through a narrow gorge nearly three miles in length, having on each side lofty crags, which in some places shoot up perpendicularly from the water's edge to the height of a thousand feet. In flowing through this gorge the river is in some places pent up to less than a chain in

width, the current being deep and strong. Three miles from the mouth of the river a slight rapid is met, which is easily passed at high spring-tides. Above this rapid the Humber opens out wide, flowing through a beautiful and picturesque valley, from three to seven miles in width, with fine flat land on either side. Within a mile of the lower end of Deer Lake, which is twelve miles from the mouth of the river, a second rapid is met, considerably stronger than the first, over which a boat can be readily taken by tracking, and which presents but a slight impediment to the safe transit of rafts of timber from the lake to the Sound. The rise from the sea to the level of Deer Lake, Mr. Murray found to be only ten feet. Deer Lake, through which the Humber flows, is fifteen miles in length and three in breadth. Around it, especially to the eastward and northward, is a fine expanse of flat rolling country, reaching away in the former direction towards Grand Lake. "The land surrounding Deer Lake," says the surveyor-general already quoted, "is of the most fertile description, bearing on its surface pines measuring from three to four feet in diameter, with birch of hardly inferior dimensions, and both these kinds existing in great quantities, and with such water-power within reach as would seem to invite the establishment of saw-mills, and at the same time to insure success to such an enterprise."

The River Humber is about one hundred and fourteen miles in length, and flows through a beautiful and fertile tract of country, which ere long, by the extension of the railway system, will be populated, its valleys waving with the yellow harvest and its hills covered with browsing herds. The difficulties presented by the rapids already referred to could easily be removed were the country settled; and if this were done, vessels of considerable size and small steamers could reach Deer Lake.

All who have visited the Humber district speak highly

of its resources. The soil is deep and fertile, and capable of yielding excellent crops of all kinds. Limestone can be easily procured, and to any extent, for agricultural purposes. The surveyor-general says: "From the resources which this part of our island possesses in its herring, salmon, and cod fishery, coupled with the great extent of land, which only requires the ordinary care of the agriculturist to insure a profitable return, it may not be extravagant to say that from a hundred thousand to two hundred thousand persons could be readily located there, who would be placed in such circumstances and surrounded with such resources as would guarantee to the sober and industrious settler a comfortable maintenance." Mr. Murray estimates the extent of land more or less available for settlements on the route through which he passed at two hundred and fifty thousand square acres. "Thousands of square miles," he remarked in his report, "have been laid out in townships, and already partially settled, in Canada, either for the purpose of lumbering or farming on the northern shores of Lake Huron and many parts of the Lower Provinces, far inferior in most respects to this region of Newfoundland, which, there can scarcely be a doubt, is capable of supporting a very large population." In this valley of the Humber many thousands might find employment in agriculture, while those living on the lower reaches of the river and on the banks of the Sound could combine fishing, lumbering, and shipbuilding with farming.

In the fine country around Deer Lake there is but a single settler—a courageous farmer from Cape Breton, who with his family ventured into this solitude a few years ago. The present writer, when on an excursion to Grand Lake, in 1878, met this lonely pioneer, whose nearest neighbours were some twenty or thirty miles off. He described the country around Deer Lake as superior to any he had seen in Nova Scotia or Cape Breton. The extent of good land

he estimated at thirty-three miles in length, and with a breadth varying from three to five miles, all of it perfectly level. The soil is a deep sandy loam, and, for the growth of root-crops, cannot be surpassed. He had grown potatoes which weighed each three pounds; parsnips and carrots twenty-two inches in length; and beans and peas one third larger than the same kinds grown in Nova Scotia. He had raised a small quantity of wheat as an experiment, and found it quite equal to Canadian wheat. Clover and buckwheat also grew luxuriantly, and he found the soil specially favourable to the growth of flax. He thought the soil would suit fruit-trees. The "interval" land along the river made excellent meadow ground. Hay could be cut here from the natural grasses. The timber, he said, was large—chiefly pine, spruce, birch, and fir.

The Humber district contains some of the finest timber in the island, which will be more minutely referred to when the forests come to be noticed. Coal beds are believed to exist in the neighbourhood of Grand Lake. Marbles of all kinds occur at various parts of the Bay of Islands. More details of these are given in another part of this volume, and also of the splendid herring fishery of the bay, which is one of the finest to be met with, the quality of the herring being equal to those taken on the coast of Labrador.

North of the Bay of Islands another fine bay opens, named Bonne Bay. It has not been surveyed, and is but very imperfectly known. Casual visitors report a large extent of good land especially suitable for grazing purposes. Those who have attempted to cultivate the soil speak highly of its fertility. There is here a fine herring fishery, and on that, with salmon and cod, the inhabitants chiefly subsist.

Of the climate of Western Newfoundland the surveyor-general says: "To persons visiting the western shores of

Newfoundland, after having been acquainted with the eastern and southern, "the difference of climate between these two places and the different effects produced on the weather by the winds become at once most apparent. The southern shore is frequently enveloped in fog, and the eastern, though not subject to that visitation to an equal extent, yet does the easterly wind almost always bring to the eastern shore cold and disagreeable weather. On the western shore fog is rarely seen, and the climate is an ameliorated one."

In regard to the more northern bays little is yet known; but casual visitors concur in declaring that at the heads of all these bays there are large stretches of good land, well adapted for settlement, and possessing natural advantages of great value.

The foregoing evidence adduced regarding Western Newfoundland shows that here is one of the most desirable fields for emigration that can well be imagined, but which being unknown is neglected. In Codroy, Bay St. George, Port-a-Port, and Bay of Islands, together with the Humber district, there are 851,200 acres of land such as we have described, awaiting the axe, the plough, and the spade. The climate is favourable to health and industrial occupations. The character of the district is such that a variety of occupations can be followed by the settlers—farming, lumbering, mining, shipbuilding, fishing, etc. The projected Great American and European Short Line Railway will open up the whole district, and place it in communication with the outside world, securing a market for the various products of industry. There is nothing, however, to prevent settlement proceeding at present in advance of the railway, the difficulties being far fewer than those encountered by settlers who face the prairie or the forests in the west of the United States and Canada. Be it remembered, too, that this region is within five days' steaming

distance of the Irish coast. Once its attractions are thoroughly known it can hardly fail to secure a considerable rill from the great stream of emigration now flowing from the Old World to the New.

CHAPTER IV.

NOTRE DAME BAY AND THE EASTERN DISTRICTS.

The future of the plain that will one day unite the Humber district with Notre Dame Bay—A splendid stretch of country—Scenery equal to that of the English and Scotch lakes—Large and small game—Red Indian Lake and White Bay—The fertile belts of the Gander and Gambo country—A wilderness that might be “settled”—The unpeopled valley of the Exploits—Gander River.

FROM the Bay of Islands on the western coast Newfoundland can be crossed, without much difficulty, to the shores of Notre Dame Bay on the eastern coast. The distance from the head of Humber Sound to the head of Hall's Bay, an arm of Notre Dame Bay, does not much exceed one hundred miles. A level plain at this point extends across the whole island, the greatest height of land between the two opposite shores of the island not exceeding one hundred feet. Thus a railway one hundred miles in length, for the construction of which along this level plain there are the greatest facilities, would unite the fertile Humber district and the Bay of Islands with Notre Dame Bay, the great mining district which will one day contain a dense population. Such a railway could commence on the eastern side, either at the south-west arm of Green Bay or at Hall's Bay, and terminate at the head of Humber Sound. There is a

splendid stretch of country between these two points, the land being in many places excellent, the timber abundant and of large size, and the mineral indications at many points such as to give promise of important discoveries. Ten or twelve thousand people could find comfortable homes along this great plain, which in some places attains a considerable width, but for the most part does not exceed from two to five miles. A chain of small lakes, with rivers flowing from them, extends from Hall's Bay to the shores of Grand Lake, with only one portage a mile wide. By following these rivers and lakes a journey across is greatly facilitated. From Grand Lake the route lies across a portage of nine miles in width, and then the Humber River is reached, flowing through Deer Lake into Humber Sound. There is not a single settler in this valley which stretches across the island. Were it settled, and a railway or ordinary road constructed, there would be a never-failing market for all kinds of agricultural produce, as well as for timber of all kinds, at the mines of Notre Dame Bay. The coal fields of St. George's Bay and of Grand Lake district would supply the mines with coal for smelting purposes and domestic use; and from Notre Dame Bay coal could be conveyed to St. John's and other towns by the railway which is now under construction.

The scenery along this route from Hall's Bay to Grand Lake is in many places beautiful, especially on the lakes, where it is often as picturesque and lovely as in the lake country of England or Scotland. Game of various kinds is abundant, and deer, at the proper season, are to be met with in large numbers. In 1878 Mr. Harvey made the journey across in company with Sir John Glover, then Governor of the island, and a small party. He has given an account of the excursion in a pamphlet entitled "Across Newfoundland with the Governor." The route lay from Hall's Bay up Indian Brook navigated in canoes, through

Indian Lake till the portage, or "height of land," was reached, whence the streams flow westward, then Birchy Lakes, Sandy Lake, and Main Brook were followed, till Grand Lake, fifty-four miles long, was reached, and some time was spent in exploring its shores. The following extract from the pamphlet above referred to will convey some idea of Grand Lake and of the feelings its scenery awakened in the mind of the writer.

"The shades of evening were closing in as we got our first glimpse of Grand Lake, and a very beautiful and impressive sight it was. Near its mouth the river takes a sudden bend and reveals at once the full expanse of the blue waters of the lake in which it loses itself. Our expectations were wound up to the highest pitch as we approached this noble sheet of water, of which we had heard so much but which so few had visited. To compare small things with great, we had been looking out for it and anticipating a sight of it with something of the same feelings which Speke experienced when he mounted the last height and saw the magnificent Victoria Nyanza stretching away in the dim distance, as far as the eye could reach. Where the river enters it Grand Lake is about six or seven miles in breadth, and with the encompassing hills gently sloping down to the water, thickly wooded, and flashing under the rays of the setting sun in all the golden glories of autumn, and the bright waters gently heaving under the evening breeze, the sight was enchanting. Near the shore the bottom is composed of bright yellow sand, and the reflection on the rippling surface produces an endless succession of golden squares and circles dazlingly beautiful in appearance. I stood on the shore enjoying the fine sight as long as daylight lasted, and watching the effect of the darkening shadows on the waters, which, as the breeze died away, became like molten silver. I tried to picture to myself in its full extent this great watery expanse stretching from where I stood for fifty-four

miles towards St. George's Bay, and grasping in its two arms a lofty island twenty-two miles in length, thus exceeding the famous Lake of Geneva by nine miles. Here it had lain embosomed in its surrounding hills, its silences unbroken save by the shouts of the Red Men, whose wigwams are no longer seen on its shores, or by the wild unearthly note of the great northern diver fishing in its waters. In all these woods and hills stretching away in one direction to Red Indian Lake, and in another to White Bay, there was not a single track except the paths beaten by the deer in their annual migrations; and in the whole region round there was not a human being but the few composing our party.

"I sat down on the trunk of a pine tree that had been washed up by the waves, and gave myself up to the spirit of the hour and the influence of the scene. The shades of night had now darkened the hilltops, and only a stray breath of wind played on the surface of the lake. The stillness had in it something oppressive, almost painful. There were no warblers to fill the woods with their evening song, nor even the hum of an insect to disturb the stillness. In vain you hold your breath and listen intently for the faintest sound. The silence was absolute, and had a peculiar and depressing influence on the feelings. To relieve this sombre mood I tried to picture the 'good time coming,' when the great valley stretching from shore to shore will be filled with a busy prosperous population; when the forests will be cleared away, and smiling corn fields and meadows will overspread the scene; when along the iron road will be gliding the chariots of fire; when those blue waves will be the pathway for the steamboat with its tranquil motion; and when 'young men and maidens, old men and children' will mingle their voices here in songs of gladness. It seemed to me as I gazed in the darkening twilight at lake and hilltops, woods and sky,

as if the utter stillness was prophetic of human approach— as if our little band was to be the pioneer of the great wave of civilisation, the boom of which I seemed to hear along the newly-laid telegraph wire which now pierced these forests. The dead and dreary stillness became vocal to my ear, and whispered that man, the lord of creation, the mighty king and conqueror, was coming to make all things new; to build the great city, to erect the monuments of human culture, to make this new world blossom like the old; to ‘make the wilderness and the solitary place glad.’ And as I listened, now that the mantle of darkness had wrapped the scene around, the air seemed all alive with his name. The trees whispered it in trembling expectancy to one another; the breeze took it up and spread it over the hills and along these lonely valleys, and proclaimed aloud that man, the rightful heir of all, was coming, that his distant footfalls were heard; and the trees seemed ‘to clap their hands’ in welcome, the hills to listen for his approach, the forests to bend their tremulous tops in expectancy, and all Nature to offer eagerly the precious things with which for centuries she had been storing her bountiful bosom for the heir of all the ages.’”

There remains now the two great fertile belts opening on the eastern side of the island to be described, namely, the valley of the Exploits and the Gander and Gambo country.

The Bay of Exploits forms a deep bight on the south coast of the great Bay of Notre Dame. It has numerous arms, the greatest being the inlet which leads to the entrance of the Exploits River. There are several islands in this arm, the principal being Thwart Island, on the eastern side; the water is deep, and “there is no impediment to navigation for vessels of any size, until reaching Peter’s Arm, where there is a good anchorage.”. . . “The entrance to the Exploits River is at Wigwam Point, in latitude 49° 5’ N.

longitude $55^{\circ} 19' W$. This magnificent river rises in the south-western angle of the island, and within a moderate distance of St. George's Bay, and after a course of two hundred miles, it falls in here. With its numerous tributaries, it drains an area of nearly four thousand square miles. Of these it is estimated that one thousand six hundred and twenty square miles are fertile soil, reclaimable and fit for settlement. Except at the mouth of the river, and on the arm, where a few settlers are found, there are no inhabitants in all this great valley. The river flows through Red Indian Lake, thirty-seven miles in length, and distant from the mouth of the river between seventy and eighty miles. The lower valley of the Exploits, between the lake and the sea, is capable of sustaining many thousand inhabitants. "The soil," Mr. Murray says, "is equal to the best parts of Lower Canada," with little swamp, unencumbered with boulders, the hills wooded to their tops, and from two to five miles wide. The root crops grown by the settlers—potatoes, turnips, parsnips, etc.—he pronounces "the finest he ever saw." The timber is in many places still abundant, consisting of pine, white birch, very large spruce, and tamarack. Lumbering operations are carried on here on a small scale, but might be largely increased. The river and its tributaries afford water-power to any extent. The facilities for stock-raising are unrivalled; while railways or common roads could be easily constructed, the valley being for the most part a dead level. Twenty miles from the mouth of the river are the Grand Falls, already described. The land in the neighbourhood of Red Indian Lake is excellent. Its shores were the headquarters of the Red Indians for many generations, and the spot where they made their last stand, when assailed by the Micmacs. Formerly their burying places and traces of their wigwams were visible here, but they are now obliterated.

This great valley was practically unknown till the year 1871, when it was surveyed by Mr. Murray, whose account of it came like a new and startling discovery—so indifferent were the people to the riches of the interior and so ignorant of their very existence. Regarding its agricultural capabilities, he says in his report: “The main river valley, from Red Indian Lake downwards, is nearly for the whole distance a level or gently undulating country, broken only by occasional abrupt hills, or rocky eminences, and densely wooded for many miles back, from either bank of the stream.” “The forests of the Exploits Valley consist of pine, spruce, balsam-fir, tamarack, white birch, and poplar.” “The quality of its spontaneous productions may fairly be taken as indicative of a fertile soil. The width of this fertile belt of land varies at different parts of the river; but taking it to average about two miles on either side (and it probably is much more), there would be an area of reclaimable country of about two hundred and eighty square miles, or 179,200 acres.” This estimate refers only to the lower reaches of the river, and does not include the country around the lake or that around the arms of the bay. “The fertility of the soil,” says Mr. Murray, “at this part of the region is amply testified wherever cultivation has been attempted, producing roots, potatoes, grass, and other crops of the finest description; while as a grazing or stock-raising country it can hardly be surpassed.” “No observant person visiting the valley of the Exploits could fail to be impressed with the manifold advantages it presents for the prosecution of industrial pursuits, such as lumbering and agriculture. With a splendid river, abundant timber, and a fertile soil, the region that is now a wilderness might, by energy and enterprise, be soon converted into a thriving settlement, maintaining a large population.”

Above Red Indian Lake the Exploits is divided into two branches—the main river or Exploits proper, and the

Victoria branch. The former rises not more than twelve miles from the sea-coast, flows through King George IV. Lake and several smaller ponds. The Victoria branch takes its origin between the White Bear and Grandy's Brook waters, and flows through Victoria Lake, a magnificent sheet of water, sixteen miles long, with a breadth of three-quarters of a mile. The character of the country through which these streams flow is varied. South of King George IV. Lake and Victoria Lake "the country is one vast desolation of bare rock" with marshes interspersed. On the left bank of the Victoria there are areas of well-timbered land, averaging five miles in width, and rich "interval" land between Lloyd's Pond and Red Indian Lake. Sixteen miles up the Victoria River "the country greatly improves, and a large tract, well wooded, generally level and covered by a good soil, prevails nearly up to Victoria Lake. This level and reclaimable land seems to extend to the eastward, with a few interruptions, to the Great Rattling Brook." The country south of Hodge's Hill and on the southern side of the Exploits "presents an unbroken dense forest, in a series of gentle undulations, as far as the eye can reach. The country between the Victoria and the head of Red Indian Lake is well timbered throughout."

