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## THE LABRADOR PENINSULA.

VOL. I.

LONDON
PRINTED BY SPOTTISWOODE AND CO.
NBW-STREET SQUARE


## EXPLORATIONS IN THE INTERIOR

## OF <br> THE LABRADOR PENINSULA

THE COUNTRY OF

THE MONTAGNAIS AND NASQUAPEE INDIANS.

## HENRY YOULE HIND, M.A. F.R.G.S.

Professor of Chemistry and Geology in the University of Trinity College, Toronto: Author of
'Narrative of the Canadian Red River Exploring Expedition of 1857, and of the Assinniboine and Saskatchewan Exploring Expedition of 1858.'

IN TWO VOLUMES.
VOL. I.

LONGMAN, GREEN, LONGMAN, ROBERTS, \& GREEN.
230. $\frac{\text { HIND, Henry Youle Explorstions in the Interior of the Labrador }}{\text { Peninsula }}$ 2 vols. Map, colouredy of the Montegneis and Nesquapee Indians. green cloth. London 1863. Was 37.50 NOW 28.00

## PREFACE.

THE Labrador Peninsula, with the coast and islands of the Gulf of St. Lawrence, possesses a colonial and imperial interest which can scarcely be over-estimated in contemplating the possible future of British North America.

The annual value of the Fisheries in British American waters exceeds four millions sterling, besides being the best nursery for seamen ' the world ever saw.'

The fisheries on the Atlantic coast of Labrador alone yield a yearly return of at least one million sterling ; and yet, since the destruction of the town of Brest, at the Gulf entrance of the Straits of Belle Isle, more than two hundred years ago, no attempts have been made to form settlements on an extensive scale on or near the coast.

In the great interior valleys, some ten or fifteen miles from the coast, timber fit for building purposes and fuel exists in abundance, and the climate and soil admit of the successful cultivation of all common culinary vegetables.

West of the Mingan Islands large areas exist suitable for settlement. Limestones and sandstones occupy the coast, and extend about ten miles back over a space of eighty miles on the Straits of Belle Isle, and great
facilities exist in many other places for the establishment of permanent curing establishments, by which an annual saving of more than a quarter of a million sterling would be secured at the outset, with the prospect of an indefinite increase. Local establishments for the supply of salt, food, and all the requirements of a vast fishing trade, are particularly demanded on the Gulf and Atlantic coasts.
The British American Fisheries will eventually acquire a wholly unlooked-for importance by direct trade with the Southern States for cured fish, upon the return of peace, and with the great valley of the Mississippi for fresh salt-water fish conveyed in ice. The connection of the present terminus of the Grand Trunk Railway of Canada at Rivière de Loup with the Bay of Chaleurs would bring the rich briny treasures of the Gulf within easy reach of the cities of the Western States.

As a nursery for seamen the great North American Fisheries have no equal, and the day will yet arrive when the hitherto desolate shores of Labrador, north, east, and west, will possess a resident population capable of contributing largely to the comfort and prosperity of more favoured countries.

Toronto: May 1863.

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# EXPLORATIONS IN LABRADOR. 

## CHAPTER I.

THE LABRADOR PENINSULA.


#### Abstract

Requisites for the Exploration of Part of the Labrador Peninsula The Start - The Personnel of the Expedition - The Equipment - Provisions - Reported Character of the Country - Canoes adapted to the Rivers - Boundaries of the Labrador Peninsula The Moisie or Mis-te-shipú River - Montagnais Maps of the Moisie and Ash-wa-ni-pi Rivers - The Montagnais Map-Makers - Objects of the Exploration - Official Information respecting the Montagnais and Nasquapee Indians - Information respecting the Ashwanipi or Hamilton River - Information respecting the Condition of the Nasquapees.


THE requisites for an exploration into the interior of the Labrador Peninsula are few and simple, but they require careful selection. Small, light, and strong canoes, a plentiful supply of the best provisions, portable tents, two or three changes of flannel clothing, a few good instruments, practised voyageurs, and skillful guides, are all that are absolutely necessary. The mountainous character of the country does not admit of canoes longer than three fathoms being used, and this condition places a limit to the number of men that can be employed, and
the amount of provisions transported. A good threefathom canoe will carry three men and five hundredweight of provisions conveniently, without being too low in the water in a large and rapid river ; neither is it more than one man, accustomed to the work, can carry over the portages, which, in the wilds of Eastern Canada and Labrador, are generally long, 'rough,' and only capable of admitting the passage of the small canoes used by the Montagnais Indians.

I made my preparations during the month of May 1861, bearing the foregoing considerations in mind, and acting in accordance with them as far as circumstances would permit. On the 4th of June, my party being formed, and all needful preparations completed, we started from Quebec in the steamer 'Arabian' down the noble St. Lawrence. Our destination was the mouth of the Moisie River, Gulf of St. Lawrence, about 400 miles from the great port of Canada, which at that time presented a very animated spectacle. An unusually large number of merchantmen were sailing majestically up the river ; others lay anchored in the rapid stream, or, moored three and four deep, side by side, occupied the spacious coves above the city. I was accompanied by my brother, Mr. William Hind, who had just arrived from England in the ill-fated steamer 'Canadian,' soon to be lost on her return passage, near the Straits of Belle Isle.

My brother joined the expedition for the purpose of making sketches and water-colour drawings of scenery, Indians, and any novelty in the vegetable or mineral world which it might be desirable to transfer to his portfolio.

Mr. J. F. Gaudet and Mr. Edward Caley were appointed by the Crown Lands' Department of the Canadian Government to accompany me as surveyors. I also took with me from Quebec five French-Canadian voyageurs, and the following requisites for the exploration :-

Four birch-bark canoes, from fifteen to eighteen feet in length.

500 pounds of smoked bacon.
800 pounds of flour.
.200 pounds of biscuit.
2000 rations of pressed vegetables.
50 pounds of tea.
25 pounds of tobacco.
Salt, pepper, pickles, \&c.
Surveying instruments, barometers, thermometers, \&c.; a plentiful supply of ammunition, fishing-tackle, nets, and a few portable non-essentials.

These provisions were reserved for use in the country beyond the rapids of the Moisie, about fourteen miles from its mouth, as it was my intention to subsist on what we could procure at the fishing station on the coast, until thrown upon our own resources in the uninhabited region.
We spent two or three days at the mouth of the Moisie in preparing canoes for the journey, collecting information, and in procuring the services of Indians and guides.

The description given of the portages by the Montagnais, who were accustomed to pass up the Moisie to their hunting-grounds on the table land of the Labrador Peninsula, was very discouraging. Indeed, some of these people, who had just descended the river from the interior,
declared it was impossible to ascend, on account of the large quantity of water coming down from the melting snows of the upper country.

They counselled us to wait a fortnight at least 'to give the river time to fall.' 'No canoe,' they exclaimed, 'cán pass the gorges while the water is high; perpendicular rocks, smooth as glass, flank the river on each side, and it rushes between them like a rapid. You can't put out a line to tow, there is no ground to walk on, nothing but high rocks, high, high ! * You must wait until the river falls.'

We experienced great difficulty in prevailing upon Indians to accompany us, and no pecuniary inducement I could offer was adequate to persuade any of the Nasquapees at Seven Islands, who had visited the coast for the first time two years ago, to venture on the journey. This unwillingness arose partly from sickness and habitual indolence - partly also from a wish to await the arrival of the Roman Catholic priest, who was expected to visit Seven Islands during the month of July. We soon found that the Montagnais and Nasquapees, who linger on the coast, rapidly lose the energy and bodily strength which characterise them when living in the interior, and which are absolutely necessary in order that they may maintain themselves in a mountainous country thinly stocked with game. Once on the coast, their habits soon changethey learn to live on seals and fish, become very susceptible of changes in the weather, and are liable during the spring of the year to prolonged attacks of influenza; the

[^1]young people become consumptive, the middle-aged rheumatic, and death rapidly thins the ranks of this once numerous and singularly interesting race.