Rich in agricultural capabilities as is the yet unpeopled valley of the Exploits, it is greatly surpassed by the valley of the Gander, which, when settled and cultivated, will undoubtedly be the garden of Newfoundland. It may truly be said to have been discovered in 1874, when Mr. Murray surveyed a portion of it, from the sea to the head of the Gander Lake, his examination being completed by Mr. Howley, his assistant, in 1876, who explored the upper reaches of the river. The total length of the main river is one hundred miles; but another branch of it, called the South-west River, also empties into the Gander Lake, and is eighty miles in length. The area drained is nearly

three thousand square miles. Altogether there are in this great expanse of country, including the whole of the Gander River and Lake, and the neighbouring Gambo and Terra Nova valleys, no less than seventeen hundred square miles available for settlement. This, as we shall see presently, is the finest lumbering country in the island.

Gander River is approached from the sea at Sir Charles Hamilton's Sound, by the great inlet of Gander Bay, the head of which is in latitude $49^{\circ} 17'$ N., and longitude $54^{\circ} 29'$ W. From this point to the lake the river is thirty miles in length. The Gander Lake is thirty-three miles in length, with an area of forty-four miles. In the deepest part fifty-seven fathoms of line failed to strike the bottom. The main branch of the river extends above the lake for a distance of sixty miles. Thus the lake intersects the finest part of the district, having one outlet by the river to Notre Dame Bay, on whose shores are our copper mines. This river, with a small outlay, could be made navigable for boats of a good size, and down it timber could readily be floated were some present obstructions removed. Lumber and produce would here find a waterway to the sea, and a ready market in the rapidly advancing mining district. The railway now in course of construction from St. John's to Hall's Bay will traverse this splendid valley, and unlock its natural treasures and render it accessible. The eastern portion of the lake stretches away in serpentine form towards Bonavista Bay, its extremity being separated from that bay by only nine miles of a very level country, over which a road or tramway could easily be constructed. Thus the valley has two outlets to the sea, and will have railway communication in one direction with the mining region, in the other with the capital and the principal towns. It is difficult to imagine a district more favourably situated for a farming and lumbering population. Along the valley drained by the South-west River, eighty

miles in length, the soil and timber are reported to be excellent. Pine logs, eighty feet in length, have been cut around the mouth of this river, and floated down the lake to the sea.

In regard to the character of the soil, Mr. Murray says: "Of this great expanse of country a very large proportion, particularly eastward from the main river, is of rich and fertile soil, as amply testified to by its indigenous produce, which, to a great extent, consists of pine and spruce of a superior size and description, intermingled with balsam fir, white birch, and poplar, the ground often being thickly matted over by an underbrush of ground hemlock. It is greatly to be regretted however that chiefly, if not altogether, from the careless use of fire on the part of trappers who frequent these regions, great damage has been done to those noble forests." . . . "Were the region opened up for settlers a very large proportion of the timber might still be utilised, as we found upon trial upon several trees, that they were still sound and solid though dead." . . . "With the almost unrivalled capabilities the country possesses for grass-growing, breeding and rearing of stock can hardly fail to become one of the great future industries of the province. The total rise on the river to the level of the Great Lake has already been shown to be about seventy-five feet; and, as a great part of the natural course is still and moderately deep water, the impediments to the navigation of vessels drawing from five to six feet might be easily overcome by the construction of five or six locks."

Mr. Howley, assistant-geologist, who completed the survey of the Gander River above the lake, says in his report: "Within the immense region drained by the Gander and Gambo rivers, there is a vast area of country capable of being easily reclaimed and converted from its present state of wilderness into agricultural settlements." . . . "The country lying above the great lake and forming the valleys

of the two rivers, present everywhere a gently undulating surface, rising to a moderate height in its more elevated parts, and sloping gradually and with beautiful regularity down to the rivers' banks on either side. For a distance of thirty miles above the lake, and at the least two miles on the western side of the main and eastern side of the southwest rivers, the country is of this character, giving a block of thirty miles long by ten miles wide, or an area of three hundred square miles, covered with a rich deep yellow sandy loam. Nearly every acre of these three hundred square miles is well adapted for agricultural purposes, while the whole is, or was at one time, densely timbered with magnificent pine, spruce, fir, and white birch. The islands or intervals in the river, especially near their outlets, are perfectly level, and covered with exceedingly rich and deep alluvial soil. Many of these flats are of considerable extent, and for the most part they support a large growth of timber, while a luxuriant crop of wild grass flourishes round the banks and on the lower levels. Much of the country surrounding the Great Lake is also well adapted for settlement, and the advantages of having a frontage on this future great highway will still more enhance its value." . . . "The country itself is magnificent. I have never seen such an extent of level land in any other part of Newfoundland. It is not to say level in the general sense. It is composed of low rounded ridges and wide sloping country, all densely timbered. There is not a hill anywhere near the river from which a good view can be obtained." . . . "That the soil here, over a very great area, is of excellent quality and capable of yielding rich harvests I cannot doubt. Taking everything into consideration, I do not think that a more promising country or one more easy of access could be found in British America." . . . "In all my travels about the island I have nowhere seen anything like the quantity of pine timber to be met with here; and, although the soil on

the western side of the island is richer in some places, this country, taking all its advantages into consideration, offers more immediate inducement to settlers."

In addition to its agricultural and lumbering capabilities the Gander country gives abundant promise of being a mining region. The rocks of the serpentine group, having all the characteristics of the copper-bearing formation in Notre Dame Bay, are extensively developed in the Gander district, not only on the north and north-east of the lake, but also on the main river above the lake, where they occupy an immense area. "It is only reasonable to suppose," says Mr. Howley, "that the ores of copper and nickel will be found to exist here also."

Of the Gambo River Mr. Howley says: "The timber on the Gambo, especially in the valley of the Triton River, is very fine. Pine is abundant, and though not generally so large as that of the Gander, is of excellent quality. The white birch, spruce, and fir along the banks of the river are remarkably fine, indeed I have seldom seen finer in any part of the island. The land available for general agriculture in the valley of the Gambo is not extensive, being chiefly confined to the alluvial flats on either side of the river. These, however, are frequently richly luxuriant, as testified by the indigenous vegetation, especially in the valley of Triton River, where they are generally upwards of a mile in width, extending from the outlet into the upper ponds and to the forks."

CHAPTER V.

ON THE PROSPECTS OF LAND INVESTMENTS AND EMIGRATION.

Authoritative opinions and reports—Newfoundland compared with the most favoured provinces of North America—Summers and winters—Newfoundland as a grazing country—Vegetable productions—The district of St. John's—Fish as a fertiliser—Wheat, barley, and hops—Report of the Joint Committee of the Council and House of Assembly—The peninsula of Avalon—The present condition of agriculture—Customs returns—Markets for farm produce—Forest timber, pine and spruce—Area of forest lands—The lumbering regions.

IN 1842 Sir John Harvey was appointed Governor of the island. He was a man of much intelligence and energy, and he had an extensive knowledge of the soil of the neighbouring colonies of Canada, New Brunswick, Nova Scotia, and Prince Edward Island. He became an enthusiastic advocate for the agricultural improvement of Newfoundland, and never ceased to urge its importance. He showed that the country must be opened up by roads as an indispensable step to the cultivation of the soil. Nothing was known in his day of the fine districts and valleys described in the preceding pages. He was only acquainted with the poorest portion of the island around the eastern shores and bays, and yet, addressing the legislature, he referred to the subject in the following

terms: "And here I will not deny myself the satisfaction of recording this public declaration of my conviction, derived from such observation and information as a residence in the island for upwards of a year has enabled me to acquire, that, both as regards climate and agricultural capabilities, Newfoundland in many respects need not shrink from a comparison with the most favoured provinces of North America. Its summers, though short, enjoy an extraordinary degree of vegetative power, which only requires to be duly taken advantage of; its winters are neither unusually long nor severe, and its autumnal seasons are as open and fine as those of any of the surrounding colonies. In point of rich natural grasses, no part of British North America produces greater abundance. Newfoundland, in fact, appears to me to be calculated to become essentially a rich grazing country; and its varied agricultural resources appear only to require roads and settlements to force them into highly remunerative development." After referring to the entire absence of roads in his day, he said: "So long as this unexampled state of things, more especially as respects the roads, is suffered to continue, this colony must remain—what it would appear to have been designed to keep it—little beyond a fishing station. Emigration to it, beyond the number of labourers required for the prosecution of that single pursuit, cannot be expected, no other encouragement being held out. But by opening up its interior by means of good roads and communications, upon lines carefully surveyed and carried through lands—and it is known that such are to be found—capable of repaying the labour of the settler, and therefore holding out inducement to that class of emigrants, you will, as I have elsewhere said, discover treasures which, though they may not offer, in the first instance, rewards so tempting, and so immediately available, as those of the surrounding deep, are nevertheless quite as essential to the prosperity of

your island home as are the fisheries themselves." These utterances of Sir John Harvey have proved to be prophetic. The existence of "the treasures" he refers to is now placed beyond all question.

Sir Richard Bonnycastle, a military officer of distinction, who spent some years in the island, and has written one of the best books on the country, was strongly impressed with its agricultural resources. His work bears the date of 1842, and in it he earnestly advocates colonisation and agricultural development. He speaks of Newfoundland as "possessing a climate of extraordinary salubrity," and predicted that if opened up for settlement, it would "take its rank amongst the more flourishing colonies of the neighbouring continent." He enumerates among the vegetable productions which he saw growing and thriving admirably, cucumbers, melons, cabbages, cauliflowers, broccoli, beet, parsnips, carrots, peas, potatoes. "The garden strawberry and raspberry of every variety thrive without more than the usual care." . . . "Potatoes, oats, turnips, and all the necessary vegetables, can readily be reared, even on the very worst portion of such a wilderness as that of the littoral. Here one hundred thousand acres are stated to be under cultivation." . . . "The very worst portion of the soil is that in the neighbourhood of St. John's, and yet here, in all directions, the plough speeds and the ancient forest has vanished." His description of the soil in the neighbourhood of St. John's is perfectly correct. It is among the poorest in the island, and yet in every direction for miles around the city are well-cultivated and productive farms, comfortable homesteads, and a numerous agricultural population. Oats and barley of the best quality are grown, and even wheat has been tried with success. If, then, such are the results of cultivation in the least promising portion of the country, where the harsh winds from the east are felt, and the effect of the cold Arctic current is most felt, what may we not

expect when the deep soil of the sheltered valleys and of the warmer interior and of the west coast are brought under cultivation? "The district of St. John's," says Bonnycastle, "is especially well adapted for a grazing country; and the imported and home-raised cattle look as plump and as sleek as those of any other part of the world where they are carefully attended to; and I have seen cows at some of the farms which would not discredit the dairies of Devon."

It may be mentioned here that a large portion of the manure used by the farmers is a compost made by mixing cods'-heads and fish offal of all kinds with earth and peat. After standing for a year a fertilising compound, equal to guano, is thus produced.

The Right Rev. Dr. Mullock, Roman Catholic Bishop of St. John's, a gentleman of high culture and intelligence, and one who took a deep interest in the improvement of the country, delivered two lectures on Newfoundland, in 1860, in which he spoke in high terms of the natural capabilities of the island, especially of its agricultural and mineral resources. Of the former he said: "All garden vegetables—cabbages, carrots, turnips, salads, etc.—are brought to the highest perfection, and the climate appears specially adapted to impart succulency to them. The potato, you all know, before the rot, was of the finest quality. It has now nearly recovered." . . . "Wheat will ripen very well. I have never seen finer barley than the growth of Newfoundland; and all persons who have bought, as I have done, Newfoundland oats, at nearly double the price of the husky grain imported here, will find that he has gained by the purchase. Hops are most luxuriant, and so are strawberries, currants, gooseberries, cherries, and many other species of fruit." . . . "My estimate, then, of the agricultural capabilities of Newfoundland, comparing it with what I have seen in the north of Europe, is, that if we had a large agricultural population, we could support them in comfort." It must be re-

membered that the foregoing was written previous to the discoveries of the geological survey.

Sir Stephen Hill, who was Governor in 1873, says in one of his despatches that "the agricultural capabilities of the island are far greater than are usually assigned to it," and that large portions of it are "capable of a high cultivation." The area of the fertile portions, he says, "added together, amount to many millions of acres. With respect to the products of the colony, potatoes, turnips, cabbages, peas, beans, and indeed all vegetables which grow in England, arrive at the highest state of perfection in Newfoundland. Of cereals, its barley and oats will not suffer by comparison with the produce of Nova Scotia; and even wheat can be ripened in spots, though, as a rule, not as a profitable crop." (This refers to the neighbourhood of St. John's.) "As regards fruit—currants, strawberries, gooseberries, and cherries, with other fruit, grow in the gardens; and countless species of berries are found in great profusion throughout the country."

In 1880 a joint committee of the Council and House of Assembly, appointed to consider the question of constructing a railway in the island, presented a report, of which the following are extracts: "Our agricultural industry, though prosecuted to a valuable extent, is yet susceptible of very enlarged development. Vast stretches of agricultural land, extending from Trinity Bay, north, along the heads of Bonavista Bay, Gander Bay, and Exploits River, as well as on the west coast, need only the employment of well-directed labour to convert them into means of independent support for thousands of the population." . . . "The inquiry is further suggested whether this colony should not become an exporter of live stock; and we have little difficulty in affirming this position. For grazing purposes, we have large tracts that we believe cannot be surpassed in British North

America; and when we regard our proximity to England, and the all-important consideration of a short voyage for live stock, the advantages we possess in this connection are too manifest to be the subject of question or argument."

The last authority we shall quote is Mr. W. Fraser Rae, who visited the island in 1880, and has recorded his views in an excellent and trustworthy work, "Newfoundland to Manitoba." He formed a very favourable opinion of the island, and, from its great natural resources, he anticipates for it a career of prosperity, now that the railway has at last been introduced to aid in the development of its agricultural and mineral resources. Of the former he says: "That the soil and climate of Newfoundland are really good is a statement which may be read with scepticism. The common opinion is unfavourable to both, and this opinion is based upon experience gained near the coast." . . . "Not till a few years ago was it determined to open up the interior of the island by constructing a railway across it. In 1875 the legislature passed an Act for an extended survey. The reports of the engineers confirmed all that had been previously written in praise of the island, while showing how easy it was to construct railways there. Nearly the whole of the interior is undulating, is covered in parts with forests, is intersected with rivers, and is strewn with lakes. One-third is water. The greater part of the soil is adapted for the growth of all kinds of vegetables, most kinds of grain, and even tobacco. On the western side the soil is richer and the climate is finer than in the peninsula of Avalon at the east. If the earlier settlement had taken place at the western shore, the island might now sustain a large population, living by the pursuit of agriculture alone."

In Newfoundland, as in Canada and the United States, there are areas which are hopelessly barren or nearly so, the

soil being too scanty to permit vegetation, or the surface covered deep with large boulders. A large space, too, is occupied by marshes or swamps. The best judges declare that, in a majority of cases, these could be drained, and profitably converted into meadow if not arable land, as has been done in similar cases in Great Britain and Ireland. Between the head-waters of the Exploits and the sea there is a dreary and desolate country on the southern coast, where vegetation is very scanty, and for months dense fogs prevail. The mistake has been in supposing that the character of such a repulsive region held good of the whole island, and that it contained no fertile belts.

The present condition of agriculture in Newfoundland will be best learned from the following returns taken from the census of 1874, being the latest. It is necessary to bear in mind that agriculture hitherto has been mainly confined to the littoral portion of the island, where the soil is poorest and the climate less favourable, the good lands being inaccessible.

Land—Acres cultivated	34,293
Cattle—Head	6,286
Milch Cows—Head	6,240
Horses	3,890
Sheep	24,964
Swine	21,897
Goats	6,708
Butter—Pounds	186,854
Hay—Tons cut	21,604
Wheat—Bushels	84
Barley—Bushels	546
Oats—Bushels	6,606
Potatoes—Barrels	315,096
Turnips—Barrels	14,001
Other root-crops—Barrels	5,487

The growth of agriculture, for obvious reasons already referred to, has been very slow. The census of 1836 gave 11,062 acres as the quantity under cultivation. That of 1845, gave 29,656 acres; that of 1855, 41,108 acres; that of 1869, 38,134 acres; that of 1874, 34,293 acres. On these points, however, the censuses are not to be relied on as entirely accurate. As the returns stand they show a decline since 1855 instead of an advance in the quantity of land under cultivation. The want of all facility of access to the fertile districts, and of every encouragement to settle in the interior, is sufficient to account for this stagnation.

The Customs' returns for 1880 show that in that year the total value of agricultural produce imported into Newfoundland, was no less than \$2,825,411. If we suppose this amount of produce raised in the country, which, were the island opened up to any extent, would be the case, then nearly three millions of dollars annually, which now are sent out of the country to pay the agriculturists of other places, would be retained and spent among Newfoundland farmers, to the great benefit of the home population. If the encouragement of home manufactures is proper, then as farms are food factories, every facility should be given for the extension of this industry, by providing railways for the transport of farm produce to market. It is evident from these returns, that for the produce of the farm and dairy and the raising of stock, there will be, for years to come, a remunerative market in the island itself, apart altogether from exportation.

The total annual value of the produce of the land now under cultivation has been estimated by Sir William Whiteway at \$612,350.

The value of the cultivated land, at the rate of \$80 per

acre, together with horses, cattle, sheep, etc., in 1855, was estimated at \$3,957,069. It may be doubted, however, whether this estimate is not too high.

Although from time to time fires have destroyed large sections of the heavily-timbered districts, yet the forest wealth still remaining and yet unutilised is immense. These forests are found chiefly in the valleys of the great rivers already described, and along the banks of their tributaries; also in the country around St. George's Bay and Port-a-Port. The varieties of the indigenous forest timbers are white pine, white and black spruce, tamarack or larch, fir, yellow and white birch. Once the country is fairly opened up by railways a great timber trade will be created. The yellow birch, which abounds largely in St. George's Bay, is said to be equal in durability to English oak, and, with the spruces and larches, is admirably adapted for shipbuilding purposes.

The great valley of the Gander is destined to be the most important lumbering region in the island. It is covered with pine and spruce of the finest description; and the river and lake present all facilities for floating logs to the sea-margin, where saw-mills could be erected. On both sides of the lake itself water-power for driving machinery could be obtained in many places. Besides the river, an outlet could be found at Freshwater Bay, in Bonavista Bay, which is separated from the lake by a level tract only nine miles in length.

Mr. Murray reports as follows of this region: "Except where partially denuded by fire the whole valley of the river, the shores over the lake, and the banks of the tributaries are all densely clad by forest, among the most conspicuous trees of which are pines, to all external appearance of the finest description. Upon the south-west arm, and at various parts of the lake,

groves of pine may be seen where the average girth of the trees is not much, if anything, less than nine feet, and where many individual trees will reach to eleven, twelve, and even fourteen feet. On about one acre of surface I measured fifteen or twenty trees, the diameters of which varied from two and a half to four and a half feet; and these, moreover, were straight, tall, and sound, with stems running up symmetrically for upwards of fifty feet without knot or branch." He estimated that there was here "an area of not less than five hundred square miles worthy of being laid out as timber limits where an immense timber trade might be carried on successfully." "Were the tracts surrounding the headwaters of the Gambo and the south-west branch to be taken into account, I have little doubt the area would be extended to a thousand square miles." In another place he said: "On the supposition that the average amount of timber fit to be converted into lumber is 20,000 feet per acre, it follows that 460,800 acres will contain nine billion two hundred and sixteen million feet of more or less merchantable produce, equal to ninety-two millions one hundred and sixty thousand feet annually for one hundred years, and yielding timber to the value of \$1,843,300 per annum." The establishment of the lumber trade in these regions, however, would only be a preliminary movement towards the ultimate permanent settlement of the land. The soil over an enormous area is rich and fertile, the surface level or gently undulating. The country is capable of raising all or most of the cereal crops in ample abundance."

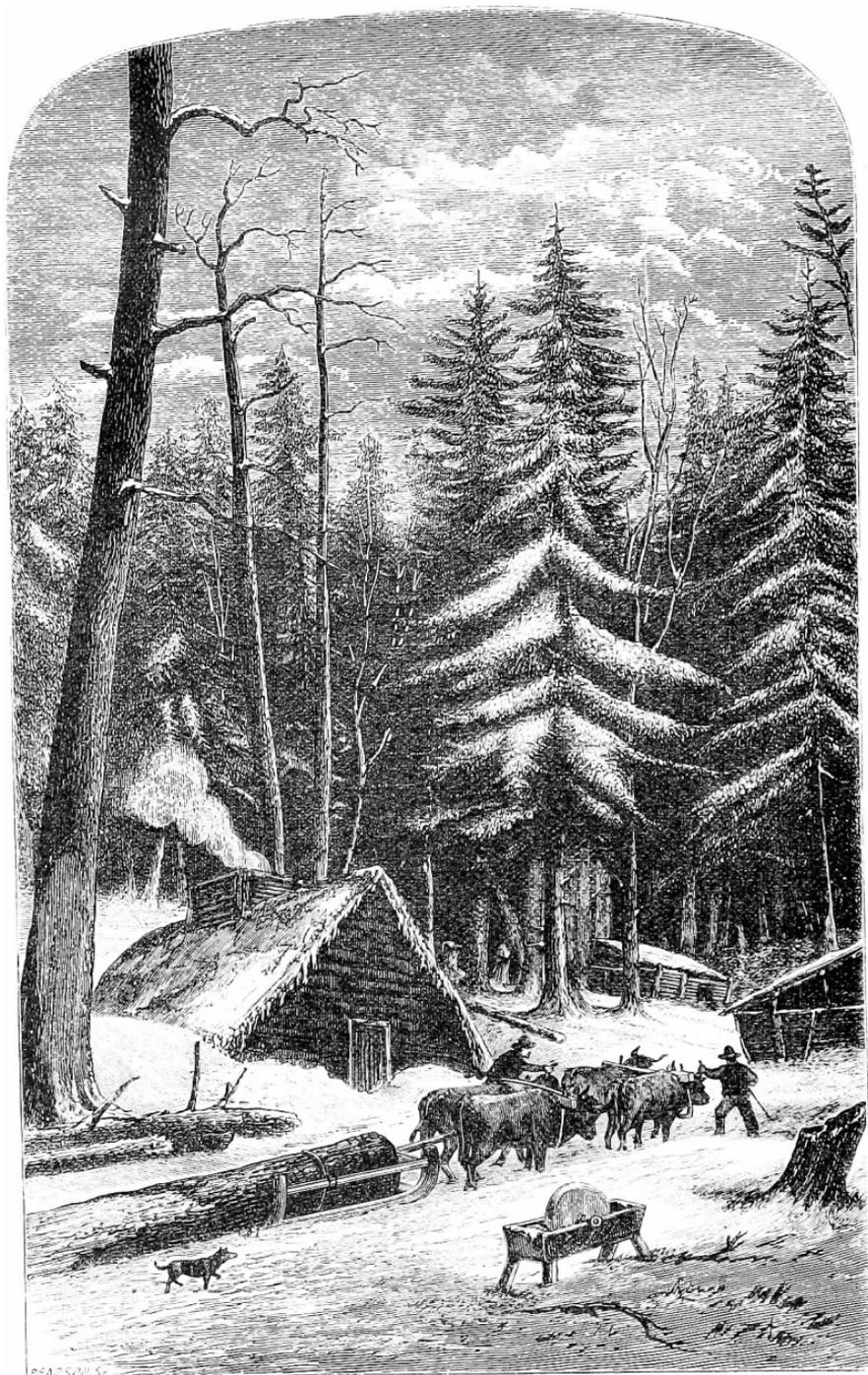
Mr. Howley, assistant-geologist, says in his report on the same region: "From careful examination of the forests at many different points, and particularly as regards the limits of available pine, I feel myself in a position to furnish

the following estimate of the area supporting that timber with tolerable confidence :

	Square miles.
Area of pine lands on the lower valley of the Gander River and north side of the lake	200
Valleys of the Main and south-west rivers above the lake	300
Country along the south side of the lake, and across to Freshwater Bay	200
Valley of the Gambo and Triton River with their tributaries	150
Total	850

“I conceive it probable that still further investigation may bring the total area up to one thousand square miles. Most, if not all, the pine here referred to is of the white variety, *Pinus strobus*, probably the most valuable species for the manufacture of lumber.” Fires have swept over many portions of this district, but “the pine, though scorched, does not appear otherwise to be much injured so long as it remains standing.”

Though not nearly equal to the Gander country in forest wealth, the valley of the Exploits contains a very large quantity of pine and other valuable timber. Near the mouth of the river a steam saw-mill has been successfully at work for many years, and no difficulty is experienced in procuring a large supply of material. “Between the Grand Falls and Badger Brook,” says Mr. Murray, “at many parts, on both sides of the main river, pine was observed to flourish luxuriantly, much of which appeared to be of excellent quality, being often of fair diameter, straight, and tall. These reaches also display a fine growth of other varieties of timber, and at some parts, especially about the forks of the Sandy Brook, white birch often attains a very large size.” About Red Indian Lake there is a superb



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LUMBERMAN'S CAMP IN WINTER.

growth of pine and spruce of "large size, straight, and tall." . . . "With a splendid river, abundant timber, and a fertile soil, this region is marked out for a prosperous settlement." . . . "The southern side of the Exploits presents an unbroken dense forest, in a series of gentle undulations, far as the eye can reach." . . . "From the Victoria River to the head of the Red Indian Lake, the country is well timbered throughout."

Another richly-wooded district is the valley of the Humber, where for many years lumbering has been conducted on an extensive scale. The surveyor-general reports of the timber here as follows: "The hard-wood found here consists chiefly of the different descriptions of birch, the yellow, called wych-hazel, within a quarter of a mile of the shore was found measuring, at six feet from the ground, from five to seven feet in circumference; and soft-wood, as pine, spruce, birch, etc., are to be had with as little difficulty, the whole consisting of a size sufficiently large for any kind of building, and in quantities abundant enough to become an article of export." Mr. Murray says: "Tamarack, or larch, is not rare; yellow birch of large dimensions is abundant; white pine and spruce grow in the greatest profusion, frequently of a size and quality not greatly inferior, if not equal, to the best that is now largely brought into the market in Gaspé and other parts of the lower province of Canada."

These are the principal lumbering regions, but, as already stated, the valleys around St. George's Bay and the Codroy valleys contain a fine growth of mixed forest timber—spruce, pine, birch, and fir. On most of the smaller streams there are also groves of pine and various other trees, while the same holds good regarding the heads of many of the bays. It is thus evident that in "regard to forest wealth and lumbering capabilities Newfoundland holds a very important place."

“It is very remarkable,” says Mr. Howley, “that no species of cedar, beech, elm, or oak have been met with in this country, although they are all common on the continent, and some of these varieties are known even to exist at Cape Breton. The valuable American white ash is a rare tree here: it has only been met with at a few favoured spots in the country surrounding St. George’s and Port-a-Port Bays.”

Part D.

MINERAL RESOURCES.

CHAPTER I.

PIONEER WORK AND PROSPECTS.

Opening of the first mine—Mr. C. F. Bennet and Mr. Smith MacKay—Tilt Cove and Bett's Cove.

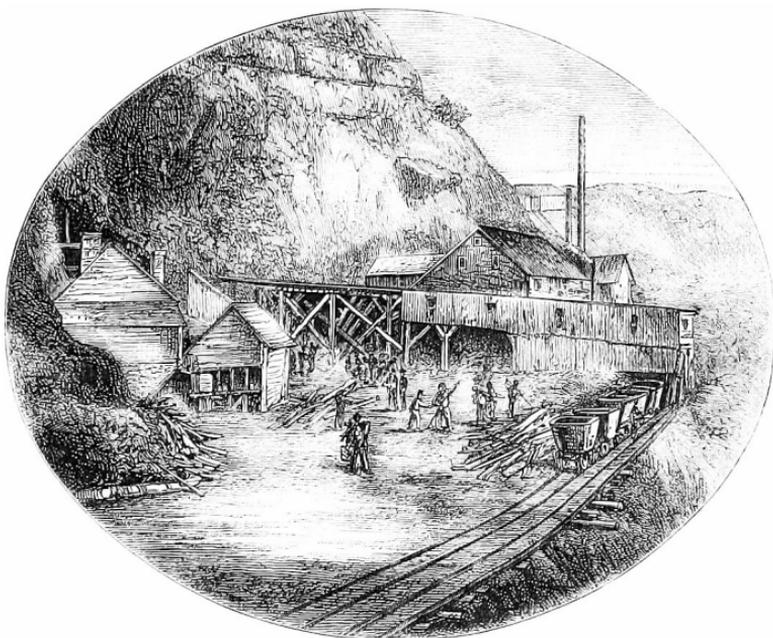
It was not till a comparatively recent date that some of the grimmest-looking rocks of Newfoundland were known to contain mineral treasures of enormous value. People were at first slow to believe in the possibility of this despised outlying portion of creation containing deposits of valuable minerals; those who persisted in searching for them were regarded as visionaries. To-day, however, Newfoundland stands sixth among the copper-producing countries of the globe. The first mine was opened in 1864; and though at first mining was prosecuted in a languid way, productive returns quickened operations; new deposits were speedily discovered and worked, and at the end of 1879 the Customs' returns showed that copper and nickel ore to the value of a million pounds sterling had been exported. Mining villages sprang up, having a considerable population, where formerly a few detached huts of fishermen had

stood. A small fleet of vessels was employed in conveying the ore to Swansea. A rush to secure mineral lands took place, and the shores of Notre Dame Bay, where the ore was found, were eagerly covered with mining licences and mining land grants. Six or seven mines were soon in operation, and great heaps of ore accumulated at different points awaiting shipment. Speculation ran high, and an extent of country forty to fifty miles in length and five or six miles in breadth] was taken up by speculators. Even men who formerly refused to believe in anything but cod-fish and seals in connection with the country were now found among the most eager copper-hunters. The work still goes on steadily, but the copper fever has abated to some extent, and now sober capitalists are at work developing mineral resources which the best judges pronounce to be of vast extent and great value. Geologists inform us that the area of mineral lands exceeds five thousand square miles. The serpentine rocks in which the ore is found are spread over this great space, and wherever these occur a search may be made with some probability of success.

Mr. C. F. Bennet was the pioneer of mining enterprise in Newfoundland. For some time he stood in a minority of one as a believer in the existence of minerals in the island. To Mr. Smith MacKay, however, belongs the honour of discovering the first considerable deposit of copper ore. This enterprising and intelligent explorer, when making a tour in the northern part of the island, in 1857, arrived at a little fishing hamlet, called Tilt Cove, containing ten or a dozen huts. His experienced eye soon detected in one of the cliffs signs of copper ore. It was not, however, till 1864 that, in conjunction with Mr. Bennet, he commenced mining operations here, which have gone on, with more or less activity, ever since, upon the deposit then discovered, and which, as yet, shows no sign of exhaustion. At the end of 1879, Tilt Cove Mine

had yielded close on 50,000 tons of copper ore, valued at \$1,572,154, and nickel ore worth \$32,740.

Tilt Cove Mine, however, was completely eclipsed by Bett's Cove Mine, a dozen miles farther south, which was opened in 1875. It was secured by Mr. Francis Ellershausen, a gentleman of great energy and sagacity, who had speedily a thousand miners at work here; and in the second year took from it 20,000 tons of ore, and in the



COPPER MINE, BETT'S COVE.

third year more than double that quantity. In 1879, the total quantity of ore exported by Mr. Ellershausen amounted to 125,556 tons, valued at \$2,982,836. In this return, however, was included some ore from a new mine, at Little Bay, opened in 1878. The last-named mine has thrown the others completely into the shade, and may be regarded as one of the most valuable copper mines in the world. The returns from Little Bay Mine show an average yield of 20,000 tons per annum. Other mines have been

opened and worked with more or less success at Seal Bay, Roberts Arm, Colchester in S.W. Arm of Green Bay, Hall's Bay, and Naked Man.

It is remarkable that the ore in these mines, is not in veins but in huge sheets, or bunches of greater or smaller dimensions. One of these was reached in Bett's Cove mine sixty feet in depth. The strata are much corrugated, and the masses of ore are found to be greatest towards the axes of the corrugations, while strings and leads often run in the course of the small faults and cracks. Operations at Bett's Cove were carried on in a thorough manner. An iron tramway connected the mouth of the mine with the harbour; a fine wharf eighty feet in length was built for the accommodation of shipping; and smelting furnaces were erected. Little Bay Mine was worked in the same energetic way, and with satisfactory results.

These mines are all situated around the shores of the great Bay of Notre Dame. Until the interior is opened by roads and railways and explored this will be the chief scene of mining enterprise. Notre Dame Bay contains numerous arms, the largest of which are Green Bay and Hall's Bay. The whole peninsula between these arms is of serpentine formation and highly metalliferous. Numerous discoveries of copper ore have been made in various places, but the holders of the licences, not being possessed of capital sufficient to work their "claims," await the arrival of mining capitalists, with whom they would willingly come to terms. Many large islands in Notre Dame Bay are also of serpentine formation, and in them several promising discoveries have been made.

It is not in the serpentine that the ore is found, but immediately associated with a chloritic slate, very ferruginous, which occurs both above and below the serpentine. Where the serpentine appears there is always a possibility that this ore-bearing chloritic slate may be found, so that

the serpentine becomes a guide to prospectors. Where no serpentine is, it is vain to look for ore, but there are vast developments of serpentine without any indications of ore. Mr. Murray says in a recent report: "The ores of copper, usually sulphurets, are found disseminated, or in layers, with iron pyrites in the chlorite slates and dioritic beds, but the more solid and valuable ones are concentrated in the folds and dislocations, particularly in the magnesian portion, by which the formation has been affected. The ores are also of frequent occurrence in white quartz veins near the same horizon. The surface rocks where these deposits exist is usually of a reddish rusty-brown colour, scored by remarkable minute reticulations which weather in relief, giving a marked and peculiar aspect, which once seen is easily recognised, and may serve as a trustworthy guide to explorers in making preliminary examination of the ground."

CHAPTER II.

METALLIFEROUS DEPOSITS AND COAL AREAS.

The Quebec Group of the Lower Silurian Series—Mr. Murray on the ore deposits of Tilt Cove—Areas of the Serpentine Series—Newfoundland as a copper-producing country—Professor Stewart's report—The auriferous rocks of Nova Scotia and Newfoundland—Mr. Selwyn's opinion—Discoveries of precious metals—Mr. Murray on the prospects of gold-mining—Lead, gypsum, and slate—Mr. Jukes on the coal seams of St. George's Bay and up the Codroy River—Conditions on which land licences are granted—Exports of copper and nickel.

Thus it is evident that the large development of the serpentine rocks in the island must be regarded as a fact of primary importance. These serpentines belong to what in Canadian geology is termed the Quebec Group of the Lower Silurian Series. "This group" says Sir William Logan, "may conveniently be separated into three divisions, the middle one of which has proved rich in metalliferous deposits in its course from the Southern Atlantic States of the American Union to Canada, and through Eastern Canada to Gaspé." This middle division, called the Lauzon division, is the one which is developed in Newfoundland, and in which all the copper mines are situated. "The Lauzon division" says Sir William Logan, "was at first united with the Levis division, but has been separated from it on account of its great mineralogical importance and distinctness, it being the metalliferous zone of the Lower Silurian in North

America. It is rich in copper ores, chiefly as interstratified cupriferous slates, and is accompanied by silver, gold, nickel, and chromium ores."

In the "American Journal of Science" for May, 1861, Dr. Sterry Hunt thus expresses his views in reference to the economic value of the Quebec Group: "The Quebec Group is of considerable economic interest, inasmuch as it is the great metalliferous formation of North America. To it belongs the gold which is found along the Appalachian Chain from Canada to Georgia, together with lead, zinc, copper, silver, cobalt, nickel, chrome, and titanium. I have long since called attention to the constant association of the latter metals, particularly chrome and nickel, with the ophiolites, and other magnesian rocks of this series, while they are wanting in similar rocks of the Laurentian age. The immense deposits of copper ore in East Tennessee, and the similar ores in Lower Canada, both of which are in beds subordinate to the stratification, belong to this group. The lead, copper, zinc, cobalt, and nickel of Missouri and the copper of Lake Superior, also occur in rocks of the same age, which appears to be pre-eminently the metalliferous period."