After much trouble we succeeded in procuring the services of an Abenakis* and a Montagnais, at the rate of one dollar a day each and their provisions. Neither of these men knew the country beyond a point fifty miles from the coast; but they told us we should be sure to meet with Montagnais, and probably also some Nasquapees, descending the river from the far interior to see the priest, according to an arrangement made with them two years ago.

* This tribe is represented in Canada by two villages - the Abenakis of St. Francis and the Abenakis of Beçancour. They are sometimes called the Abenquois. The date of the deed assigning to them certain lands on the St. Francis River, Lower Canada, is Aug. 1700. They number now 387 souls on the St. Francis, and 172 in the village of Beçancour. Their huntinggrounds formerly extended over a considerable part of New Brunswick, the State of Maine, and the country drained by the St. Francis, in Lower Canada. They are half civilised; and most of them speak either the English or French language, in addition to their native tongue. The Abenakis are Algonquins, but their language differs so much from the Montagnais dialect, that our Indian could not understand his companion, so as to carry on a conversation. The word Abenakis is derived from Waban, 'it is morning,' and $y k h i$, 'earth,' the whole signifying 'men of the morning,' or east. The village and environs of the Abenakis of St. François, in 1821, contained 500 souls. In 1818 their church was burned, and they petitioned the Legislature of Lower Canada for assistance in rebuilding it. Their interpreter, J. B. D'Estimanville, gave evidence before the Committee of the House, appointed to investigate the claim of the Abenakis, to the effect that he had resided among the tribe for twenty years, and had been their interpreter since 1804 . Among their claims he mentioned the loyalty of this people during the first American war; their great influence over the other Indians south of the River St. Lawrence, from Cape Breton to Missisquia Bay, and over the Chaouans and the nation of the Wolves of Upper Canada, in alliance with them. In 1637 the Abenakis ascended the St. Lawrence as far as Three Rivers, to trade porcelain beads (wampum) with the Algonquins, for beaver skins. In 1661 they were at war with the Iroquois, whose conquests had extended to their hunting-grounds.

Being unable to engage better guides, we abandoned one small canoe at the mouth of the Moisie, and notwithstanding the warnings of the Indians on the coast, we started on the 10 th of June with the following equipment :-

One strong Amalicite* canoe (my own), with the Abenakis as guide, and a French Canadian as bowsman; one Micmac $\dagger$ canoe (Mr. W. Hind's), with two French Canadians; one Ottawa canoe (Mr. Gaudet's), eighteen


THE START.
feet long and very broad, containing Mr. Caley, three French Canadians, and the Montagnais as steersman.

When laden with our supply of provisions, the three

* The Amalicite nation are represented in Canada by a band of 171 persons, who reside on a reserve situated on La Rivière Verte, in the township of Viger. The principal strength of this people is in New Brunswick, where they have several settlements in the valley of the River St. John.
$\dagger$ The country of the Micmacs extended over Nova Scotia and the north shore of New Brunswick. A band containing 473 souls are settled on the banks of the Restigouche, in Lower Canada. They are Roman Catholics, and have generally made satisfactory progress towards civilisation. Their brethren in Nova Scotia and New Brunswick still exist for the most part in a degraded state, and gain a precarious livelihood by hunting, fishing, and the sale of rude articles of their own manufacture.
canoes were depressed to within six inches of the gunwale, but as we contemplated a week's work in making the passage of the Grand Portage, which was represented to be nine miles long, round the magnificent Grand Rapids of the Moisie, it was thought that the consumption of provisions during that time would sufficiently diminish the load in the canoes before we reached the more difficult and dangerous part of the river. The fourth canoe, a Montagnais, was left behind on account of the many formidable portages which we should have to encounter, and the necessity for travelling as 'light' as possible through the rugged country before us.

Having enumerated the personnel of the exploring party, we may here fitly glance at the geographical position of the country which we were about to penetrate.

The vast peninsula which commonly bears the name of Labrador-a term more correctly applied to the northeastern portion-occupies an area between the Atlantic and Hudson's Bay, lying within the 49th and 63rd parallels, and between the 555th and 79th meridians. The Gulf of St. Lawrence, the North Atlantic, Hudson's Straits and Hudson's Bay are its boundaries on three sides ; Rupert's River, the Mistassini, and the Bersamits River may be considered as forming the approximate limits to the south-west. From the mouth of Rupert's River on Hudson's Bay, to the mouth of the Bersamits on the Gulf of St. Lawrence, the distance is about 470 miles ; and from Cape Wolstenholme - the most northern point of the country, to the Straits of Belle Isle, it is 1,100 miles. Travelling northwards, from the Hudson's Bay Company's post at Bersamits, in a direct line to Ungava Bay, the
distance would be about 650 miles; while to Cape Wolstenholme, to the west, it is not less than 1,000 . The area of the Labrador Peninsula is approximately 420,000 square miles, or equal to the British Isles, France, and Prussia combined, and the greater portion of it lies between the same parallels of latitude as Great Britain.

The whole of this immense country is uninhabited by civilised man, with the exception of a few settlements on the St. Lawrence and North Atlantic coasts, and some widely separated posts of the Hudson's Bay Company. It is thinly peopled by nomadic bands of Montagnais, Nasquapee, Mistassini, and Swampy Creek Indians, and by wandering Esquimaux on the northern coasts. Taken as a whole, it is a region unfit for the permanent abode of civilised man; and although once rich in fur-bearing animals, and in caribou or reindeer, it is now in many parts almost a desert. It derives great importance, however, from the remarkable richness of the fisheries on its coasts ; hence the establishment and maintenance of permanent fishing villages on the main land becomes a subject of great importance to Canada and Britain. The condition, character, customs, and traditions of the aboriginal inhabitants of so large a portion of the earth's surface, many of whom have never visited the coast, are full of interest; and the geography and geology of so vast an extent of country form proper subjects of enquiry at the present day.

In the absence of any definite boundaries, the entire peninsula is divided into three parts, supposed to be separate watersheds, to which special names have been given. The area draining into the river and gulf of St. Lawrence
belongs to Canada, whose eastern boundary is at Blanc Sablon, near the mouth of the North-West River. The country, supposed to be drained by rivers which flow into the Atlantic, is called Labrador, and is under the jurisdiction of Newfoundland. The remaining part of the peninsula, which is drained by rivers flowing into Hudson's Bay, has received the designation of the East Main. The names and position of the mouths only of the many rivers which flow into the Gulf of St. Lawrence, from the Bay of Seven Islands to the Straits of Belle Isle, are correctly given in published maps of the country; and nearly the whole of our present knowledge of the east side of the Labrador Peninsula is derived from Captain Bayfield's surveys, which are limited to the coast. No map to which I have been able to obtain access exhibits a correct geographical picture of the interior of the country.