In a paper contributed to "The Journal of the Society of Arts" Mr. Murray, geological surveyor, says: "I may broadly state that the ore deposits of Tilt Cove occur under conditions strikingly similar to those known in Eastern Canada, and to characterise rocks of contemporaneous origin. The metallic material is arranged in isolated, irregularly-shaped masses, through a set of strata conforming with beds above and below, of a calcareo-magnesium quality, and that these beds are succeeded on the north by a great body of serpentine. As far as I have hitherto seen, and from all the information I have been able to gather, the copper will, in this county, most frequently be found to occur in a similar manner—that is to

say, in beds rather than in regular veins or lodes. I think it right to call particular attention to the facts of this case, and to express a strong opinion, for the benefit of adventurers or explorers, that the immediate neighbourhood of the serpentine rocks, wherever they may be found to exist, will be the most probable position for their labours to be crowned with success. These serpentines, besides being associated with many valuable metallic substances, frequently afford a beautiful variety of marble, which in many cases might of itself prove of considerable importance, added to which may be enumerated the frequent occurrence of soap-stone, asbestos, and talc. Chromic iron is frequently associated with the serpentine, and may probably be discovered in some parts in workable quantities."

Thus then science, confirmed by actual experiment, points to Newfoundland as one of the great copper-bearing regions of the world. It holds a wide development of that metalliferous zone which in other North American countries has yielded abundance of valuable mineral. The question arises: "What is the extent of the serpentine rocks in the island?" Mr. Murray's geological map enables us to answer that question. Commencing at Cape Norman, the extreme northerly point of the island, we find serpentine developments of considerable extent from Pistolet Bay to Hare Bay, while another spread extends along the coast to Canada Bay. At Cape St. John begins the great serpentine development in which are situated all the existing mines. The whole shores of the Great Bay of Notre Dame, together with its cluster of islands, are of the serpentine formation. This belt may be estimated at a length of forty miles, the breadth being yet undetermined, without taking the islands into account. The greatest spread of the serpentine rocks is in the Gander country, where as yet they are unexplored. Round the shores of Bonne Bay and Bay of Islands there

are also large developments of serpentine. Indeed there are strong grounds for believing that the serpentine formation runs across the whole island; and as the interior is yet unexplored, it may come to the surface in many places far inland, where it will be discovered when railways are extended so as to open the whole country. It must be remembered too that these remarks apply to the prospects of copper mining alone; and that in other parts of the island lead and other ores are found, and give promise of very encouraging developments.

Mr. James P. Howley, assistant geological surveyor, gives the following trustworthy estimate of the areas of the serpentine series in Newfoundland:

	Square miles.
Between Hare and Pistolet Bays	230
North from Bonne Bay	350
South from Hare Bay	175
South from Bonne Bay	150
South from Bay of Islands	182
Surrounding Notre Dame Bay	1,400
Gander Lake and River country	2,310
Bay d'Est River	300
Total	5,097

The foregoing calculation, which is made by one thoroughly acquainted with the country, shows how extensive are the mineral lands of the island, requiring many years for their thorough exploration and development. In the most extensive of these areas—the Gander River country—no prospector has yet tried his fortune. The great success of mining, especially at Bett's Cove and Little Bay, shows what possibilities exist in connection with the prosecution of this industry, which is yet in its infancy. The discovery of fresh deposits is constantly taking place; and the next ten

or twenty years will witness, in all probability, a wonderful expansion of mining enterprise. It would seem that only capital and skill are needed to insure success.

There is no man whose opinion on the mineral resources of the country is more worthy of respect than that of Mr. Murray, a careful and cautious observer, and one of the most skilled geologists of North America. After a survey of a large portion of the mining region, he thus speaks, in his Report, of the Geological Survey of 1875: "I feel bound to state that the experience of the late investigation convinces me more than ever that many of the northern parts of this island, and the great Bay of Notre Dame in particular, are destined to develop into great mining centres, should capital and skilled labour be brought to bear in that direction. The frequent repetition of the mineral-bearing strata, associated with serpentine, chloritic slates, and diorites, maintaining a nearly uniform character throughout their distribution, and invariably exhibiting metalliferous indications, all seem to warrant the expression of such an opinion." . . . "The ores of copper, usually sulphurets, are found disseminated, or in layers with iron pyrites in the chloritic slates and dioritic beds; but the more solid and valuable ores are concentrated in the folds and dislocations (particularly the magnesian portion) by which the formation has been affected. In addition to the ores of copper, ores of nickel, magnetic, chromic, and spicular iron, lead and sulphur ores have been found in abundance, and traces of the precious metals have occasionally been found always near the same horizon. The usual form of the nickel ores is that of arsenical or copper nickel; but it also occurs as millerite, or nickel pyrites; and as cloanthite, or an allied species which is of a steel gray or pale ruby-red colour."

In a paper published in the "Journal of the Royal Geographical Society," in 1877, Mr. Murray says: "There is every probability that vast tracts on both sides and centre of the

island contain metallic ores of great value and importance. The chief of these are copper, nickel, lead, and iron, which are usually more or less nearly associated with serpentine and other magnesian rocks of Lower Silurian age. The presence of the precious metals has been indicated by analysis at a few parts, and native silver is said to have been found at Fortune Bay. There can hardly be a doubt that the Bay of Notre Dame, particularly, will soon become a great mining centre."

Professor Stewart, an American mining expert of high standing and great experience, visited Notre Dame Bay in 1880. In a lecture delivered in St. John's, on his return from his explorations, he declared that he had formed a most favourable opinion both as regards the extent of the mineral deposits and the quality of the ore. The following are extracts from the report of his lecture in one of the local newspapers: "He described the copper ore as a beautiful yellow sulphuret, free from arsenic or any undesirable ingredient, with a little iron, and containing from eight to twelve per cent. of pure copper. He had never seen finer copper ore in the course of his experience. The character of the rocks in which it occurred was such as to give an absolute assurance of perpetuity in the working. These rocks were metamorphosed and laminated, and the extent of mineral indication over extensive areas was such as rendered exhaustion in the working a practical impossibility. A more promising mining field for copper he had not seen anywhere. No fear whatever need be entertained that these mines would become exhausted. Judging by the laws which govern mineral deposits, the depth of the vein is such as to render them practically inexhaustible. He had traversed a region between Little Bay and Hall's Bay, where his party had seen so much copper that they were fairly surfeited. He said that before coming here he had merely heard that there were some copper mines, but when he came he felt

astounded at what had been done in copper mining in the short space of five years. He found that already Newfoundland stood sixth in the roll of the copper-producing countries of the world, and that during the last five years copper ore had been extracted to the value of four million dollars, and about one million dollars had been spent on mining plant alone. He expressed his admiration of Little Bay Mine, which was yielding two thousand tons of ore monthly. Looking to the future he had every reason to believe that Newfoundland was destined to become one of the greatest copper-mining countries in the world, and he believed that this industry alone would yet raise it to a very high place. He expressed himself as delighted with the beautiful scenery of the island, and impressed with the immense natural advantages presented in these grand bays and arms of the sea, which penetrate so far inland, and enabled ships of any size to load ore or other products near the spot where they were raised. He predicted a great and prosperous future for the island when its natural riches were turned to account."

Copper is by no means the only ore found in the country. In the lower geological formations, which are largely represented, the existence of ores of various kinds, and of other valuable economic materials, has been ascertained. Magnetic iron ore has been found, though not yet in large masses, in the Laurentian; the presence of the precious metal is indicated in the Cambrian; while lead ore has been found in workable quantities in the Huronian and Lower Silurian. Coal has been found in pretty extensive beds in the Carboniferous. Thus, while the great beds of serpentine hold the copper treasures, present indications warrant the belief that the Huronian rocks contain the precious metals, and especially that extensive and valuable deposits of lead are to be found. The whole island, therefore, may be fairly regarded as more or less metalliferous, while on the western coast the coal areas have yet to be turned to account.

Mr. Murray has repeatedly expressed in his reports his belief that the equivalents of the auriferous rocks of Nova Scotia are developed in Newfoundland. Mr. Selwyn, director of the Geological Survey of Canada, is of opinion that the gold-bearing rocks of Nova Scotia are the representatives of the Cambrian and lowest members of the Silurian system. It was not till 1880 that any discoveries of auriferous quartz were made in Newfoundland. In that year certain discoveries were made near Brigus, Conception Bay, which induced Mr. Murray to visit the locality. He tested one spot with the following results, as described in his report: "By the first blast from two to three cubic feet of rock was removed, all of which was carefully broken up, washed, and examined; which operation finally resulted in the display of ten or twelve distinct 'sights' of gold. In one fragment, about five pounds weight, largely charged with dark-green chlorite, the gold shows itself in three places distinctly, while many small specks are perceptible by means of a good lens. The fracture of a fragment of milky white and translucent quartz, which was broken off the large piece, revealed two patches of gold, both of which together, if removed from the matrix, would probably produce about one pennyweight of the metal; whilst several small masses or nuggets were found adhering to the small broken fragments of quartz at the bottom of the pail in which the rock was washed, the largest of which contained about ten or twelve grains of gold." . . . "That a large area of the country in the regions referred to is auriferous there can scarcely be a doubt, although nothing short of actual mining and practical experience can possibly prove what the value of the produce may be, or whether the prospects of obtaining a remunerative return for the necessary outlay are favourable or otherwise." His report concludes in the following words: "The indications of gold in this country then are certainly sufficiently favourable to

merit a fair trial. And there are good reasons to hope and expect that ample capital applied to skilled and judicious labour may be found remunerative to future adventurers; while a new industry will be added to give employment to the labouring population of the island, and possibly bring this despised and but little-known colony into more prominence and consideration abroad than it hitherto has enjoyed."

Whatever the future may determine regarding gold, there is no doubt that the island is rich in lead ore. This ore is not confined to any one formation, the presence of that metal having been observed as low as the Laurentian and as high as the Coal measures. Lead was first discovered at La Manche, near the north-eastern extremity of Placentia Bay, where workings were carried on for several years. The vein which was worked here is from three to six feet, and is chiefly of calc spar. The ore is distributed irregularly through the whole thickness of the vein, and sometimes in pockets. Professor Shephard, of America, who examined it, placed it on a par with some of the most valuable lead deposits of the New World, and estimated that the part of the vein he examined "would yield 30,000 cubic feet of solid galena, giving a product of upwards of thirteen millions of pounds." An English mining engineer said of it: "The quality of the ore is very fine, and commands the highest price in the English market. It will produce about 82 per cent. of metallic lead. It also contains some silver." This mine, however, has not proved a success, notwithstanding its promising appearance. It has never, however, been worked by men having either skill or capital.

In 1875 a rich deposit of lead ore was found at Port-a-Port, on the western shore, and was worked for a short time with very promising results; but on the protest of the French, the Imperial authorities ordered the work to be

stopped. Now that the French Shore difficulty is settled, as far as the territorial rights are concerned, it is likely this mine will soon be reopened.

Magnetic iron ore has been found at Cairn Mountain, in St. George's Bay. Mr. Murray anticipates, from various indications, that its existence will be discovered along the range of the Laurentian Hills.

Gypsum is found in immense developments. Mr. Murray says: "This mineral gypsum is perhaps distributed more profusely and in greater volume in the carboniferous country of the first area than in any part of the American continent of the same extent." There are enormous developments of gypsum at Codroy and around St. George's Bay. Marbles too, of almost every shade of colour, have been produced from various parts of the coast, on both the eastern and western shores; while granite of the finest quality, building stones, whetstones, and limestones are in ample profusion.

Another material which the island can supply in abundance is roofing slate. The best slate quarries yet opened are in Smith's Sound, and Random Island, Trinity Bay. The development here is very extensive, sufficient to supply half the continent of America, if duly worked; and the quality is declared by good authority to be equal to the best Welsh slate. Mr. Murray says of them: "Judging of the quality of the specimens which were brought from Smith's Sound, and the thickness of strata attributed to their place in the formation, together with their proximity to the sea, these slates, when fully developed, can hardly fail to prove of very considerable commercial importance."

In the rocks of the carboniferous age, which cover extensive areas on the west coast, it is now placed beyond all doubt that there are large workable seams of coal.

Mr. Jukes paid a visit forty years ago to St. George's Bay. On the south side of the bay, near Crabb's River, and about eight miles from the coast, he found a seam of coal three feet in thickness, of excellent quality, being cannel coal. As the top was wanting, he concluded that it belonged to a still thicker bed. He says in his report: "There is no doubt of there being more beds in this vicinity, and of the probability of all the centre of this low district being occupied by a productive coal field. Up the Codroy River, in a similar parallel, beds equally valuable are reported to exist." From fair data, Mr. Jukes calculated the extent of this small portion of the coal basin of Newfoundland at about twenty-five miles wide by ten in length. Mr. Murray has laid down the position of an outcrop upon his map, in order to show where workable seams were likely to occur in St. George's Bay, and he calculates that the plan of one seam, there drawn as three feet in thickness, and occupying an area of thirty-eight square miles, contains 54,720,000 chaldrons of coal, or 1,425,000 chaldrons per square mile. A very considerable portion of this he believes will be found within workable depth; and this is but one of the many seams that may yet be found in the area between Cape Anguille and the head of St. George's Bay. The whole carboniferous area of the western coast occupies three distinct areas, which Mr. Murray designates the "St. George's Trough, the Port-a-Port Trough, and the inland Trough of Humber River and Grand Lake." "The latter trough," he says, "in its western outcrop strikes inland from the lower end of Deer Lake towards Adee's Pond, and then along the left bank of the river towards the western shores of White Bay. The eastern outcrop runs along the edge of the upper end of Deer Lake towards the Grand Lake. If the workable beds of Cape Breton exist at all in the central trough of

Newfoundland, the country where they may be expected to be found will be the region between the Humber River and Sandy Lake, where there is ample room to bring in a sufficient accumulation of thickness." Mr. Jukes gives it as his opinion that "it is highly probable that coal may be found over the whole or greater part of it."

Thus then, in addition to its other resources, Newfoundland contains, beyond all doubt, valuable and extensive coal fields, which are yet untouched. The projected Short Line Railway will traverse the coal region, and when it is constructed these treasures will not long remain undeveloped.

The laws which regulate the sale or leasing of Crown lands, for agricultural purposes and mining, are very liberal, and well calculated to promote the settlement of the country and the development of its mineral resources.

A licence may be obtained for the occupation of ungranted lands, for agricultural purposes, of not less than two hundred and fifty acres or more than one thousand acres, subject to the condition that the licensee shall, within five years, settle upon the land at least one family for every two hundred and fifty acres; and within that period, cause to be cleared and cultivated, at least five acres for every hundred acres so licensed, and continue the same under cultivation, and continue the said families thereon, or others in lieu thereof, for a period of ten years from the expiration of the said five years. Upon the performance of which the licensee shall be entitled to a grant in fee of the said land.

The Governor in council may issue free licences of occupation in quantities not exceeding fifty acres, for a term not exceeding five years, of any ungranted lands, to any persons

desirous of permanently settling on and cultivating the same; and to every person desirous of erecting a saw-mill upon any such land a similar licence for two hundred acres. Grants in fee of such lands will be given to the occupiers at the end of five years if they have cultivated two acres, and also grants in fee to such as shall have erected a saw-mill and worked it for three years.

An exclusive right to search for minerals for a period not exceeding two years, over a space not exceeding three square miles, can be obtained by any British subject; and the person obtaining the same has a right to a lease for eleven years of all the mines and minerals in one square mile of the said land (if applied for within the said two years), and fifty acres of unoccupied surface land. When mining leases are obtained for a term of eleven years, for the minerals contained in one square mile the lessee is bound to expend, within five years from the date of such lease, the sum of ten thousand dollars; and within six years from the expiration of the first five years, the further sum of ten thousand dollars, otherwise the lease is forfeited and reverts to the Crown. The foregoing conditions being complied with a grant in fee is given, gold being reserved. The fee for mining licences over three square miles is twenty-five dollars, for mining leases fifty dollars, and for subsequent grants in fee twenty-five dollars. Gold is reserved in all such licences.

The following are memoranda relating to minerals, drawn up by Alexander Murray, C.M.G., F.G.S., and published in a paper which appeared in *Nature* in 1881.

MEMORANDA:

SHOWING THE QUANTITIES AND VALUE OF COPPER AND NICKEL ORES EXPORTED FROM THE ISLAND OF NEWFOUNDLAND IN THE UNDERMENTIONED YEARS.

Years.	Ports cleared from.	Copper.	Nickel.	Dollars.	Remarks, etc.
		Tons.	Tons.		
1854 to 1864 1875 to 1879	St. John's	627½	—	22,980	Chiefly from Huronian rocks.
	„	544½	—	19,179	Partly from openings in Notre Dame Bay.
	Total	1172		42,159	Value of Nickel ore.
					Dollars.
1869	Union Mine, Tilt Cove	5038	30	190,016	7200
1870	„ „	4218	88	134,976	8800
1871	„ „	1924	7	61,568	700
1872	„ „	477½	8	152,768	2560
1873	„ „	5414	233	189,490	9320
1874	„ „	4346	—	104,304	—
1875	„ „	4838	17	179,006	1360
1876	„ „	646½	28	232,70½	2800
1877	„ „	5389	—	194,004	—
1878	„ „	4450	—	97,966	—
1879	„ „	1964	—	35,352	—
	Total	49,719	411	1,572,154	32,740
					The ores returned for 1878-79 were largely derived from Little Bay Mine, and partly from Colchester, all belonging to the Bett's Cove Mining Company.
1875	Bett's Cove.	6,290	—	232,360	Thus, the total of the ores of Copper and Nickel exported since 1854, amounts to 4,629,889 dollars, or nearly £1,000,000 sterling
1876	„	18,670	—	456,481	
1877	„	42,065	—	1,093,768	
1878	„	31,370	—	690,140	
„	Regulus	750	—	34,500	
1879	„	26,421½	—	475,587	
	Total	123,556½		2,982,836	

Part III.