The mouth of the Moisie or Mis-te-shipú River - the ' Great River' of the Montagnais Indians - enters the Gulf of St. Lawrence in longitude $66^{\circ} 10^{\prime}$, about eighteen miles east of the Bay of Seven Islands, and has its source in some of the lakes and swamps of the high table land of Eastern Canada. For centuries it has been one of the leading lines of communication from the interior to the coast, travelled by the Montagnais during the time when they were a numerous and powerful people, capable of assembling upwards of 'a thousand warriors' to repel the invasion of the Esquimaux, who were accustomed to hunt for a few weeks during the summer months, a short distance up the rivers east of the Moisie, as they do now on the Coppermine, Anderson's, and Mackenzie's Rivers,
in the country of the Hare Indians and the Loucheux. The old and well-worn portage paths, round falls and rapids and over precipitous mountains on the Upper Moisie, testify to the antiquity of the route, independently of the traditions of the Indians who now hunt on this river and on the table land to which it is the highway.

My attention was first drawn to the Moisie by the Abbé Ferland, of Laval University, Quebec, who showed me a chart constructed by seven Montagnais Indians at the request of Père Arnaud, a zealous missionary among the aborigines of this part of British America. The chart exhibited the route followed by these Indians from Hamilton Inlet on the Atlantic coast up Esquimaux River, a continuation of the Ashwanipi, to a great lake in the interior called Petshikupau - thence by an unbroken water communication through the Ashwanipi River and a lake of the same name to near the head waters of the east branch of the Moisie, which they reached by crossing a low water parting, and descended to the Gulf of St. Lawrence. According to the Indian chart, the Ashwanipi must flow through five degrees of longitude, traversing the elevated table land of the Labrador Peninsula in a direction roughly parallel to the coast of the Gulf of St. Lawrence.

The chart is a curious and instructive illustration of the remarkable capabilities possessed by Indians to delineate the general features of a country through which they have passed ; and as far as we were able to compare it with our own surveys, it is singularly exact and accurate.

The map is signed thus -
Fait à la rivière Mosie en juillet 1859. Chs. Arnaud, ptre. O.M.I.

One of the objects of the present expedition was to ascertain the degree of confidence which might be placed in the Montagnais chart of the interior, and to test, as far as the season would permit, the native delineations and descriptions by my own observations and the maps resulting from our exploratory survey. So little was the Moisie, or Mis-te-shipu of the aborigines, known in Canada when the Surveyor-General of the then Lower Province, Joseph Bouchette, published his work on the British Dominions in North America in 1832, that its name is not even mentioned among the chief rivers flowing into the St. Lawrence and Gulf, while those of rivers having scarcely one half its magnitude or importance are given. The Ichimanipistick, or River of Seven Islands, and the St. John, on either side of the Moisie, are named, but the 'Grand River' was apparently unknown to the Surveyor-General in 1832.* In the description of the limits of the Domaine, afterwards the territory of the King's Posts Company, by Hocquart in 1733 , the Moisie is referred to in the following terms :-' Lower down the river the domain shall be bounded by virtue of our aforesaid ordonnance of the 12 th instant, by Cape Cormorant as far as the Height of Land, in which tract shall be included the River Moisie, Lake of the Kichestigaux, the Lake of the Naskapis, and

- Page 293. The British Dominions in North America, \&c. By Joseph Bouchette, Esq., Surveyor-General of Lower Canada, \&c. London: Longmans, 1832.
other rivers and lakes which flow into the same.' The leading object was, however, to obtain as much information as possible respecting the general features and resources of that portion of the Labrador Peninsula, and of the Montagnais who now hunt chiefly on the coast, as well as of the Nasquapees who roam throughout the interior. The extent and character of the information accessible to the public respecting these Indians may be gathered from the following extract from the Report of the Special Commissioners appointed by the Government of Canada to investigate Indian affairs, published in 1858 :-

To the tribes above enumerated we may add the Misstassins and Nasquapees, on the Lower St. Lawrence. The latter are akin to the Montagnais, and number about 2,500, of whom 1,500 are still pagans. This tribe acknowledge a Superior Being, who they say lives in the sun and moon. In this respect their legends correspond with the Ottawas. To this Deity théy sacrifice a portion of everything they kill. They are clothed altogether in furs and deer skins, and are described as being most filthy in their habits. Their only weapons are the bow and arrow, and they resort to the use of the drill for the purpose of igniting their fires.*

The existence of the Ashwanipi River, and its supposed rise in the rear of Seven Islands, was mentioned twenty years ago by Mr. W. H. A. Davies in a paper read before the Literary and Historical Society of Quebec in 1842. Mr. Davies derived his information from Indians visiting the Hudson's Bay Company's post, on Invertoke, or Hamilton Inlet. In describing the rivers which enter that

[^2]remarkable bay, he says:-' Of these the Grand or Hamilton River, flowing in at the head of the bay, is by far the most considerable, both as regards the length of its course, and the volume of water it discharges. It is nearly half a league in breadth at its entrance, gradually decreasing in width for about twenty-five miles from its mouth; it then becomes from one eighth to one quarter of a mile wide ; from this size it never varies very much as far up as it has been followed. Two hundred miles from its mouth it forces itself through a range of mountains, that seem to border the table land of the interior, in a succession of tremendous falls and rapids for nearly twenty miles. These falls were accidentally discovered in 1839 by a gentleman engaged in exploring a route from Esquimaux Bay to the interior: Above these falls the river flows with a very smooth and even current; it has been followed for one hundred miles farther, where a post has lately been established. Between the falls and the post it passes through a succession of very large lakes, communicating with one another by very short straits. These lakes appear to cover a very considerable part of the table land; they have not yet been explored, and their dimensions are consequently not known ; but from Indian report, many present a water horizon in different directions, as portions of them are crossed. Above the post called Fort Nascapee the river has not yet been explored, but the Indians report that it comes from a long distance to the westward, and runs with a deep and gentle current, unobstructed by falls or rapids. It is supposed to come from lakes in the rear of Seven Islands. If this is the case, it. developes a curious fact in the
formation of that country, viz., that a large river should flow for so considerable a distance on the top of the ridge, if I may so express it, between the head waters of the rivers falling into the St. Lawrence and those falling into Hudson's Bay and Straits; for they are said by the Indians to be quite close to the waters of the Grand River on either side. The course of the river from Fort Nascapee to the place where it forces itself through the mountains is to the southward of east; it then turns to the east, and finally to the north-east. The latter course it pursues until it falls into Esquimaux Bay.' *

An insight into the condition of the inhabitants of the north-eastern portion of the Labrador Peninsula was given in the 'Evidence before the Select Committee of the House of Commons on the Hudson's Bay Company, 1857.' The following is the passage referred to :-

Mr. Roebuck: You still have instances in your recollection of cannibalism occurring?

Sir George Simpson: Cannibalism has occurred repeatedly.
$M r . R$. : When did it occur in your recollection ?
Sir G.S.: I do not exactly recollect. I think there were some cases of cannibalism in the last few years, in the Athabasca country.

Mr. R.: I have before me a letter of Mr. Kennedy: I suppose you have heard of Mr. Kennedy?

Sir G. S.: There are several Kennedys; which Kennedy do you mean?

Mr. R.: He is a person who has quarrelled with your Company, I believe, and he wrote a letter to Lord Elgin.
$\operatorname{Sir}$ G. S.: William Kennedy.

[^3]Mr. R.: There is a passage in his letter; I want to ask you whether you are at all cognizant of the facts. Quoting from a letter received by him, he says, 'You will be grieved to hear that the curse which had effect in the old country has extended here, though arising from causes of more frequent occurrence than even the failure of the crops. Starvation has, I learn, committed great havoc among your old friends the Nascopies, numbers of whom met their death from want last winter; whole camps of them were found dead, without one survivor to tell the tale of their sufferings; others sustained life in a way the most revolting - by using as food the dead bodies of their companions; some even bled their own children to death, and sustained life with their bodies!' Quoting from another letter, he says, 'At Fort Nascopie the Indians were dying in dozens by starvation; and among others, your old friend, Paytabais.' A third he quotes as saying, 'A great number of Indians starved to death last winter; and _ says it was _-'s fault in not giving them enough of ammunition.' Do any facts like that come within your knowledge ?

Sir G. S.: No; that is an exaggerated statement.
Mr. R.: In your thirty-seven years' experience in that territory, you have never heard of any transactions like that, and deaths like that?

Sir G. S.: Never, except in Mr. Kennedy's letter.
Mr. R.: Not in your own experience?
Sir G. S.: Certainly not.

## CHAPTER II.

THE MOUTH OF THE MOISIE TO THE GRAND RAPIDS.

Scenery on the Moisie Bay - The Climate - Brent Geese Leaky Canoes - Waterproof Bags - Louis, a Montagnais IndianLouis' Squaw -Louis' Marriage - Seal Hunting-First Camp on the Moisie - Louis' Blanket - Seals - Salmon Fishing Stations on the Moisie - Captain Strachan's Station - Louis' Father-in-Law - Powdered Rhubarb - Carefulness of Indians with respect to Medicine - Strychnine - Its Use by the Fur-Traders.

FROZEN snow in brilliant masses, capping the distant mountains, was visible from our canoes on the afternoon of the 10th June, as we slowly won our way against the rapid current of the Moisie, after leaving the fishing station at the mouth of the river.

A cloudless sky, a hot sun, fitful puffs of wind from the north, cold and turbid water in the river, patches of ice in every sheltered nook on the banks of the beautiful Moisie Bay, where snow had drifted deep during the long winter months, were significant indications of the climate of the country.

A few Brent geese flying to the north, salmon here and there rising high at June flies, a solitary kingfisher, and a flock of golden-legged plover, were all the signs of life we saw during the first five miles.

On the borders of the spruce forest, which came down almost to the water's edge, the birch was just putting
forth its delicate green leaves, but the larch scarcely showed any indications of returning vigour. In damp and shady nooks, the ferns were still cautiously unfolding their earliest fronds, and on the willows, half bathed in the flood, hung the catkins of spring in the Moisie Bay.
' How late the season appears to be here,' I remarked to the guide.
'The ice only left the Bay during the last week in May,' he replied: 'but the winds from the sea keep the trees back; at the Rapids we shall find them coming well into leaf. Those Brent geese* are going to the lakes, and perhaps to Ashwanipi ; the Indians who know the upper country tell me they will find it full of ice even now,' he continued, as a small flock flew high above us towards the north ; ' but we are sure to meet Domenique,

[^4]who has been wintering there, and he will tell us all about the upper lakes.'

A shout from the rear canoe brought us up. The heavily-laden little craft was taking in water through the holes in the sides, where the bark is fastened with watap or sinew to the frame-a light breeze having begun to blow sufficient to raise a swell in the river. It was also found to be leaking where the bark was sewn together, the strain caused by the heavy load having cracked the gum. Hence it became necessary not only to 'gum' the canoe, but also to readjust the baggage, before we could proceed on our voyage.

At the first favourable spot for camping we disembarked, and set the Indians to examine all the canoes, and put them into a proper condition. Two bags of biscuit were found to be partially wetted, but no damage was done to the flour, which had been properly laid on poles placed at the bottom of the canoe which contained it.

Towards evening I despatched a canoe to the fishing station to procure an additional bag of flour in place of the provisions which had been spoiled. The wetted biscuit concerned the entire party; but a close inspection of the baggage after it was landed, showed that a misfortune had happened to a waterproof India-rubber bag, which might have been attended with some inconvenience. It also gave us an insight into the character and disposition of the Montagnais steersman, who turned out to be a ' character.' In the waterproof bag were packed a number of articles which it was most desirable to keep dry; it had been placed in the canoe in the proper position, at the stern of the vessel, but the Montagnais
had not been instructed by the owner of the bag to 'keep this side up,' and it appeared, that in order to make more room for his legs, he had laid the bag on its side after we had started. The proprietor of the waterproof receptacle of his worldly goods was enlarging upon the advantage of India-rubber, as we were surveying, with some chagrin, our damaged biscuit, when a loud exclamation from Louis - for that was the Montagnais' name turned our attention towards him. He was holding the waterproof bag at arm's length, and slowly pouring the water out of it-expressing, Indian fashion, his astonishment that the bag held water so well and so much of it. While the owner of the bag was engaged in laying his things out to dry in the sun, Mr. Gaudet told me about Louis' mode of treating a leaky canoe, and I cannot do better than give his own description. 'Just before we landed, I turned to Louis and asked him whether there was any water in the canoe; for we were so crowded, and there was so much baggage stowed away at the bottom, that we could not see between the poles.* "Oh, yes," said Louis laughing, "plenty." "How much?" I asked. He held up his hand horizontally, with his fingers close together - this way - to tell me that it was four inches deep-at the same time yawning, and splashing his bare feet about in it; and when he had done yawning he looked me full in the face, and said, "Water cold—very cold." "À terre bête !" I shouted, "quick! quick!" and we made the canoe leap

[^5]through it; for Louis brightened up when he saw I was angry, and paddled with a will. That fellow will either be a great nuisance to us, or very amusing and useful. He is strong as a horse, laughs at everything, and cares for nothing.'

Louis was described to me before I engaged him as a very good-tempered Indian, and thoroughly capable of managing a canoe, but not fond of work or very sure with his gun. His qualifications as regards canoes made him acceptable, and, although he was weak and ill during the first week, from change of diet and constant exposure to wet day and night, he soon became a valuable addition to our party, independently of the constant amusement he afforded to the other men.
'Do you see that handsome squaw there ?' said a Nova Scotia fisherman to me the morning before we started from the mouth of the Moisie.
' Yes,'. I replied, 'I see her - what of her?'
'That's Louis' wife, the Indian you engaged.'
'Louis' wife. Why, she doesn't live in his lodge.'
' No,' said the fisherman with a smile, 'she don't, and, what's more, she won't : she won't have anything to say to her husband, and, what's more, she's ashamed of him.'
'What has he done to offend her?' I asked, both surprised and curious.
' Well, the fact is, he can't huit.'
'Can't hunt? Do you mean to say that that handsome woman married Louis knowing he could not hunt?'

- That's where it is ; she didn't know he could not hunt
-you've just hit the other side of it,' said my facetious informant with a smile. 'Now I'll tell you,' he continued: 'These Indians on the coast are strange people. I was here fishing last summer when she came with her father, the old man in the tent yonder, near those squaws skinning the seal; the priest was here baptising, marrying, and I don't know what. Louis saw the girl, and asked her to marry him : they had


SEAL HUNTING ON THE MOISIE.
no time to lose; the priest was going away in a couple of days, not to come again for a twelvemonth, so the girl consented, they spoke to the priest, and were made man and wife in a jiffey. Well, two days after this wedding, Louis went out with his wife to hunt seals : she steered and he took the gun - the way these Indians do. Louis fired at the seals one after the other and missed them.

His wife then turned the canoe in disgust to shore and stepped straight to her father's lodge. After much bother, Louis prevailed upon her to come with him again to hunt, and give him a chance. So she agreed to go again, and on the following day she steered him close to a seal : he fired, and missed. She brought him up to another : he fired again, and missed a second time. She looked - so Louis told his people - just looked, said nothing; but that look made Louis nervous. She brought him to a third seal - close to it - he missed again. She said nothing, but paddled to shore, and then ran to her father's lodge. She says she 'll never live with him again. Up to this time she's kept her word; but they say the priest will make her when she goes to Seven Islands next month - we shall see.'