POPULATION, GOVERNMENT, ETC.

CHAPTER I.

POPULATION AND TRADE.

Statistics of 1654—Gradual increase of population—Religious denominations—Celtic and Saxon—Exports and imports—Charges on revenue and the customs returns.

THE earliest estimate of the resident population of the island was made in 1654, when it was ascertained that about three hundred and fifty families were settled in the different harbours. Allowing an average of five persons to each family, the total population was then one thousand seven hundred and fifty.

In 1680 the commanders of the convoy frigates, on duty in connection with the fisheries, collected statistics of the population, of which the following is an abstract :

- 212 Planters (of whom 99 were married).
- 251 Children.
- 1695 Men-servants.
- 23 Women-servants.
- 454 Head of cattle.
- 25 Horses.
- 361 Boats.
- 196 Stages.
- 67,340 Quintals dried fish annually.
- 595 Hogsheads of train-oil.

The foregoing refers to the resident population of the island, and shows that their number in 1680 was two thousand two hundred and eighty.

At the same time, the statistics show that the western merchants had 97 ships, of the burthen of 9305 tons, 793 boats, 133 stages, and 3922 men engaged in the fishing-ports. Besides these, they had 99 ships, of 8123 tons, mounting 415 guns, and navigated by 1157 seamen, and employed in carrying the produce of the fisheries to Europe, the West Indies, and South America. Their annual take was 133,910 quintals of dried fish and 1053 hogs-heads of train-oil.

The following abstract shows the population and trade of the island in 1698 :

Number of planters	...	...	...	284
„ their children	...	...	...	462
„ their servants	...	...	...	1,894
„ boats owned by them	...	...	...	397
Quintals of fish made by them	...	...	...	101,152
Number of ships fishing and carrying fish				252
Their tonnage	...	...	...	24,318
Number of seamen employed	...	...	...	4,244
Quintals of fish caught by ships			...	114,770
„ purchased by merchants			...	157,848
„ carried to market			...	265,198

The resident population according to this abstract was, in 1698, two thousand six hundred and forty.

We have no further record of the population till 1763, when, according to Sir R. Bonnycastle, the resident population amounted to 7,000; and 7,112 besides were engaged in fishing on the shores, or fur-hunting in the interior, while

four hundred sail of vessels carried on the trade of the island.

In 1780 the resident population reached 8,000, and in 1785, 10,000. In 1804 the population had increased to 20,380; in 1825 it reached 55,719. In 1827 a census was taken, and the population was found to be 59,571. In 1832 it reached 60,008; in 1836, 75,094; in 1845, 98,703.

The census of 1857 gave the total population of the island, the French Shore and Labrador included, as 124,288. The census of 1869 showed that the population had increased to 146,536; while that of 1874, the latest yet taken, gave the total population as 161,374. Supposing the population to have increased during the last eight years in the same ratio as during the previous five years, from 1869–1874, the population in 1882 is 185,114.

In 1780, St. John's, the capital, contained a population of 1,605; in 1801, it reached 3,420; in 1809, 5,000; in 1812, 7,075; in 1835, 15,000. At the present date, 1882, the population of the capital is close on 30,000.

The rate of increase of the entire population during the twelve years between 1845 and 1857 was 25 per cent.; between 1857 and 1869—twelve years—the rate of increase was $18\frac{1}{2}$ per cent. During the five years from 1869 to 1874 the rate of increase was 10 per cent. in that period.

It was not till 1845 that the different religious denominations were distinguished in the census returns.

	Protestant.	Roman Catholics.
The census of 1845 gave	49,505	46,983
„ 1857 „	67,743	57,214
„ 1869 „	85,496	61,040
„ 1874 „	97,057	64,317

The census of 1874 was the last taken.

The following Table gives in detail the numerical strength of the different denominations at the various periods :

	1845.	
Church of Rome		46,983
Church of England		34,294
Wesleyans		14,239
Presbyterians		578
Congregationalists		394
Remainder unknown		—
	1857.	
Church of Rome		57,214
Church of England		44,285
Wesleyans		20,229
Presbyterians		838
Congregationalists		347
Baptists and others		44
	1869.	
Church of Rome		61,040
Church of England		55,184
Wesleyans		28,990
Presbyterians		974
Congregationalists		338
Baptists		10
	1874.	
Church of Rome		64,317
Church of England		59,561
Wesleyans		35,702
Presbyterians		1,168
Congregationalists		461
Baptists and others		165

The following Table shows the distribution of the population in the several electoral districts, and the religious denomination to which they belong, according to the census of 1857, that of 1869, and of 1874 :

Districts.		Total population.	Episcopalians.	Roman Catholics.	Wesleyans.	Presbyterians and Congregationalists.
St. John's, E. & W.	1857	30,476	5,655	21,900	1,882	1,039
	1869	28,850	5,734	20,007	2,140	969
	1874	31,576	6,487	20,946	2,926	1,217
Harbor Gráce ...	1857	10,067	5,490	3,390	1,112	75
	1869	12,740	6,822	4,153	1,588	177
	1874	13,055	7,239	4,013	1,615	188
Harbor Main ...	1857	5,386	1,160	4,153	71	2
	1869	6,542	1,442	4,982	118	—
	1874	7,174	1,716	5,361	97	—
Port-de-Grave ...	1857	6,489	2,726	1,637	2,112	14
	1869	7,536	3,224	1,900	2,397	15
	1874	7,919	3,415	2,002	2,501	1
Carbonear ...	1857	5,233	791	2,582	1,859	1
	1869	5,633	895	2,368	2,367	3
	1874	5,488	929	2,189	2,362	8
Bay-de-Verds ...	1857	6,221	446	1,583	4,191	1
	1869	7,057	469	1,731	4,857	—
	1874	7,434	439	1,775	5,220	—
Trinity ...	1857	10,736	6,016	1,253	3,460	7
	1869	13,817	7,428	1,384	4,985	20
	1874	15,677	8,417	1,583	5,663	14
Bonavista ...	1857	8,850	5,714	2,030	1,083	23
	1869	11,560	7,029	2,420	2,094	17
	1874	13,008	6,860	2,599	3,531	18
Twillingate & Fogo	1857	9,717	6,232	1,442	2,036	7
	1869	13,067	6,846	1,961	4,235	25
	1874	15,213	7,014	1,964	6,217	18
Ferryland ...	1857	5,228	127	5,093	8	—
	1869	5,991	172	5,817	1	1
	1874	6,419	173	6,246	—	—
Placentia & St. M'ys	1857	8,334	966	7,156	212	—
	1869	8,794	1,174	7,390	219	11
	1874	9,857	1,351	8,254	239	13
Burin ...	1857	5,529	1,356	2,354	1,810	9
	1869	6,731	1,390	2,546	2,789	6
	1874	7,779	1,733	2,692	3,349	5
Fortune Bay ...	1857	3,493	2,787	647	30	29
	1869	5,233	3,935	1,290	6	2
	1874	5,788	4,391	1,387	9	1
Burgeo & La Poile	1857	3,545	3,172	89	282	2
	1869	5,119	4,123	142	843	11
	1874	5,098	4,216	125	731	26
French Shore ...	1857	—	—	—	—	—
	1869	5,387	2,698	2,466	186	37
	1874	8,651	3,745	3,736	991	179
Labrador ...	1857	—	—	—	—	—
	1869	2,479	1,803	483	165	28
	1874	2,416	1,489	476	295	156
RECAPITULATION.						
	1827	59,571	No denominational data.			
	1857	119,304	42,638	55,309	20,148	1,209
	1869	146,536	55,184	61,040	28,990	1,322
	1874	161,449	59,544	64,348	35,745	1,812

It is worthy of remark that the increase of population has arisen almost entirely from natural growth, as since 1814 the amount of immigration has been quite insignificant. The fisheries were barely sufficient to sustain the existing settlers, and latterly have failed to expand so as to meet the wants of a rapidly growing population. Till recently no attempts were made to open up the agricultural districts, work the mines, and utilise the forests; and no inducement was presented to emigrants to seek for a home in Newfoundland. The case is now altered. Railroads designed to open up the interior are under construction; mines and forests are being developed; agriculture is rendered practicable. We may now fairly expect that ere long a stream of thrifty immigrants will pour in to the colony, and turn the fine natural resources to industrious account.

The last census, that of 1874, presents some results that will be interesting. The number of males was found to be 82,963; the number of females 77,791. The number of males between 50 and 70 years of age was 6,798; of females between 50 and 70, 6,085; of males from 70 upwards, 1,660; of females same age, 1,435; number of married males, 24,402; of married females, 24,380. Of the total population of 161,374, 153,621 were born in Newfoundland; the remainder in other countries. The number of aged and infirm paupers was 1,146; of deaf and dumb, 83; of blind, 107; of lunatics, 137; of idiots, 100. Of Indians (Micmacs) there were 151.

The number of churches belonging to the Church of England was 103; to the Church of Rome, 77; to the Wesleyans, 60; to others, 4. There were 4 bishops; 120 clergymen or ministers; 30 lawyers; 41 doctors; 589 merchants or traders; 1,004 farmers; 2,171 mechanics; 45,845 persons engaged in catching and curing fish; 26,377 able-bodied seamen engaged as fishermen; 18,935 children attending school; 20,758 children not attending school; 24,050 inhabited houses by 26,916 families.

The same census showed that there were 8,689 men on board 1,197 vessels that were engaged in the sea and other fisheries. The number of acres of land under cultivation was 36,339; the number of head of cattle was 6,665; of milch cows, 7,273; of horses, 4,057; of sheep, 28,766; of swine, 22,955.

The present population of the island is composed mainly of two elements, the Celtic, or Irish, and the Saxon, or English. The Roman Catholic portion of the population are the descendants of Irish emigrants; the Protestant portion are the descendants of English settlers, chiefly from the south-western counties of England. There are besides a small number of Scotch.

REVENUE, FINANCIAL CONDITION OF THE COLONY, TRADE,
EXPORTS, IMPORTS, SHIPPING.

The following Table shows the revenue and the value of the exports and imports from 1870 to 1881 inclusive:

Years.	Revenue.	Exports values.	Imports values.
1870	\$831,423	\$6,984,543	\$6,655,849
1871	749,981	8,154,206	6,039,227
1872	812,752	7,166,443	6,716,068
1873	801,412	7,700,799	6,766,603
1874	841,588	8,569,960	7,354,689
1875	830,219	8,214,768	7,058,372
1876	855,228	8,168,540	7,205,907
1877	872,913	7,625,441	7,363,634
1878	839,640	6,594,807	6,868,723
1879	962,921	7,168,924	7,261,002
1880	897,474	6,759,875	6,966,243
1881	1,003,803	9,365,304	6,863,708

The revenue is chiefly derived from duties levied on imports. These duties are partly *ad valorem* and partly

specific, but only to a very slight extent differential, the tariff being designed for revenue purposes only, not for protection. There are no direct taxes of any kind, and no city or town corporation. Even the capital is not incorporated. All expenses for making and repairing roads, streets, bridges, breakwaters, public wharves, etc., are defrayed out of the general revenue, the Board of Works having charge of this department. The provision for the poor, for the maintenance of a police force, and indeed for the whole Civil Service is also chargeable on the general revenue. The *per capita* taxation in 1882 is only \$4.94 per head of a population of 185,368. When the absence of municipal taxation is taken into account it will be seen that the people of Newfoundland are the most lightly taxed of all the inhabitants of the British colonies. Out of a total revenue of \$1,003,803 in 1881, no less than \$916,938 were derived from customs' duties; \$11,638 from Crown lands; \$17,400 from postal revenue; and \$29,736 from interest on the Halifax Fishery Award.

The prosperity of the colony may be inferred from the steady advance of the revenue without any additional taxation, till in 1881 it reached over one million dollars, and is now quite adequate to meet all the demands of the public service. Within the last twenty years the revenue has more than doubled. In 1860 the revenue amounted to \$534,432; in 1861, to \$360,172; in 1862, to \$467,716. In 1881 it amounted to \$1,003,803.

The financial position of the colony is exceptionally good. The consolidated and debenture debt of the colony on the 31st December, 1881, was \$1,351,008. The amount *per capita*, with a population of 185,000, is thus a little over seven dollars. In Canada the public debt was a few years ago \$29 per head, and is now considerably more. In Victoria it is \$104 per head; in New Zealand, \$279; in

South Australia, \$176; in New South Wales, \$73; in the Cape of Good Hope, \$48; in Newfoundland, \$7.

This, however, is not all. This small public debt is *nominal* not *real*. Of the whole sum of \$1,351,008, the Savings Bank, which is a Government institution, holds \$593,304. An Act was passed by the legislature in 1879, entitled "An Act to provide for the payment of the public debt of this colony," by which it was enacted that "the profits of the Newfoundland Savings Bank now existing, and the profits of the said Bank, as they shall arise from time to time, together with the sum of \$8,651 now held by the said Bank as a sinking fund, and all interest accruing thereon, shall be constituted a sinking fund for the liquidation of the public debt of this colony; and that such fund be applied in the first instance towards the payment of all debentures of the colony which are or may be held by the said Newfoundland Savings Bank." The effect of this Act in reducing the public debt will be that in twenty-one years from 1879, even supposing there should be no increase in the present amount of deposits and profits, the debentures held by the Bank will be paid off. So much of the funded debt being thus provided for, there remains only \$757,704. But as an offset against this amount the colony has now placed to its credit, at four per cent., \$741,814, being a portion of the Halifax Fishery Award of one million dollars. This almost covers the remainder of the public debt. Virtually, therefore, the colony is in the unique and enviable position of being free from public debt, the whole of the existing debt being provided for. Such being the financial position of Newfoundland, with an increasing revenue and without debt, it is in a most favourable condition for undertaking public works of general utility; and should it be found necessary at any time to contract a loan for such purposes, with such unquestionable security to offer, money can be borrowed on the most favourable terms. How small an

amount it has been found necessary to borrow of late may be judged of by the fact that during the last eight years the public debt has been increased but thirty-six cents per head of the population—a scarcely appreciable amount. The sound condition of the revenue is apparent from facts already stated. In the thirty years which have elapsed since 1852 it has risen from \$335,700 to over a million dollars.

The following statement shows the estimated charges on the revenue for the year 1882 :

	Dols.	Cts.
Relief of the poor and the institutions connected therewith	142,350	0
Steam and mail service subsidies	140,760	0
Postal service	29,000	0
Telegraph extension, maintenance, and interest	10,853	84
Education	91,860	0
Roads and bridges	108,000	0
Public works (special votes)	20,000	0
Magisterial and police department	65,797	0
Interest on public debt	63,000	0
Interest on railway loan	4,700	0
Geological and land survey	5,500	0
Court-house and gaol supplies	9,000	0
Ferries	2,931	0
Pensions	15,889	61
Legislative contingencies	31,000	0
Judicial, civil, and revenue department	128,395	0
Ship-building (in aid of)	10,000	0
In aid of lighthouses, repairs and maintenance	8,000	0
Western herring fisheries protection	2,500	0
In aid of cleansing St. John's streets	4,000	0
In aid of gas companies, St. John's and Harbour Grace	2,900	0

	Dols.	Cts.
Repairs of public buildings	7,540	0
Printing, postage, telegraphs, and shipwrecked crews	3,650	0
For sundry other sources	17,522	0
To defray expenses for general election 1882	7,000	0
To defray expenses for vaccination	3,000	0
For encouragement of home industries	1,500	0
Railway subsidy and contingent expenses	20,000	0

The following extracts from the customs tariff will show the nature of the duties levied on imports :

Agricultural implements	Free.
Apples, per barrel	30 cents.
Bacon, hams, tongues, etc., per cwt.	\$2.
Butter, per cwt.	\$1 20 cents.
Candles	20 per cent.
Cheese, per cwt.	\$1 50 cents.
Coal brought into St. John's, per ton	25 cents.
Confectionery, per cwt.	\$3 50 cents.
Eggs	Free.
Flour, per barrel	20 cents.
Fresh meat and poultry	5 per cent.
Horses, each	\$2 30 cents.
Indian meal, per barrel	15 cents.
Lumber, per thousand feet	\$1.
Manufactures of wood	20 per cent.
Oats, barley, rice	8 per cent.
Oxen, cows	5 per cent.
Oatmeal, per barrel	20 cents.
Pig iron	Free.
Pork, per barrel of 200 lb.	\$1.
Ready-made clothes	20 per cent.
Steam-engines, boilers, etc.	Free.
Tobacco, manufactured, per lb.	12 cents.

Goods, wares, merchandise not other- wise enumerated	13 per cent.
Brandy, per gallon.	\$1 20 cents.
Gin „	\$1.
Whisky „	\$1.
Rum „	75 cents.
Wines—Champagne, per gallon	\$2.
„ Port, Madeira „	\$1 50 cents.
„ Spanish red, claret, per gal.	33 cents.
„ Rhenish „	60 cents.

The exports of Newfoundland, with the exception of copper ore, are fish products of various kinds. The following Table shows the gradual progress in the values of the exports during each group of five years, from 1852 to 1881 :

Average value of exports.	Group of five years.
1852 to 1856	\$5,166,129
1857 „ 1862	6,132,392
1862 „ 1867	6,080,445
1867 „ 1871	7,011,407
1872 „ 1876	7,847,661
1877 „ 1881	7,159,522

While the foregoing Table shows an actual advance in the value of exports since 1852, yet when the increase of population is taken into account there appears an actual decline in the *per capita* value of the exports, and also of the imports, as the following comparative statement sufficiently shows :

Year.	Value of exports per head.	Value of imports per head.
1860	\$47 82 cents	\$44 52 cents.
1870	49 69 „	45 42 „
1874	53 56 „	45 57 „
1879	39 90 „	40 74 „
1880	37 33 „	38 33 „

These figures indicate a gradually decreasing average in the earnings and incomes of the people, showing that the fisheries, hitherto the chief reliance, are inadequate to meet the wants of a growing population, and that other industries, especially agriculture, are essential.