I turned to look at Louis' wife. She stood near to the place where we were talking; -a handsome, determined woman ; lips full, but tightly closed ; a dark, intelligent eye, which, when it met yours, rested upon you with a tranquil, self-possessed gaze. Her arms were folded beneath a shawl she drew tightly round her waist. Her hair was neatly bunched up, Montagnais fashion, on each side of her face; she wore the picturesque Montagnais cap of crimson and black, ornamented with braid round the edges ; neat moccasins and mistassins peeped from beneath her dress as she stood motionless, watching her sisters cutting up a seal, and apparently paying no attention to their jeers and scoffs, which the interpreter near at hand said they were 'throwing at Louis.' Altogether she seemed to be a very unfit life companion for the indolent and careless Louis, who always wore a look of happy
or stupid indifference to all the chances and changes of this world.

Before Louis started with me, he asked for fifteen dollars. I gave them to him, and was not surprised to learn that he sent them to his wife as a peace-offering. She accepted the money, but returned no answer, nor did she appear to be in the least degree softened by this well-meant attempt at reconciliation.

Our first camp on the Moisie was not more than six miles from the mouth of the river. Part of the low point of land where the tents were erected was covered with water during the high spring tides. The banks, about sixty feet high, were uniformly wooded with spruce and birch as far as our camp ; but here, by the washing of the river, they had become wholly denuded of trees, and were composed of incoherent sand resting on ash-coloured clay. The forest of the level plain, which extends some ten or twelve miles back from the coast, consisted of spruce, larch, and birch, some of the trees being of considerable size and well fitted for building purposes.

Just as the canoe was about to start back to the station to fetch the flour, which I was anxious to obtain to replace the wetted biscuit, Louis came to me with a desponding look, and said he had forgotten his blanket - 'Would I let him go in the canoe and fetch it?' But Louis was not to be trusted so near home. He might repent having come, as Indians often do during the first day or two ; I therefore told the other men, whom I could trust, to bring Louis' blanket with them. Louis gave them very indefinite and confused directions where to find his blanket, and I am still under the impression that the article in
question was more imaginary than real, for we never heard of it afterwards ; and Louis, when seen enveloping himself in a capacious but rather dirty rug before choosing his ground for the night underneath a canoe, replied to the questions -
'Why, Louis, what did you want two blankets for?'
'Don't want two blankets - one enough.'
'Then why did you want to go and fetch the other blanket?'
' Like it best,' answered Louis.
'Do Indians ever have more than two blankets?'
' No ; one blanket enough for Indian.'
'Do you think the men will find yours at the fishing station?'
'Tink not ; tink they will have very hard work to find other blanket,' said Louis, with a comical laugh.
' Perhaps the blanket around you is the one you thought you had left behind?'
' May be,' said Louis, brightening up, and turning his head to survey the rug. 'May be; it looks very much like it.'
'Then you have not got another blanket, Louis?'
' No !'
Young seals were heard calling during the night, and their dams were feasting on salmon struggling in the nets stretched half across the river close to our camp. The distant roar of the sea reached us at intervals, as gusts of moist wind came up the river ; but the night was comparatively warm, and the early morning bright. After breakfast we started for the Rapids, and in our progress up the river found the vegetation much farther advanced,
away from the influence of the sea breezes. The balsam-poplar and birch were nearly in full leaf, and grew in graceful clusters on the precipitous sandy banks, which were at least seventy feet high, and increasing as we ascended the stream. On approaching the Rapids, fourteen miles from the mouth, the spruce and birch became handsome trees, frequently eighteen inches in diameter. Land-slides showed the country to consist of incoherent sand some sixty feet thick, resting on grayishblue coloured clay, of which fifty feet were seen above the surface of the water.

Beautifully situated, two miles below the Rapids, is the salmon-fishing station, leased by two American gentlemen, but now deserted in consequence of the civil war raging in the States. The level character of the country changes here, and the cold gray gneiss, peeping out from the spruce-clad banks, tells the reason why; the level driftcovered banks of the Moisie are transformed to swelling domes of rock, clothed with the dark green spruce, striped here and there with the more delicate-hued birch. Near the foot of the Rapids we arrived at the fishing station formerly tenanted by one of the most successful salmon fishermen in Canada, Captain James Strachan, of Toronto. His spruce-bark lodge still remained on the bank where it had been pitched some years before, and near it were the rude but ample comforts and conveniences with which sportsmen in Canada often surround themselves in the woods, when time and means are at their command, and which contribute in no small degree to the enjoyment of a camp in the wilderness. They all appear to have been respected by the few Indians who come down the river,
or by the solitary trapper who now and then passes this way during the winter season, to hunt for the highly-prized martens of Labrador.

Just before reaching Captain Strachan's spruce-bark lodge, we met a canoe full of Montagnais Indians, who had been seal-hunting, but without success. They turned out to be Louis' father-in-law and three of his family. We stopped to say a few words, when the old man embraced the opportunity to ask me for some medicine, at the same time commending his son-in-law to my care. I gave the old man some powdered rhubarb, and told him to take a pinch occasionally before going to bed. But these general directions did not suit him, and I was compelled to give precise answers to his numerous questions-respecting the exact quantity of water to be taken with the rhubarb how long before or after - what he should eat before and after-how long he should lie in bed - and whether he might be permitted to drink cold water until the effects of the medicine had passed away. When I had answered with as much precision and gravity as possible these and several other questions of a more precise but less agreeable character respecting the effects of rhubarb, the old man expressed himself satisfied, said he would try 'a pinch' that very night, and bade us good-bye. He had not paddled fifty yards when he shouted to us to stop, and, hurrying back, insisted that I should show him the exact quantity of rhubarb he ought to take at a dose ; this done, he said a few words to Louis, and went his way.

As soon as he was gone, Louis gave the signal for a race. Away the canoes leaped through the water, until
they reached the little sandy beach at the landing-place opposite the spruce-bark lodge.

No one will be surprised at the solicitude exhibited by Louis' father respecting the quantity of medicine to be taken at a dose, when it is known that the strongest poisons are employed by the fur-traders to kill wild animals, and the effects of these poisons are known to the Indians and greatly feared by them. Strychnine is now very generally employed, and even in the far-off wilds of Mackenzie River it is one of the most successful agents in the hands of the trapper, or rather the poisoner, of some of the fur-bearing animals.

In a paper presented to the Natural History Society of Montreal on the fur-bearing animals of the Mackenzie River District, by Mr. Bernard R. Ross, C.T. of the Hudson's Bay Company's Service,* the effect of strychnine on different animals is noticed. The Gray or Strongwood Wolf (Canis occidentalis, var. Griseus, Rich.) is killed by this poison. It is described as an 'infallible method, though the animals sometimes go to such a distance that it is difficult to follow their tracks; and if a fall of snow come after they have eaten the bait, their bodies are often lost. About two grains are required to kill a wolf quickly.'

In poisoning foxes Mr. Ross says : 'I have tried aconitine, atropine, and corrosive sublimate without success.

[^6]The only poison that I have found strong is strychnia. One or two grains of this are mixed with a little tallow, forming a small ball, and covered with a coating of grease outside to prevent the animal from tasting it. A quantity of pounded dried meat and morsels are strewn about so that the animal, after swallowing the poison, may be detained a sufficient time for it to operate.'

## CHAPTER III.

MISTA-KA-PITAGAN, OR THE GRAND PORTAGE.