The Table of exports and imports shows that for the years 1879 and 1880 the average annual volume of the trade of Newfoundland amounted in value to \$14,077,971.

The Customs returns for 1881 show the value of the exports for that year to the different countries named, as follows:

Country.	Value of exports thereto. Dols.	Value of imports therefrom. Dols.
The United Kingdom	2,255,764	2,396,424
Brazil	2,120,773	—
Portugal	1,183,235	47,210
Spain	629,469	152,638
United States	309,680	1,931,741
Italy	207,284	—
Hamburg	48,480	1,744
Spanish West Indies	47,491	68,387
Sicily	15,710	9,920
British West Indies	340,124	259,688
Dominion of Canada	386,833	1,956,524
Gibraltar	163,834	—

The total exports and imports for 1881 are grouped as follows :

Country.	Value of exports thereto. Dols.	Value of imports therefrom. Dols.
United Kingdom	2,255,764	2,396,424
British Colonies	905,610	2,234,077
Foreign Countries	4,593,991	2,233,207
	<u>7,755,360</u>	<u>6,863,708</u>

The foregoing figures demonstrate that the largest volume of trade is between Newfoundland and the United Kingdom ;

and that the best customers for the fish products, next to the United Kingdom, are Brazil, Portugal, Spain, British West Indies, Canada, and the United States. Of the whole volume of trade, about 17 per cent. is with Canada, and about 15 per cent. with the United States.

The following comparative statement will be found interesting as showing the trade of the colony forty years ago, and affording data for comparing that period with the present, in regard to the revenue imports and exports :

COMPARATIVE STATEMENT OF THE QUANTITY AND VALUE OF THE STAPLE ARTICLES OF PRODUCE EXPORTED IN THE FOLLOWING YEARS :

Years.	Dried fish. Quintals.	Oils. Gallons.	Seal skins. No.	Salmon. Tierces.	Herrings. Barrels.	
Quantity.	1840	915,795	3,206,583	631,385	3,396	14,686
	1841	1,009,725	2,673,574	417,115	3,642	9,965
	1842	1,007,980	2,262,031	344,683	4,715	13,839
	1843	936,202	3,111,312	651,370	4,058	9,649
	1844	852,162	3,605,868	685,530	3,753	13,410
	1845	1,000,333	2,219,301	352,202	3,545	20,903
	1847	837,973	2,224,233	436,831	4,917	9,908
	1848	920,366	2,610,820	521,004	3,822	13,872
	1849	1,175,167	2,282,496	306,072	5,911	11,471
	1850	1,089,182	2,636,800	440,828	4,600	19,556
	1851	1,017,674	2,744,910	511,630	4,025	36,259
	1852	973,731	2,931,767	534,378	3,473	42,716
Value.	1840	£576,245	£305,197	£39,408	£12,939	£9,036
	1841	605,014	266,832	29,961	12,302	6,361
	1842	561,950	233,313	23,200	13,078	7,119
	1843	532,194	335,975	40,497	12,216	4,570
	1844	482,480	315,690	39,648	11,945	6,065
	1845	536,990	243,640	40,123	12,794	11,234
	1847	489,940	229,172	46,280	9,782	5,111
	1848	491,924	350,579	58,426	6,597	7,644
	1849	588,728	213,742	33,780	10,815	5,671
	1850	532,969	309,928	66,350	9,200	9,779
	1851	493,014	319,977	76,596	12,024	18,261
	1852	463,741	363,607	76,790	10,252	14,411

COMPARATIVE STATEMENT OF THE COLONIAL REVENUE AND EXPENDITURE IN THE FOLLOWING YEARS :

	1850	1851	1852
Colonial duties ...	£59,381 19 0	£74,205 4 1	£62,300 11 8
Light dues ...	2,390 16 11	2,467 18 8	2,781 3 0
From other sources ...	5,142 8 0	3,722 11 5	19,241 11 6
Totals ...	£66,915 3 11	£80,395 14 2	£84,323 6 2
Expenditure ...	£71,807 1 5	£75,770 5 1	£90,409 8 10

VALUE OF IMPORTS AND EXPORTS IN THE FOLLOWING YEARS:

	1848	1849	1850	1851	1852
Imports ...	£769,628	£770,190	£867,316	£943,191	£795,758
Exports ...	887,581	876,567	975,770	959,751	965,772

SHIPPING.

On December 31st, 1881, the registered tonnage of the colony was 1,895 vessels, having a tonnage of 89,655 tons. Of these, 1,866 were sailing vessels, and 29 were steamers. In addition, 60 vessels were engaged in the foreign carrying trade, which, though owned in Newfoundland, were registered in Britain.

The following Table shows the increase in the tonnage since 1859 :

	Vessels.	Tons.
In 1859 . . .	1,342 . . .	89,670
„ 1869 . . .	1,459 . . .	75,445
„ 1879 . . .	1,718 . . .	82,564
„ 1881 . . .	1,895 . . .	89,655

The number of vessels entered at the various ports in 1881 was 1,366 ; their tonnage, 158,345 ; their crews, 7,991.

The number of vessels cleared at the various ports in 1881 was 1,018 ; their tonnage, 132,743 ; their crews, 6,630.

The number of steamers entered in 1881 was 190 ; their tonnage, 162,285 ; their crews, 7,338.

The number of steamers cleared at the various ports in 1881 was 181 ; their tonnage, 160,268 ; their crews, 7,183.

The number of vessels built in the colony in 1881 was 76 ; their tonnage, 3,361. The bounty paid on them was \$10,013. Twenty-seven vessels were built on which no bounty was paid : their tonnage was 582.

CHAPTER II.

GOVERNMENT.

The constitution—Executive and public officers—The electoral districts—Salaries of officials—The judicial department—Constitution and character of the law courts.

IN 1832 the boon of a representative government and a constitution was granted to Newfoundland. The island was divided into nine electoral districts, each of which was to have one or more representatives, according to its population, the whole number of members to be fifteen. The right of voting was conferred on every man who for one year immediately preceding the day of election had occupied a dwelling-house within the island, either as owner or tenant. A legislative and executive council, composed of seven persons, appointed by the Crown, was also created. The system did not work well, and in 1842 the constitution was suspended, and the council abolished as a distinct branch of the Legislature, and its members were authorised to sit and vote in the House of Assembly, on the same footing as if they were elected members. This was known as "The Amalgamated Legislature." At length, in compliance with the strongly-expressed desire of the people, "Responsible Government" was conceded to the colony in 1855. This was simply the application of the principles of the British constitution to the government of the colony.

It provided that the country "should be governed according to the well-understood wishes of the people." The party who were sustained by a majority in the Legislature had at their disposal the appointment to the principal offices in the colony. By them, too, the Executive Council was selected. Two legislative Chambers were appointed. The House of Assembly, to be elected, the Legislative Council to be nominated by "The Governor in Council."

This form of government, which has worked satisfactorily, is that by which the affairs of the colony are at present regulated. It consists of a Governor, who is appointed by the Crown, and whose term of office is usually about six years; an Executive Council, chosen by the party commanding a majority in the Legislature, and consisting of seven members; a Legislative Council, or Upper House, of fifteen members, nominated by the Governor in Council, and holding office for life; and a House of Assembly of thirty-one members, elected every four years by the votes of the people. The chief public officers of the Government, selected from the party who command a majority in the Legislature, are the Colonial Secretary, who is also Secretary of the Executive Council, the Attorney-General, the Receiver-General, the Solicitor-General, the Surveyor-General, Financial Secretary, Chairman of the Board of Works, and Auditor of Public Accounts.

There are fifteen electoral districts, sending 31 members, divided as follows :

					Members.
St. John's East	...	...	...	...	3
St. John's West	...	...	...	...	3
Harbour Grace	...	...	...	...	2
Carbonear	...	...	...	...	1
Harbour Maine	...	...	...	...	2
Port-de-Grave	...	...	...	...	1
Bay de Verds	...	...	...	...	1

	Members.
Trinity	3
Bonavista	3
Twillingate and Fogo	3
Ferryland	2
Placentia and St. Mary's	3
Burin	2
Fortune Bay	1
Burgeo and La Poile	1

The qualification of persons to be elected to serve as members of the House of Assembly is a net annual income, arising from any source whatever, of \$480, or the possession of property, clear of all incumbrances, exceeding \$2,400. They must have resided in the island for two years previous to each election, be over twenty-one years of age, and be British subjects or lawfully naturalised.

The members of the House of Assembly are elected by a household suffrage. All persons who, either as owners or tenants, have occupied a dwelling-house for two years next before the day of election, are entitled to vote.

In addition to the electoral districts enumerated already, there will be two others on the western coast, each entitled to elect a representative at the next general elections, in November, 1882. The Act enfranchising the so-called "French Shore," has received at length the royal assent; thus the next House of Assembly will consist of thirty-three members.

The members of both branches of the Legislature are paid. Members of the House of Assembly, if resident in St. John's, receive \$194 per session; if resident elsewhere, \$291 per session. The members of the Legislative Council receive \$120 per session; the president, \$240. The Speaker of the House of Assembly receives \$1,000 per session.

The Legislature is usually summoned to meet "for the

despatch of business" about the beginning of February, and the session generally lasts till the end of April.

The Governor receives a salary of \$12,000 per annum, paid by the colony; his private secretary, \$924; his orderly, \$300; keeper of the lodge, \$277; and light and fuel are provided for Government House.

The salaries of the Colonial Secretary, the Attorney-General, the Receiver-General, and the Surveyor-General are each \$2,400 per annum. The Chairman of the Board of Works receives \$2,000 per annum; the Financial Secretary, \$1,384; the Auditor of Public Accounts, \$1,000; Solicitor-General, \$1,200. The legislative contingencies average \$27,000 per annum.

The Supreme Court was instituted in 1826 by the promulgation of a Royal Charter. It is composed of a Chief Justice and two Assistant Judges, appointed by the Crown. The Chief Justice has "rank and precedence above and beyond all persons within the colony and its dependencies, excepting the Governor or Acting Governor for the time being, and excepting all such persons as by law or usage take place in England before the Chief Justice of the King's Bench." The Chief Justice may accept the office of Administrator of the Government of the Colony, and also of Judge of the Vice-Admiralty Court, with the emoluments and fees belonging to each office. The Supreme Court holds two terms or sessions each year, in St. John's, one of them commences on the 20th of May, and the other on the 20th of November. There is a Chief Clerk and Registrar of the Supreme Court. There are circuits of the Supreme Court held in the northern and southern districts of the island, at such times and places as may be fixed by the proclamation of the Governor. These are presided over by the Chief Justice, or one of the Assistant Judges, in rotation. The salary of the Chief Justice is \$5,000; of each of the Assistant Judges, \$4,000. They hold their appointments for life.

The Court of Labrador has civil and criminal jurisdiction over such parts of Labrador as lie within the Government of Newfoundland. It is presided over by one Judge, who is nominated by the Governor in Council. His salary is \$1,154.

The Central District Court is a Court of Record, held in St. John's, for the said district, for the adjudication of civil causes, and sits whenever business requires. There are two Judges, appointed by the Governor in Council; the salary of each is \$2,000. They may jointly or severally hold such Court, or when business requires, may sit separately. There is also a District Court in Harbour Grace, with jurisdiction over the electoral district of Conception Bay. It is presided over by one Judge, who is *ex officio* a Justice of the Peace. There is a Sheriff for each judicial district of the island, who is appointed by the Governor in Council.

Courts of General and Quarter Sessions are held in the island, at such places as may be determined by the proclamation of the Governor. They are presided over by Stipendiary Magistrates or Justices of the Peace.

"The Law Society of Newfoundland" is constituted by Statute, and is under the inspection of the Judges of the Supreme Court for the time being. "No person is admitted by the Supreme Court to practise as an attorney unless upon actual service of five years with some practising attorney of the island; or, if a regular graduate of any college in Her Majesty's Dominions of four years, or who, having been entered on the books of 'The Law Society' as a student at law, shall have been subsequently called to the Bar in England, Scotland, or Ireland, or any of Her Majesty's Colonies." Any person who has been called to the Bar in England, Scotland, or Ireland, or any of the Colonies, upon producing evidence thereof, and undergoing a satisfactory examination, may be called by the Law Society to the degree of barrister.

CHAPTER III.

ROADS, RAILWAYS, AND STEAM COMMUNICATION.

The first highway—Postal roads and mail routes—Preliminary survey for the first railroad—Subsidy of money and lands offered by Government for construction of the road—Progress of the work—Turning of the first sod, and running of the first locomotive.

OWING to the mistaken policy pursued by the British Government, in connection with Newfoundland, as detailed in our historical sketch, it was not till the year 1825, or fifty-seven years ago, that the first road was constructed in the island. The cultivation of the soil was not regarded as a legitimate pursuit in Newfoundland, so that the idea of making roads to reach and open up good lands for settlement and cultivation was not entertained. At length a better era dawned, and the first step in progress was taken by Sir Thomas Cochrane, Governor, who in 1825 constructed a good road, nine miles in length, from St. John's to Portugal Cove, on the shore of Conception Bay. Opposite the village of Portugal Cove, on the northern side of the bay, was the second largest settlement in the island, Harbour Grace, the centre of a considerable population. By establishing regular boats to cross this bay, a route was established by which nearly half the population

then living in the country were provided with a rough means of intercommunication. A road to Torbay, a village north of St. John's, and another along a beautiful valley through which flows a small stream falling into St. John's harbour, to a spot now called Waterford Bridge, speedily followed. Then the more distant settlements began to connect themselves with each other by roads and finally with the capital. In several directions roads radiating from St. John's were constructed, along which farms and neat farmhouses were soon visible. One of these roads extended first to Topsail, on Conception Bay, thence to Holyrood at the head of the bay, and onward to Salmonier, St. Mary's, and Placentia. It is eighty miles in length to Placentia, and the St. Mary's branch is twenty-two miles additional. Road-making has been carried on ever since, and of late about \$100,000 per annum have been devoted to making and repairing roads and bridges. At the present time there are about seven hundred and twenty-seven miles of postal roads, and one thousand seven hundred and thirty miles of district roads. The Great Northern Mail route, when completed, will be one hundred and thirty-seven miles in length; and one thousand two hundred miles are in process of making.

The Allan Line of steamers call at St. John's on their outward and homeward voyages between Liverpool and Halifax. Thus the colony has fortnightly communication with Great Britain and America. During three months of winter these steamers run from Liverpool to Halifax without calling at St. John's, the connection during this time being kept up fortnightly by a mail steamer, plying between St. John's and Halifax. A subsidy of \$69,120 per annum is paid by the colony to the Allan Company for these services. In addition, two local steamers ply between St. John's and the settlements north and south, carrying passengers, mails, and goods. In the summer season, the steamer plying

northward connects with the Labrador steamer at Battle Harbour. Another mail steamer plies on Conception Bay. The amount of subsidies for local steam service is \$52,300 per annum, and for both oceanic and local steam services \$121,420 per annum.

The first step towards the construction of a railway was taken in 1875, when a preliminary survey of a line from St. John's to St. George's Bay, distance about two hundred and sixty miles, was made, under the direction of Mr. Sandford Fleming, who was then engineer-in-chief of Canadian railways. In a valuable paper which he published some years previously, he had pointed out that the shortest and safest travel-route between America and England was across Newfoundland. He suggested a fast line of steamers from Valentia, Ireland, to St. John's, Newfoundland, carrying only mails, passengers, and light express matter. Thence a railway to St. George's Bay, and another line of steamers between that point and Shippegan in the Bay of Chaleurs, New Brunswick, where connection with Canadian and American railways could be established. By this route he calculated that the ocean passage would not exceed four days, and that passengers and mails from London would reach New York in seven days. The Government of Newfoundland obtained from the Legislature a money grant for a preliminary survey of a railway from St. John's to St. George's Bay, being the land portion of this route. This survey was made in 1875, and the result showed that there were no serious engineering difficulties in the way, and that the line could be constructed at a moderate cost.