High-Water Portage - The Moisie Rapids - Dimensions - The Boulders of the Moisie Rapids - Labradorite -Fire-Rocks Montagnais and Cree Dialects - Vapour Baths - Essence of Ginger - The Mista-ka-pitagan, or Grand Portage-Description of View from the Grand Portage - Spruce-bark Lodges - Frozen Rain-drops - Beautiful Spectacle - Extraordinary Low Temperature - The Ascent of the Rapids in Canoes - Salmon - Dangers of the Ascent-Indian Skill-Move Camp-Desolateness of the Country -Probable Remains of Early Missionaries - Symmetrical. Arrangement of Boulders.

FINDING it impossible to ascend to the foot of the Rapids where the Mista-ka-pitagan or the Grand Portage begins, in consequence of the high flood in the river, we were compelled either to land our baggage and canoes at the fishing station described at the close of the last chapter, and cut our way through the woods to the foot of the Rapids, or wait until the waters in the river fell at least three feet.

Three men were despatched to examine the path over the high-water portage and report on its condition. This portage is only passed in the spring of the year, or during a freshet, by Indians ascending the river.

The men returned in the evening with the intelligence that the path was 'rough,' but with some little 'cutting out' the canoes and baggage could be passed over it. It
was thought advisable to send the baggage first, and try to force our way up the river with the light canoes, as it would involve much labour and great loss of time if we were compelled to cut out a road for the large canoe through close woods for more than a mile. On Wednesday (12th) work was begun in earnest. Each man was


CUTTING OUT A ROAD.
loaded with a heavy pack, and an ascent made to the summit of a precipitous hill 240 feet high, in the rear of the fishing station. This was the most difficult part of the undertaking, the remaining portion of the path being
over level rocks or down steep hills. From the summit level a grand view of the Rapids is obtained, as well as of part of the deep gorge through which the tumbling river flows. As a thunder-storm threatened to wet the flour which had been carried over in bags to the foot of the Rapids, I desired one of the Indians to protect it in the best way he could. After a moment's pause he took a small axe from his waistband, and, approaching some spruce trees, peeled off large pieces of bark, with which, in a few minutes, he made a covering impervious to rain. By six in the following evening all the baggage had been carried over. We therefore camped at the foot of the Rapids, intending to try and ascend the torrent with our frail little transports on the following morning.

The Moisie Rapids, when the channel is full, are grand indeed. A river 130 to 180 yards broad leaps through a chasm of zigzag form in six successive steps. The fall does not exceed sixty feet in a distance of three and a half miles; but the body of water in the spring of the year is immense, and being pent up in a comparatively narrow channel between rocks and hills about 400 feet in height, it well serves to convey to the mind those impressions which are always created by Nature in her wild and stormy moods. One singular feature of the Rapids is the long rows of huge, rounded, and polished boulders which lie piled one above another at each turn of the river wherever lodgement can be found. They are imposing monuments of the power of water and ice; but, as we afterwards found in the upper country, the boulders of the Grand Rapids are few and diminutive when compared with the infinite number of colossal erratics which lie scattered over the valleys, the hill-sides, and the moun-
tain-tops, as the table land of the Labrador Peninsula is approached.

The prevailing rock in the boulders of the Rapids is gneiss, but some of Labrador felspar indicates the character of the formations in the country through which the Moisie flows. As I stood upon a Cyclopean pebble of brilliant Labradorite, brought no doubt by ice from the upper country, and worn into a polished rounded form by ages of exposure to running water, I was able to create a mental picture of the flashing fire-rocks of the Montagnais, the fire-mountains which the Nasquapees told us existed far towards the height of land, seen only green and bright by sunlight and moonlight, but never when the Manitou, who dwells in those mountains, is displeased with the wandering and helpless children of the forests and lakes of Labrador. This dream was scarcely realised to its full extent. I saw the 'fire-rock,' but not flashing, as the Indians described; but I do not doubt that small areas of the Labrador felspar exist, which glitter with the brilliant play of colours characteristic of this beautiful mineral.
'Louis, what is the Indian name of these Rapids?'
'Skatchewan.'
'Skatchewan? Why, does not that mean "swift water?",
'Yes.'
'And the name of the river ?'
' Mista-shipu.'
'That means Great River, the same as Missi-sippi ?'
'Yes.'
'And what is the Montagnais name of the Grand Portage ?'

## ' Mista-kapitagan.'

Even the names of rivers in the Montagnais dialect of the Cree language on the Gulf of St. Lawrence so closely resemble those at the foot of the Rocky Mountains, 3,000 miles distant, that anyone, although almost unacquainted with the tongue, may recognise the similarity of the dialects, and affirm them to be of the same origin without any evidence beyond what his ears afford in casual conversation.

At ordinary water levels, such as those of summer, canoes can ascend to the foot of the Grand Rapids, and strike at once the point which we were two days and a half in attaining. In autumn it would be an easy task to start from the fishing station at the mouth of the river, and reach the foot of the Rapids in one day with light canoes.

The south end of the Portage is a fine situation for a camp, surrounded on three sides by steep hills between 300 and 400 feet high, partly clothed with forest trees, and partly consisting of bare rock. It is superior as a salmon-fishing station, for those who are fond of indulging in that attractive pastime, to either of the lower stations, and it is near the limits of the region explored in modern times by civilised man.

Beyond the Grand Portage the country is undescribed, although there is reason to believe that the early Jesuit missionaries had a station on the summit of this stupendous barrier. Evidences of their presence there at a very early period will be given farther on; but in the country lying to the north we found no trace of their having been up the valley of the Moisie River.

VOL. I.

In a map constructed by the Jesuit Father Laure, dated 'Checoutimi, August 23, 1731,'* the mouth of the 'Moyse' is drawn near Seven Islands. The rapids of the river are also represented, but the 'Moyse' is delineated as flowing through a large lake called Atatchigamichick. This lake has no existence on the Moisie, but is an expansion of a small river bearing the same name, and described in this narrative as the Cold Water River-an affluent of the Moisie, up which our route lay towards the table land. Lake Ashwanipi is also indicated on Father Laure's map under the name of Lake Achouapipi, and the Nasquapees are stated to occupy the country north of this lake under the name of Les Cuneskapi.

The stones and fire-holes for the vapour-bath were seen in the neighbourhood of old Indian lodges, showing that, like the rivers and lakes from the Rocky Mountains to Labrador, which bear names derived from the same language, we find the favourite remedy for sickness adopted and cherished by all the ramifications of the great Cree nation.

The difficulties encountered in reaching the foot of the Rapids were so great that we determined to send our baggage across the Grand Portage, and wait a day or two before we attempted to bring the canoes up to our camp. The men complained of the steep hills and rocks, and declared it was impossible to carry canoes over such rugged paths without more 'cutting out.'

On the morning of Thursday (13th) we commenced to cross the great barrier to the interior country, not without

[^7]some misgivings. Louis began to complain that he had pains all over him, and felt weak and cold. Change of diet, together with the labour of portaging, to which he was unaccustomed, made him feel unwell; he wanted to go back, and could only be prevailed to stay upon receiving the assurance that I would give him some medicine and cure him without loss of time. A teaspoonful of essence of ginger in a cup of tea warmed him thoroughly, and after a good night's rest he rose himself again, and said he was much better. An additional dose of ginger and tea restored him to his usual good spirits and careless indifference to all sublunary things. The Grand Portage was represented to us by people at the mouth of the Moisie as nine miles long, but we could not find anyone there who had crossed it. Our Abenakis Indian, as well as Louis, had passed it several times ; and while the former called it six miles, the latter merely remarked that it was 'very long - might be nine miles, might not ; but it was very long.'