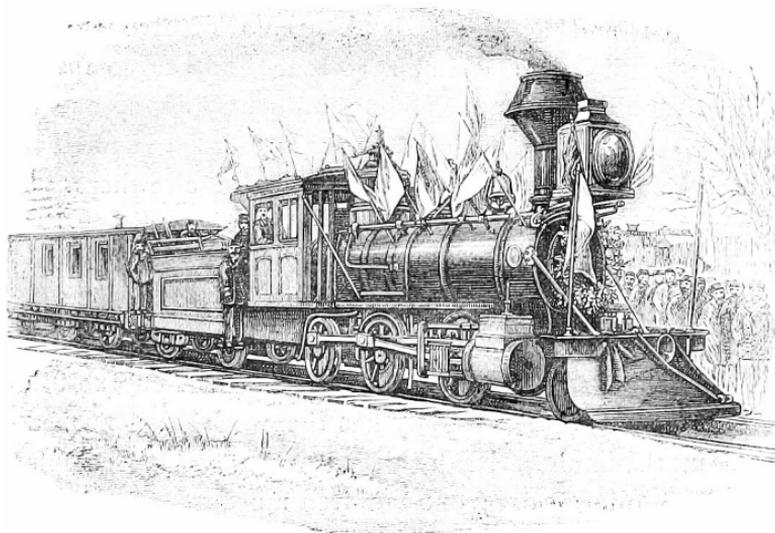
Two years elapsed before any further steps were taken. At length, in 1878, the Hon. W. V. Whiteway, Premier (now Sir William V. Whiteway), undertook to grapple with the matter in earnest. With the concurrence of the government of which he was leader, he introduced a series of resolutions, which were warmly received and accepted by

the Legislature. Among other things it was resolved that an annual subsidy of \$120,000 per annum and liberal grants of Crown lands along the line should be given to any company which should construct and continue in operation a line of railway across Newfoundland, connecting by steamers with Britain on the one hand, and with the Intercolonial and Canadian lines on the other, across the Gulf of St. Lawrence. Steps were immediately taken by the Newfoundland Government to have this proposal advertised in England and elsewhere. But an unexpected difficulty arose. The Imperial Government declined to sanction the undertaking, on the ground that the terminus on the western side of the island, at St. George's Bay, would be on that part of the coast on which the French had fishery rights secured by treaty, and that negotiations in regard to those rights were then in progress. Thus the hopes of the colony were blighted in regard to this project. The Government waited patiently two years, in expectation that diplomacy would remove the difficulty, but without result. Sir William Whiteway and the Government then resolved to take the matter up in another form. Instead of constructing a line across the island, which would be a link in the chain of communication between the old and new worlds, they proposed to build a narrow-gauge railway suited to local requirements, and such as would be within the means of the colony. The resolutions which Sir William Whiteway submitted to the House of Assembly proposed the construction of a narrow-gauge railway from St. John's to Hall's Bay, the centre of the mining region, with branches to Harbour Grace and Brigus, the total length of which would be about three hundred and forty miles. Such a line, Sir William pointed out, would open up for settlement the most fertile agricultural and the best timber lands in the island more especially the great valleys of the Gander and

Exploits. It would place the mining region in connection with the capital, and thus impart a great impetus to mining industry by increasing facilities for its prosecution; and it would also traverse and open up a large extent of mineral lands which there was every reason to believe was of great value, and which was as yet almost unexplored. His proposal was that the colony itself should undertake the work, and he showed that the finances of the country were in such a healthy condition as to warrant the enterprise. A joint committee of both branches of the Legislature was appointed to consider the proposal, and their report was strongly in favour of the construction of the railway. The report dwelt on the necessity which existed for opening up new industries for the employment of the increasing population, for whose support the fisheries were now utterly inadequate. It referred to the immense mineral wealth of the country, which only required capital for its development; to the vast extent of fertile lands which the geological survey of the island had made known; to the large importations of agricultural produce and live stock, all of which could be raised in the country; to the advantages the island possessed as a grazing country, and to the facilities of exporting live-stock to England; and to the benefits that would flow from the remunerative employment furnished to the people by the construction of a railway. It concluded by recommending the passing of an Act authorising a loan of the amount required to construct the line, within the limits of one million pounds sterling, and in sums not exceeding half-a-million of dollars in any one year. This report was adopted by the Legislature by an overwhelming majority of both branches. Railway commissioners were appointed, and engineers were employed in the summer and autumn of 1880 in making a survey of the first hundred miles.

According to this arrangement then, the colony, through

the Government, was to construct the proposed line of railway, the necessary funds to be raised by a loan on the credit of the colony. When, however, the Legislature met in February, 1881, two offers came before it, one from a Canadian, and another from an American syndicate—to build and operate the proposed line of railway. This at once raised the question whether the railway should be carried out through a contract with a company instead



FIRST EXCURSION TRIP ON THE NEWFOUNDLAND RAILWAY.
"TRAIN ABOUT TO START."

of by the Government itself. There were weighty objections of a political character to the work being placed under the control of Government, and it was considered that the construction of the line would be more economically carried out by contract. The Legislature, therefore, proceeded to formally consider the two propositions. The result was that the proposal of the American syndicate was accepted by an overwhelming majority in the House of Assembly.

The leading features of the contract entered into between the colony and this company are as follows:

Steel rails of the best quality to be used; the line of railway to run from St. John's to Hall's Bay, with branches to Brigus and Harbour Grace; the distance estimated at three hundred and forty miles.

A money subsidy of \$180,000 per annum, to be paid half-yearly by the Government, for thirty-five years conditional on the efficient maintenance and operation of the road, the proportions of this subsidy to attach while the road is in course of construction, and as each five miles are completed and approved, land grants of five thousand acres per mile of good land are secured to the company in alternate blocks along the line in quantities of one mile along the line, and eight miles in depth; and if not obtainable along the line, to be selected elsewhere. The company bind themselves to build a substantial, reliable, and efficient road, subject to approval by a government inspector, and to complete it within five years.

The first sod of the railway was turned on the 9th of August, 1881, and so rapidly has the work been pushed on that in September, 1882, thirty-five miles were completed and in running order; one hundred miles were located, and the remainder of the line northward under survey. Including outlay for labour, purchase of rails and sleepers for future use, rolling stock, construction of wharf and waterside premises on the harbour, the company had expended over a million dollars on the enterprise in July, 1882. All the engagements of the company have been faithfully complied with. At the present rate of progress the work will probably be completed within three years.

When the Legislature met in February, 1882, an application came before it for a "Charter of Incorporation for the Great American and European Short-line Railway Company." The object of this company is to carry out the project already referred to, of making the great travel-

route between America and Europe across Newfoundland. Their plan, however, is a vast improvement on that of Mr. Sandford Fleming. They propose to construct a first-class railway, standard gauge, from the eastern coast of Newfoundland to a point in the neighbourhood of Cape Ray; thence a steam ferry is to carry mails and passengers to a point near Cape North, in Cape Breton, a distance of fifty-six miles; from which point a railway is to be built to the Strait of Canso. This being crossed, the railway system of Canada and the United States is reached, and travellers can proceed to all quarters. A line of the swiftest steamers is to ply between a port on the west coast of Ireland and the Newfoundland port at the eastern terminus of the railway. The company calculate on shortening the time of travel between London and New York by two days. They claim that "the short ocean passage, the great saving in time, together with the superior comforts and safety of this line, will soon make it the most popular route for first-class trans-Atlantic travel, and will also attract a very large part of the emigration that now goes direct to New York and other United States and Canadian ports."

A select committee of the House of Assembly was appointed to consider and report on his application. Their report was highly favourable. In it the committee said: "The value of our geographical position in the direct line of travel between Europe and America receives in this scheme its due recognition, and the importance of this fact can hardly be exaggerated. When the project is realised this island will occupy a proud place in the economy of trans-Atlantic travel, for the advantages of the short sea route will assert themselves, and will become permanently accepted. The voyage between the Irish coast and this island is free from all unseen dangers, and no steamer running between these limits has ever met with serious disaster. The

distance of sea voyage is but one thousand six hundred and forty miles, and experience shows that the approach to the Newfoundland coast is rarely affected by the presence of fog, despite the popular theory in this respect. On the score of safety no other trans-Atlantic route presents equal attractions, and it is matter of record that the losses of ships and life by stranding on Atlantic voyages have, in almost every instance, taken place to the westward of this island." The report further enlarges on the immense benefits such a line of railway would confer on Newfoundland, as it would complete the line now under construction, unite the eastern and western coasts, open up the fertile lands and mineral treasures of the latter, and promote its settlement, lead to a very large monetary expenditure among the people, and bring the island into daily communication with the great centres of trade and civilisation of Europe and America.

The charter asked for was readily granted by the Legislature. A land-grant of five thousand acres per mile along the line, in alternate blocks, and an exclusive right of way for forty years, were secured to the company by the charter. The importation, free of duty, of all materials for the construction and maintenance of the line, was also permitted. The project is supported by a large number of wealthy and intelligent capitalists. Developing, as is proposed, what is claimed to be the shortest and safest route between the two hemispheres, its establishment is only a question of time.

CHAPTER IV.

EDUCATION.

Rise and progress of educational movements—Legislative enactments—Denominational appointments—Government grants—The Colonial and Continental Church Society.

It was not till the year 1843 that the Legislature took any action in connection with the promotion of education in the colony. Previous to that date all educational efforts proceeded from religious bodies or individuals, and being thus dependent on mere desultory and unorganised labours, education was in a low condition, and in the widely-scattered settlements many of the young had grown up ignorant of the very rudiments of knowledge. Taking into account the disadvantages under which the people laboured in regard to education, it must be admitted that the educational progress made during the last thirty-nine years is of a very gratifying character. The interest in education is deepening and extending, and its importance is more fully realised among the great body of the people. A very liberal provision is made for it by the Legislature, and gradually improvements have been introduced. No doubt very much yet remains to be done, but the advances already made, and the enlightened zeal in the cause of education now awakened afford sufficient guarantees of future progress.

In 1843 the initiatory step was taken by a Legislative Act granting a sum of 5,100*l.* annually for the promotion

of education, one half the amount being appropriated in support of Protestant and one half in support of Roman Catholic schools. Educational districts were defined, and a board appointed for each. Where the majority of the population were Protestants, the schools were to be under a Protestant board; where Catholics preponderate, the schools were to be under a Catholic board. An effort was also made to provide for the higher education by voting 3,000*l.* for the erection of an academy in St. John's, with salaries for three teachers. From a variety of causes this academy, in which all denominations were to receive an united education, proved an entire failure. After a trial of six years it was broken up; and in 1850 three academies were founded on the denominational principle, one Roman Catholic, a second Church of England, and a third in which Wesleyans, Presbyterians, and Congregationalists were united. At a later date the Wesleyans obtained a separate academy for themselves, so that now academic education is conducted in four distinct establishments in St. John's. This may seem a waste of power, but in the present state of denominational feeling separate education is perhaps unavoidable. Denominational zeal perhaps furnishes a stimulus to educational efforts which would otherwise be wanting. In the elementary schools the denominational principle has also been carried out, and each religious denomination now receives a grant for education from the public funds in proportion to its numbers. Separate boards of education in the different districts have charge of the schools. Three inspectors are appointed by Government, one for Roman Catholic schools, one for Church of England schools, and one for Wesleyan schools. The gentlemen who hold these appointments are zealous and able educationists, and are using every effort to advance the cause of education. Their annual reports show a decided progress in recent years, and the system appears to be working well.

Instead of a normal school, an arrangement is in operation for the training of pupil teachers in the academies. After going through a certain course of education, these pupil teachers have to undergo examinations, are graded according to their merits, and on passing receive certificates, without which they are not eligible to be appointed to take charge of schools. This, in due time, will elevate the standard of education, and incompetent teachers will gradually disappear. No doubt normal schools will be the next step. The drawback under a denominational system such as this is that the salaries of teachers are lower than they would be were there an united system of education in operation. More money, too, is required for the erection of school houses. Denominational lines are drawn more deeply by the education of the young in separate schools. The state of religious feeling, however, does not at present admit of an united education, whatever the future may bring about; and the denominational system is working to the satisfaction of those interested.

A brief account of the present condition of education will be interesting, and will show the progress already made.

The total amount of the annual legislative grant for elementary schools and academies for the whole of Newfoundland and Labrador is \$93,952. Taking the population as given in the last census of 1874 at 161,000, this would be a *per capita* amount of 58 cents for the entire population for academic and elementary education.

The Elementary Education Grant is	\$70,311
For Pupil Teachers	4,061
For the Encouragement of Teachers	2,000
For Inspection	4,000
	<hr/>
Total	<u>\$80,372</u>

This gives a *per capita* grant of 49 cents for elementary education. The four academies and two grammar schools receive \$9,880 per annum, or 6 cents *per capita* of the entire population.

The education grant is divided among the different religious denominations in proportion to their numbers as follows:

Church of England	\$32,144
Church of Rome	35,571
Methodists	20,350
Presbyterians.	898
Congregationalists	214
Harbour Grace Grammar School	924

The amount distributed among teachers of elementary schools as salaries is \$55,418 per annum. The teachers of academies receive as salaries \$10,588.

Denominationally the salaries are distributed as follows :

SALARIES OF ELEMENTARY SCHOOLS.

Church of England	\$24,820
Roman Catholic	16,083
Methodists	14,230
Congregationalists	285
Total	<u>\$55,418</u>

SALARIES OF ACADEMIES.

Church of England	\$3,115
Roman Catholics	1,160
Methodists	3,400
General Protestants	1,100
Carbonear Methodist Grammar School	600
Harbour Grace Grammar School	1,213

The total number of elementary schools in 1881 was 416. Of these 157 belonged to the Church of England, 158 to the Roman Catholics, 99 to the Methodists, and 2 to the Congregationalists. There are 4 academies and 2 grammar schools.

The total number of pupils in the elementary schools in 1881 was 24,292. Of these 9,163 belonged to the Church of England, 9,014 to the Church of Rome, 5,284 to the Methodist Church, and 92 to the Congregational Church.

The total number of pupils in the academies and grammar schools in 1881 was 674. Thus the total number of scholars is 24,971. The total number of pupil teachers in 1881 was 84.

Since the denominational principle was fully carried out, in the subdivision of the education grant, the increase of schools has been 59, the increase of teachers, 89; the amount spent in erecting school houses and teachers' houses, \$100,695. The *per capita* cost of the education of scholars is \$3 61c., exclusive of fees.

The salaries of teachers under the Methodist boards are as follows:

Male.		Female.	
1st Grade . . .	\$300	1st Grade . . .	\$200
2nd Grade . . .	250	2nd Grade . . .	180
3rd Grade . . .	180	3rd Grade . . .	160
Maximum . . .	400	Maximum . . .	250
Minimum . . .	160	Minimum . . .	160

No return of salaries is given under Church of England and Roman Catholic boards.

The census of 1874 showed that there were then 18,935 children attending school. This gave an attendance at school of about one in eight of the population. Estimating the population in 1882 at 185,000, then, the number attending school being 24,971, the attendance is about one in

seven of the population. There is, therefore, an increase of attendance at school during the last eight years in proportion to population. As the colony is increasing in population and wealth, educational improvements will no doubt keep pace with the material prosperity. The great *desideratum* at present is a more perfect training for the teachers, and an increase of their salaries.

In connection with the cause of education in Newfoundland grateful acknowledgment is due to "The Colonial and Continental Church Society," by whose instrumentality schools have been maintained in the island for more than half a century, and most valuable educational work has been done, especially at a time when the need of the poor inhabitants was sorest. These schools have been maintained mainly by the liberality of the members of the society, their efforts having been acknowledged and aided by an annual grant from the funds of the colony. In fact, the beginning of common school education in the island may be said to date from 1823, when "The Newfoundland School Society" was founded in London by Samuel Codner, a Newfoundland merchant. It began by opening schools in St. John's, Harbour Grace, Trinity, and other places; and under the supervision of the teachers at these principal places branch schools were opened in the smaller settlements. The society afterwards extended its operations to other parts of British North America, and in 1851 it united with the "Colonial Church Society," taking the new name of "The Colonial Church and School Society." The amalgamation seems to have led to a rapid growth of means and extension of operations. Having established a large number of chaplaincies on the continent of Europe for the benefit of English travellers and residents, its name was again changed in 1861 to "The Colonial and Continental Church Society." It is worth remembering that this important missionary society, with a present annual income of over 40,000*l.*,

began with the formation of the Newfoundland School Society in 1823.

Since the Legislature undertook the work of public education, the position in the island of this old society has become less prominent. At the present time it has twenty schools in operation, and, taking the average of the last five years, the number of scholars attending them is 2,295, and the average expenditure on their account about 2,000*l.* The Legislature aids the society in its educational work in the island by a grant of 500*l.* sterling, taken out of the Church of England share of the education grant, the remainder of the expenditure being furnished from the funds of the society, and also in part from subscriptions in Newfoundland and from a portion of the school fees. The central schools in St. John's are used by the Church of England Boards of Education as a training school for their teachers, male and female, nearly twenty teachers being sent out every year.

Honourable mention is also due to the Christian Brothers, who have in operation a school in St. John's attended by 350 pupils. Their schoolrooms are the finest and best arranged and equipped in the island, and the character of the instruction imparted by them is deservedly spoken of in the highest terms. They are doing an excellent educational work in St. John's.

CHAPTER V.

RELIGIOUS DENOMINATIONS.

Protestant and Roman Catholic settlers—The Church of England—
The early missionaries and the first bishopric—Wesleyan Method-
ism and Congregationalism—Progress of Presbyterianism.

THE census of 1874 showed that there were at that date 97,057 Protestants, and 64,317 Roman Catholics. Of the Protestants 59,561 belonged to the Church of England; the Wesleyans numbered 35,702; the Presbyterians, 1,168; the Congregationalists, 461; other denominations, 165.

According to the census of 1857 the denominations stood as follows :

Protestants	65,743
Catholics	56,895

The Protestant denominations stood thus :

Church of England	44,285
Wesleyans	20,229
Presbyterians	838
Congregationalists	347
Other denominations	44

Besides, there were in Labrador 1,331 adherents of the Church of England and 319 Roman Catholics.

The great bulk of the original Protestant settlers who arrived year after year were English from the south-western counties, and nearly all of them belonged to the Church of England. The Roman Catholic settlers came from Ireland. A number of Scotch mercantile establishments have been for about eighty years engaged in the business of the country, and are among the most extensive and prosperous of the exporting firms. In connection with them came the original representatives of the Presbyterian Church, whose numbers in 1874 did not much exceed 1,000. English dissent was represented as early as 1775 by a Congregational Church in St. John's, whose adherents in 1874 numbered 461.

It was not till 1703 that any organised effort was made on the part of the Church of England to supply the spiritual wants of its adherents, who, in considerable numbers, were settled on the shores of the island. The Society for the Propagation of the Gospel in Foreign Parts was established in 1701, and their attention was at once directed to Newfoundland. At that time there was but one Protestant clergyman in the island—a Mr. Jackson, who was in St. John's. The society adopted him as its missionary, and gave him a salary of 50*l.* per annum. The efforts of the society were gradually extended year after year, and more missionaries were sent as the population increased. Conception, Trinity, and Bonavista bays were the seats of the early missions of the Church of England. Churches were built in St. John's, Harbour Grace, Carbonear, Old and New Perlican. In 1787 a memorial was presented to the society from the inhabitants of Placentia Bay, asking for a missionary, and promising to contribute to his support. His Royal Highness Prince William Henry, afterwards King William IV., then in command of a ship of war on the station, contributed handsomely to the erection of a church at Placentia, and presented it with a set of communion plate, which is still preserved.