At four in the morning we despatched the men with a load each, instructing them to carry them a mile and a half and then return-Messrs. Gaudet and Caley marking the distances, and recording the variations in the aneroid barometer at each considerable change of level. I followed an hour afterwards with a second aneroid, recording the variations at each measured station. The path runs through a deep valley to the summit of a range of embossed gneissoid hills, which form on this part of the coast the southern boundary of the mountainous country.

The distance of this range from the sea is about four-
teen miles, and its general direction is from the northeast to the south-west. It appears to be one of several ranges which have courses rudely parallel to one another: the most marked of these is the range which passes in the rear of Mingan. One mile from the commencement of the Grand Portage the altitude is 320 feet above the level of the river, or about 330 feet above the surface of the sea; the spring tides which rise here seven feet being appreciable a short distance below the foot of the Rapids.

From this spot, a view both extensive and very beautiful can be obtained on a clear day. The sea, like a line of silver light, is visible towards the south, while east, west, and north are ranges of wooded hills bearing from northeast to south-west.

Snow, even on June 13, lay on several of the more elevated peaks to the north. The valley of the Moisie, apparently occupying a rent between two ranges of hills, grows blue in the far north-east, and appears to be bounded by peaked mountains spotted with snow. No bird, or squirrel, or rabbit was seen in the fine woods of the deep sheltered valleys leading to the summit of the Grand Portage. Bare rock or larch, succeeded by thin clumps of. stunted spruce, or half a dozen larch just coming into leaf, with a rich undergrowth of Labrador tea plant, and mosses or lichens of every hue and depth of colour, are the features of the ground over which the well-worn Montagnais portage path runs. At night we all returned to our camp at the foot of the Rapids. Rain set in after sunset, and as the oil-cloths were used for covering the provisions left on the Portage, two of the
men, who did not relish the idea of being wet through in consequence of sleeping at the side of a light canvass tent and catching the drip, set to work and soon made a waterproof half-tent of the bark of the spruce, which in the spring of the year may be peeled off without difficulty, and in large sheets. Our tents were made of light sail-cloth, or 'American cotton,' and turned rain admirably as long as the cloth was tight and not touched by any object in the inside. If, however, a bag or gun or a tired voyager should touch the cloth of the tent during rain, the water would penetrate at the point of contact and begin to drip.

A half-tent of birch or spruce-bark is made in the following way, by anyone familiar with woodcraft:-A stout pole about seven feet long, with a crotch at one end, is driven into the earth by repeatedly plunging it into the same hole; it is made firm by driving one or two short stakes into the ground close to it. Six or eight other poles, about twelve feet long, are laid in the crotch at an angle of $45^{\circ}$, and about two feet apart at the base. Large slabs of spruce-bark are then cut from neighbouring trees, by the simple process of making a longitudinal slit with the axe four feet long, and nicking it round above and below the end of the slit; a stick, or the axe-handle, is then inserted into the slit, and worked up and down until the whole of the bark is separated from the trunk. A skillful woodsman will prepare ten square yards of spruce-bark in as many pieces within the space of half an hour. The bark is then arranged, like tiles, on the poles, and the pieces are prevented from falling down by other poles resting upon
them on the outside. Such a tent is quite waterproof as long as the wind blows the rain in the rear, but if the wind should change, its value as a shelter becomes very materially diminished, and the only remedy is to complete the circle with more poles and bark, and thus make a spruce-bark lodge - an excellent substitute for one of birch-bark, and capable of affording shelter against wind, rain, or snow.

It rained heavily during the night, but towards morning the clouds cleared away, a cold wind from the north set in, and the thermometer fell to $4^{\circ}$ below the freezing point, congealing the rain-drops which hung on the leaves, and covering the little pools of water with a thin sheet of ice. But when the first rays of the unclouded sun fell on the hills surrounding our camp, just as a gentle breeze swayed the branches lightly to and fro, the frozen rain-drops sparkled like clusters of diamonds, throwing off rainbow colours all around. This ever-varying play of light descended into the valley with the uprising sun, lingered about our camp for a few short minutes, and faded slowly away as the frozen rain-drops melted in the genial warmth of his rays.

The men rose that morning cold and disheartened by the heavy labour of the preceding day, and the still more severe work which evidently lay before them; but nature, all bright and fair, together with the wonderful spectacle of the rainbow-coloured light sparkling and dancing as it descended the hills, soon made them forget their troubles, and they went on with another load, singing and cheerful at heart. Speaking at breakfast about the sudden change from warm rain to a temperature of $4^{\circ}$ below
freezing point, and probably much lower on the exposed mountain-tops, Mr. Gaudet remarked that in the winter of 1858 and 1859 he had slept in an open tent near the dividing ridge between Lake Superior and Winnipeg, when the whole party were roused simultaneously by a sudden reduction of temperature, caused by a cold blast from the north. The thermometer at the hour when they rolled themselves in their blankets was a few degrees below zero: at four in the morning the change came ; a gust of wind so cold and piercing swept over the camp, as to penetrate even two doubles of the famous four-point north blankets, and awoke voyagers, Indians, and surveyors with a sudden start. The thermometer fell to $46^{\circ}$ below zero : the instrument was one of Negretti and Zambra's minimum spirit thermometers, and had been tested and its error recorded in the Observatory at Toronto.

As soon as the baggage was carried a mile and a half across the Grand Portage, we decided to make an attempt to bring the canoes by the river from the fishing station to our camp.

The men were despatched for this purpose, and we sat on the huge boulders at the foot of the Rapids anxiously watching for their appearance round the jutting points of rock which hid the fishing station from view, and where the eddying waters foamed and struggled in their haste to reach the sea.

Two hours after the men started a canoe appeared round the point, wavered for a few moments, and then went back; appeared a second time, and, retreating a little, boldly crossed the river to examine the other side.

The canoe was a small one, and contained two Indians. In a few minutes she returned to our side of the river and again disappeared behind the jutting rocks, leaving us in anxious suspense and doubt. In half an hour two canoes suddenly show themselves at the point, shoot out into the stream, and, crossing the river, disappear from view in a small bay on the opposite shore. With a glass I see the men attach a rope to the canoes, and one by one drag them against the foaming torrent, round the sharp edges of the rock swept by the swollen tide of the Moisie. Now they take to their paddles and make about 300 yards, to the edge of another point of rocks, past which a surging torrent rolls; they tie the canoes together, and, while two men 'fend off,' the others pull them round the point, with difficulty finding footing on the rough but almost perpendicular rocks which dip straight down into the water. Now they carry the canoes cautiously over a gently-sloping shelf wet and slippery as ice; here they rest awhile, and discuss the best mode of crossing the river, which the Indians point out. After a long struggle with the stream, they reach a part of the beach opposite a bar in the river, an island or peninsula at low water, and, gliding across the current which separates it from the main shore, gather fresh strength for the chief difficulty which lies before them - the passage of the main stream. They must reach the foot of the eddy on this side, or they will be swept down and perhaps be broken against the rocks at the first bend. They are making signs and pointing to the water at their feet: now the Indians strike the water with their paddles, both canoes being on the bar. What are they doing? Looking
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CANOES CROSSING THE FOOT OF THE GRAND RAPIDS.
over the side of the canoes and pointing here and there with their paddles. What is that? A huge fish springing from the water close to the canoes,- salmon, the Moisie salmon,-salmon by tens and hundreds and thousands passing up the river, and, while the water is high, swimming over the shoals or lying on them, before they begin the ascent of the Rapids, either gathering strength or waiting until the water falls and opens a road for them to the upper river.