The hardships, perils, and privations encountered by these early missionaries were very great, and too much praise cannot be accorded them for their self-denying labours. In carrying the consolations of religion to the poor fishermen of those days, in their widely-scattered settlements, their journeys had to be made by sea in open boats or small fishing vessels, as there were no roads; and in these frail barques they had to cross wide arms of the sea, and double headlands and promontories exposed to the great swell of the Atlantic. The cold of winter had to be encountered in rude wooden houses of the poorest description, and through the blinding snowstorm they had often to make their way from one fishing hamlet to another. Like Goldsmith's curate, they were "passing rich on 40*l.* a-year," the largest salary the society could give them being 50*l.* per annum. One of them, a Mr. Langman, a most laborious missionary, who had 50*l.* a year from the society, represented that the little gratuities he received from his flock were quite inconsiderable, and that "he had to go and beg for them as a poor man would for alms." It was not till 1814 that the salaries rose to 100*l.* per annum. It is not wonderful that under such discouraging circumstances the progress of the Church of England in the colony should have been very slow.

In 1787 the first colonial bishopric was created, that of Nova Scotia, "with ecclesiastical jurisdiction over the provinces of Upper and Lower Canada, New Brunswick, and the Island of Newfoundland." It was not till 1827 that Bishop Inglis, of Nova Scotia, was able to visit this portion of his immense diocese. He found but nine clergymen and missionaries in the whole island. There were six hundred communicants and twenty-three schoolmasters. At length in 1839 Newfoundland was erected into a separate diocese, including the Bermudas, and the Rev. Aubrey S. Spencer, archdeacon of Bermuda, was consecrated to the

new see. He found but eight clergymen in the island, and the church in a very disorganised and dispirited condition. Through his zealous labours a great change for the better was effected, and the church speedily made marked progress. In two years he was able to report that a theological seminary for training missionaries was opened, that there were twenty-five clergymen, thirty thousand church members, three thousand two hundred scholars in the Sunday schools, and between two and three thousand in day schools. In 1843 he laid the foundation of a cathedral in St. John's, which was consecrated in 1850. Bishop Spencer was succeeded in 1844 by Dr. Edward Feild, of Queen's College, Oxford, who continued bishop for thirty-two years, till his death in 1876. Under his zealous and devoted labours the church prospered and extended itself; a cathedral was built; orphanages were erected; Sunday and day schools increased in numbers; and the Church was thoroughly organised. Bishop Feild was most abundant in labours, never shrinking from toil or peril in the discharge of his duties. By all denominations his self-denial and devotedness were admired and appreciated. Dr. J. B. Kelly was appointed coadjutor in 1867, but failing health compelled him to resign in 1877. He was succeeded, in 1878, by the Rev. Llewellyn Gomes, D.D., who is now the bishop of the diocese.

The diocese is now divided into eight deaneries, and the number of clergy is fifty. A diocesan synod was established in 1873. A theological college for the education of candidates for holy orders has been in operation for a length of time, and is now endowed. Orphanages for destitute children of both sexes have been founded on a secure basis. The cathedral in St. John's, of which only the nave was completed, is now advancing towards entire completion, and will be a very beautiful and spacious structure. The total number of churches belonging to the Church of

England in Newfoundland and Labrador is at present one hundred and two.

In 1874 the Roman Catholic inhabitants of Newfoundland numbered 64,317. Catholicism was founded in the island as early as 1623, by Sir George Calvert, an Englishman, who, as described in the Historical sketch, settled at Ferryland. During the occupation of portions of the island by the French, priests of the Franciscan Order acted as chaplains to the French ships of war, and to all forts manned by over forty men. In 1689 the Catholic bishop of Quebec visited Placentia, then in the occupation of the French, and brought with him several priests from the Franciscan convent in Quebec. The church there was placed under their care, and a royal licence was obtained for the establishment of a convent of Franciscans in Placentia. When, in 1713, Newfoundland was placed entirely under the jurisdiction of England, and the French retired, all ecclesiastical records were taken to France. Unhappily the reign of religious intolerance commenced soon after, and continued for more than sixty years. For an account of the persecutions endured by Roman Catholics in those days reference is made to the Historical portion of this work. The disabilities of Roman Catholics came to an end in 1784, when liberty of conscience and the free exercise of their religion were granted to all the inhabitants of the island. In that year the Roman Catholic Church in Newfoundland was publicly organised by the appointment of Dr. O'Donnell as prefect apostolic, by pope Pius VI. In 1796, the population having increased, and episcopal superintendence being needed, Dr. O'Donnell was appointed vicar apostolic and bishop. Under his superintendence numerous churches were built, and the ministrations of religion carried out in localities where previously they were unknown. Bishop O'Donnell retired from office in consequence of age and infirmity in 1807,

and died in Waterford in 1811, in his seventy-fourth year. He was succeeded by Bishop Lambert, who held office till 1817, when Dr. Thomas Scallan was appointed bishop. He died in 1830, and was succeeded by Bishop Fleming, who held office till 1850. In 1847 Newfoundland was erected into a diocese, and Dr. Mullock became coadjutor bishop, and in 1850 he succeeded Bishop Fleming. The cathedral, which was commenced by Bishop Fleming in 1841, was consecrated September 9th, 1855. With the adjacent episcopal residence, convents, and college, it cost over 120,000*l*. In 1856 Newfoundland was divided into two dioceses—St. John's, comprising the southern part of the island from Bay of Islands to Spaniard's Bay; and Harbour Grace, all the northern portion, and Labrador. These boundaries have since been altered to a slight extent. Dr. Dalton was the first bishop of Harbour Grace, and the Right Rev. Henry Carfagnini the second. By a decree of 17th September, 1871, the western portion of the island was erected into a prefecture apostolic. Dr. Mullock died in 1869, and in 1870 the present bishop, the Right Rev. Thomas Joseph Power, was consecrated in Rome by His Eminence Cardinal Cullen.

In the diocese of St. John's there are now a cathedral, twenty-six churches, besides a number of chapels, twenty-nine priests, a college, thirteen convents, and a female orphanage. In the diocese of Harbour Grace, of which Dr. McDonald is now bishop, there are a cathedral, fourteen churches, besides a number of chapels, sixteen priests, and five convents. In the prefecture apostolic of St. George's, West Newfoundland, of which the Very Rev. Monsignor Sears is prefect apostolic, there are three churches and three priests.

Wesleyan Methodism presents an honourable record in Newfoundland, and has been characterised by zeal, activity,

and usefulness. It dates from 1765, when the Rev. Lawrence Coughlan, a travelling preacher in connection with the Rev. John Wesley, was ordained by the Bishop of London, at the request of the Society for the Propagation of the Gospel in Foreign Parts, that he might be qualified for the office of a missionary in Newfoundland. At that time the state of religion and morality among a people who had been long neglected, and left almost without religious instruction and education, is described as deplorable. Immorality of the worst description abounded, and religious worship was maintained in but a few localities. Mr. Coughlan's labours were mainly in Harbour Grace, Carbonear, and other places in Conception Bay. He encountered a great amount of opposition and bitter persecution, especially from some of the wealthier classes, till at last he was cited to appear before the Governor, who declared in his favour and appointed him a justice of the peace. This ended the persecution, and he continued to labour quietly and with marked success. Three churches were built, and in these he ministered, till failing health compelled him to return to England, where he published a book, dedicated to the Countess of Huntingdon, in which he gave an account of his work in Newfoundland. In 1786 three missionaries were sent to the colony by the Wesleyan organisation, to prosecute Mr. Coughlan's work. Ten years later there was but one Wesleyan missionary in the island, and in 1806 two missionaries, and 508 members. The work went on and extended as the population increased. In 1814 Newfoundland was constituted a separate district, with a superintendent. In 1829 there were twelve missionaries and 1,147 members. In 1840 there were labouring in the island fourteen ministers and ten local preachers; there were 2,733 members, and 15,000 adherents. Sunday and day schools were conducted in connection with the missions. The census of 1857 gave

the number of Wesleyans in the island as 20,229; ministers seventeen, and churches thirty-seven. The census of 1874 states the number of Wesleyans as 35,702, and the number of churches as forty-two. At present Newfoundland is constituted a separate Conference, with a president, and is divided into three districts—St. John's, Carbonear, and Bonavista. The total number of ministers is forty-nine, and of churches forty-four.

Congregationalism in Newfoundland dates from the year 1775, when a church was formed under the Rev. John Jones. He had been originally a soldier in the artillery stationed in St. John's, and having been led to engage in religious work, his ministrations proved so acceptable that on his discharge from his regiment he was ordained in England to be minister of the church in St. John's, which had been planted under his auspices. His labours extended over twenty-one years. He died in 1800. The single church thus organised has maintained itself ever since, and has always sustained a high character for usefulness and zealous Christian work. Its ministers and members have liberally aided other denominations, and shared in efforts to advance the best interests of the community. There are now, in addition to the church in St. John's, a congregational church at Twillingate, another at Rendell Harbour, Trinity Bay, and two mission stations in Fortune Bay. The census of 1874 gives the number of congregationalists in the island as 461. Of late years they have taken an active part in education in proportion to their numbers, having in operation five elementary schools, with an average attendance of 207, and expending \$884 per annum in the support of these schools.

The first Presbyterian church was organised in 1842. Previously the Presbyterian residents of St. John's had worshipped with the members of other Christian churches, but they then formed themselves into a distinct body, and

erected a church, which was opened for public worship on December 3rd, 1843. Their first minister was the Rev. Donald A. Fraser, a man of considerable gifts and attainments, whose labours were cut short by death in 1845. The congregation numbered about five hundred persons, some of the most intelligent, influential, and wealthy residents being members. The causes which had led to the disruption of the Established Church of Scotland at length produced a division among them; and the portion sympathising with the Free Church of Scotland separated in 1848, and erected a second Presbyterian church, which was opened for worship in 1850. In 1855 a third Presbyterian church was erected in Harbour Grace. In 1876 both the Presbyterian churches in St. John's were destroyed by fire. The two congregations being now under the same ecclesiastical jurisdiction, namely the General Assembly of the Presbyterian Church in Canada, resolved on union, which was effected in 1877. On the 18th of June, 1878, the corner-stone of St. Andrew's church was laid. It is a handsome structure, and was completed at a cost of \$40,000, and opened for worship on the 30th of November, 1879.

In addition to the foregoing, there is a Presbyterian church and mission station at Little Bay Mine, also a mission church at Bay of Islands. The total number of Presbyterians, according to the census of 1874, is 1,168.

CHAPTER VI.

THE POST-OFFICE, CONSTABULARY, LIGHTHOUSES, BANKS, ETC.

The mail service—Cost of the postal department—The police force
—Thirty-two lighthouses and beacons—The light dues—Bank
statistics.

POSTAL communication between St. John's, Britain, and America is maintained by the Allan Line of steamers which touch at St. John's fortnightly, on their outward and homeward voyages between Halifax and Liverpool. During three winter months these steamers omit calling at St. John's, and run direct between Liverpool and Halifax. A fortnightly steamer during those months runs between St. John's and Halifax, carrying passengers and mails. There is thus fortnightly mail communication throughout the year with Britain and America.

Local postal communication between St. John's and the various towns, villages, and settlements is maintained by coastal steamers, waggons, boats, and messengers. During summer communication is maintained between St. John's and the principal northern ports by a fortnightly mail steamer, which connects, during part of the season, with the Labrador mail steamer at Battle Harbour. In winter there is an overland mail monthly. Another coastal steamer

runs fortnightly between St. John's and the southern and western ports during the year. A steamer plies on Conception Bay during nine months of the year.

In the post-office, St. John's, the staff consists of the postmaster-general, four clerks, an assistant-clerk, and mail agent for Labrador, two assorters, and two letter-carriers. There is also a superintendent of the money-order office. There are throughout the island twenty-six postmasters and ninety-two way officers. The annual cost of the postal department is \$28,334.

The constabulary consist at present of one general superintendent, one sub-inspector, four head-constables, twelve sergeants, ninety constables, and six cavalry, including a mounted sergeant.

The force is organised, equipped, and disciplined in every respect similar to the Royal Irish Constabulary; and, properly speaking, it is a military as well as a civil force, being thoroughly drilled in the use of arms, etc.

This force was first organised after the withdrawal of the military in 1871, by the late general-superintendent, Mr. Foley, selected by the Home Government, who died when the force was only in its infancy. The present general-superintendent, Mr. Carty, who was also selected by the Home Government, and succeeded Mr. Foley in 1873, has carried out the organisation so successfully that, at the present moment, the Newfoundland Constabulary is a splendid body of men, and considered far superior to any other force in any of Her Majesty's colonies, and second only in efficiency, zeal, and intelligence to the Royal Irish Constabulary.

The constables are drilled and instructed in their various police duties at Fort Townsend, which is the headquarters; and the best and most efficient men are always selected for the out-harbour stations, which number at present thirty-four.

The force is increasing in numbers from year to year, and the greatest confidence is placed in their zeal and efficiency by the inhabitants of the colony in general, so much so that almost every settlement in the colony is loudly demanding their services.

The permanent force at St. John's consists of fifty men ; and on all public occasions a guard of honour is furnished from the force of cavalry and infantry.

The annual cost of the magisterial and police department is \$64,702.

The coast of Newfoundland is now well lighted, and every year witnesses an increase of lighthouses and other valuable means of securing the safety of its large seafaring population. At present there are thirty-two lighthouses and beacons, and four fog signals at the most dangerous points around the shores. During the last eight years the Government have erected no less than seventeen lighthouses and fog alarms, with other appliances for preserving the lives and property of the people, at a cost of \$86,100. The erection of all these thirty-two lighthouses has been the work of the last forty-seven years. In 1813 a lighthouse was placed at Fort Amherst, at the entrance of St. John's harbour. No further effort was made to light the coast till 1835, when the local Legislature passed an Act for the erection of a lighthouse on Cape Spear, five miles south of St. John's, and for another at Harbour Grace. Cape Bonavista lighthouse was built in 1843 ; Cape Pine in 1851 ; Cape Race in 1856 ; Baccalieu in 1859 ; Cape St. Mary's, 1860. In 1872 a powerful steam whistle was placed at Cape Race ; in 1877 a powerful siren trumpet at Cape St. Francis ; and at Cape Spear a compressed air trumpet. These are sounded day and night during the continuance of thick weather or snow-storms. A 32-pounder gun is placed at Fort Amherst, and discharged every hour during daylight when the cape is enveloped in fog.

To sustain the lighthouse and alarm system light dues are collected to the extent of one shilling per ton on all vessels entering any port or harbour of the colony, except coasting, sealing, or fishing vessels, but not to be levied more than once a year. Sealing and coasting vessels pay sixpence per ton on registered vessels of forty tons and upwards; vessels under forty tons pay fifteen shillings per ton. No greater sum than 25*l.* can be levied in any year on any steamer or vessel entering any port of the colony; and no steamer plying between Europe and any port of North America and entering any port of the colony, as a port of call, is liable to pay any light dues or any port charges except pilotage.

The amount of light dues collected in 1881 was \$31,289. A sum of \$40,000 per annum is required to sustain the system.

There are three banks, all in St. John's—the Savings Bank, the Union Bank, and the Commercial Bank. They are all well-managed and successful institutions.

The Savings Bank is a Government establishment, and it is enacted by statute that “the general revenue of the colony is liable for all monies deposited in the bank, and all interest payable thereon.” This gives absolute security to depositors. Being thus a colonial institution, the Governor-in-council appoints the cashier and eight governors, five of whom are selected from the members of the House of Assembly, and three from the Legislative Council. Three directors are annually elected by these governors from among themselves, and by them the affairs of the bank are superintended. Depositors of not less than four dollars, or over two hundred and fifty dollars, for a period of not less than six months, receive interest at the rate of three per cent. per annum. Larger sums may be received as ordered and defined by the Governor-in-Council; and the amount on which interest will be paid is regulated in the same way.

On the 31st December, 1879, the amount of deposits in the Savings Bank was \$1,134,505. The profits of the year amounted to \$17,301. The reserve fund at the end of the year amounted to \$101,919. By an Act of the Legislature, this is now constituted a sinking fund for the liquidation of the public debt of the colony, the annual profits of the Savings Bank being added to it from year to year. In the first instance, this fund will be applied to the payment of all debentures of the colony held by the Savings Bank, amounting to \$595,849, or nearly half of the entire public debt. This will be cleared off in about sixteen years. The Savings Bank has a branch in Harbour Grace.

On the 31st December, 1880, the amount of deposits in the Savings Bank was \$1,219,787. On the 31st December, 1881, the deposits amounted to \$1,291,162, being an increase of \$71,374 on those of the previous year. The profits of the year were \$13,213. The profits of 1880 were \$19,000.

The Union Bank of Newfoundland is one of the most prosperous banking institutions now in existence. It was established in 1854. During the first eighteen years it paid an average dividend and bonus of eleven and a half per cent. per annum. The reserve fund was then so large that the directors declared a special bonus of fifty per cent., which was taken by the shareholders in paid-up shares. On this increased capital the dividends and bonuses have of late years been twenty per cent. per annum, or to original shareholders equivalent to twenty-seven per cent. on their investment. The original \$200 share now sells for \$800. Last session the bank obtained an amendment of its charter enabling it to increase its capital and note circulation.

The Commercial Bank is also a very prosperous institution. It was established in 1857. Its original \$200 share now sells for \$520. In dividends and bonuses its rate of interest now averages twelve per cent. per annum. Its

capital is 50,000*l*. Both banks have been conducted with great skill and prudence. Neither engages in any speculative business, all transactions being of the safe and solid order.

The following newspapers are published in St. John's :

- The Royal Gazette—weekly.
- The Patriot—weekly.
- The Public Ledger—bi-weekly.
- The Times—bi-weekly.
- The Newfoundlander—bi-weekly.
- The Advocate—bi-weekly.
- The Evening Telegram—daily.
- The Evening Mercury—daily.

In addition there are three papers published elsewhere :

- The Harbour Grace Standard—weekly.
- The Carbonear Herald—weekly.
- The Twillingate Sun—weekly.

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