Now the canoes are launched forth into the current, keeping the bows well up the stream; they hold their own for a few yards, then the current begins to drive them downwards; with almost frantic efforts they sweep their paddles. The Indians in the small canoe, with beautiful skill and well-directed power, keep the head of their canoe against the stream, and do not lose an inch more than they can help. On they come battling against the torrent. The small canoe reaches the eddy and is safe ; the large canoe, with three strong men but less skillfully handled, is in danger of being carried down swiftly. The stream is drifting them, helpless and powerless, towards the first curl of the eddy; if they get beyond that they must be swept away. They have only fifty yards to fall down stream and they may give it up; they have only fifty yards to come in a straight line and they will be safe. The steersman looks round and sees the danger; Hup! hup! hup! he cries. A dozen rapid strokes with the paddle, made by men who see their peril and know the only means to avert destruction, bring them well towards the edge of the eddy ; a dozen more throw them into it just where it takes its first turn, and they are safe. The men
sink back exhausted, leaning on the bars of the canoe which is gently carried towards us by the returning stream and caught as it touches the shore.

The variableness of the climate showed itself this morning : at nine it was clear, warm, and bright ; at halfpast ten a slight shower of snow fell, just sufficient to whiten the hills. By noon all was bright and green again, and after dinner we took the canoes along the Grand Portage, and moved camp to our baggage on the summit level. The men found the labour very distressing, and required much encouragement to make them perform the appointed distances for the day; nevertheless, we succeeded by the following evening in carrying everything to within a few hundred yards of the end of the Portage. The desolation on the Gneiss Mountain was very impressive. No birds were visible except some gulls sailing high in the air above us; no animal life of any description, and of insects only a single butterfly was seen wandering from one sweet Alpine flower to another ; the ants had not yet come from their winter restingplace, and when their hills were disturbed they were found coiled in a half-torpid state a few inches below the surface, or moved sluggishly about as if just awakening from a long winter's sleep. Still this wilderness has its charms; the air is delightfully pure and exhilarating. The distant mountains look green and tranquil, the winding river sparkles brightly in the noonday sun, delicate wild flowers blossom in every hollow where a little soil has accumulated, and in the shallow depressions of the surface rich mosses and lichens form a soft carpet green and gray, red or pale yellowish-white, according to the


Hanbart, Chromo lath
RESTING ON THE PORTAGE PATH
species which most prevail. Wandering from the Portagepath while the men were resting after a long and heavy 'pull,' I came upon a number of boulders symmetrically arranged - the work, I thought, of some of the earlier missionaries, who two centuries ago travelled through part of this country when Indians and game were numerous. Some of the boulders were two feet in diameter, and placed about one yard apart; they were fifteen in number, and had evidently been arranged by the hand of man, as there were very few others to be found in the immediate vicinity, and the symmetry of the disposition was very striking. They were placed upon a bare rock, seven forming an arch, and eight others lying in two parallel lines below the centre stone of the arch. A small spruce tree grew in a crack in the rock exactly in the centre of the semicircle. The whole bore a rude resemblance to a cross, which would have been complete if the two boulders on each side of the arch were taken away.
In 1660 , the Jesuit missionary Menard spoke of the neophytes of Seven Islands in the account which he wrote of the condition of the missions in Nouvelle France. He stated that they were anxious to see their pastors, that they might be consoled in the midst of their afflictions, for they dare not ascend to Tadoussac, near the mouth of the Saugenay, on account of their enemies the Iroquois. It is clear that at this early period the French Jesuits had visited the Indians on the coast below Seven Islands, and had baptised a considerable number. The Seigniory of Mingan was granted to Sieur François Bissot in 1661, and the group of islands lying off the shore, called the

Mingan Islands, were conceded in 1677. It is therefore very probable that, as the country both above and below the Moisie was known and allotted two centuries ago, the symmetrically-arranged group of boulders on the Grand Portage was the work of the Jesuit missionaries of that period. Frost may have slightly shifted the position of the boulders, most of which weigh more than a ton, and the form no doubt was originally that of a cross, to which, as before stated, they bear a close approximation in their present arrangement.

Strolling still farther on, I came to a deep valley about 100 yards broad, with steep walled sides. In this valley the vegetation was rich and luxuriant. The trees were protected from the cutting winds which in winter sweep over the bare rocks on the summit level, and the snow no doubt drifts deeply in this depression, for patches of ice still remained at the bottom some feet in thickness. A rich soil had accumulated in the huge crack - for it was nothing more - and here I saw some whisky jacks and a few small warblers.

From one end of the Portage to the other we passed a series of marten traps, cut out of the butt-end of trees where they were found sufficiently large for the purpose. They were from 100 to 300 yards apart, according as the trees afforded opportunity for their construction. A marten trap is made in the following manner. A tree is felled about three feet from the ground - its diameter must not be less than six inches or exceed ten; the top of the butt-end is squared off, and two side pieces, about twelve inches long, five broad, and one thick, being merely chips from the tree, are inserted into crevices at
the top, made with an axe. These form two sides of a triangular box, open above and on one side, which serves as the door, where a small piece about an inch high is left attached to the butt-end to hold the fall in its place when it descends. The fall is made from a neighbouring tree, which should not be more than three inches in diameter; when stripped of its branches it is merely a pole, one end still attached by a few fibres to the stump, and the other supported over the door of the trap by a small piece of wood, which rests on a cross bit, to which the bait is attached. Snow falls to the depth of three and four feet in these wilds, and the traps are generally near the level of the snow in mid-winter. The marten enters the door to get at the bait, and while tearing it away, the cross stick is moved, displacing the small stick supporting the fall, which descends on the back of the animal and kills it. The line of marten traps had been constructed during the previous winter by the Abenakis Indian who accompanied us, and who bore the name of Pierre, by which designation he will be described in future chapters. The Labrador martens are very valuable, being equal in the richness of their fur to those of the Mackenzie River ; but they are no longer numerous in the wilds of Eastern Canada.

By Saturday evening we had conveyed all the baggage to the north end of the Grand Portage, and there remained only the canoes to bring down the abrupt descent of 280 feet, which led us once again to the Moisie.

The vegetation on this descent was very luxuriant, all the trees being in full leaf, and many of them of large growth. The most imposing were the spruce, some of
which approached two feet in diameter a short distance from the ground, with tall and clear trunks. The birch was also large, and perhaps in the present condition of the country the most important tree ; for it is from this neighbourhood that the Montagnais and Nasquapees procure the birch-bark for their canoes. This valuable tree diminishes so much in size towards the upper waters of the river, that its bark is not adapted for the construction of canoes, and we were told that the only other place where the birch tree grows to a size suitable for the construction of those frail craft was on the Ashwanipi River, near where it empties itself into Hamilton Inlet. The Hudson's Bay Company import bark from the Ottawa for the use of the coast Indians.

The following morning was wet and cold; but as soon as the rain ceased, and while the men lay in their tents sleeping or talking, Pierre, who spoke English well and was never idle, busied himself in assisting the cook to knead and bake. After several cakes were pronounced ready for use, the conversation relating to hunting in these wilds during the winter took place, as recorded in the next chapter.

## CHAPTER IV.

## THE MARTEN TRAPPER.

Pierre, the Marten Trapper - The Marten Road - The Carcajoù, or Wolverine - The Carcajoù following the Trapper's Steps Death of the Carcajoù - Indian Mode of making a Câche to protect Furs from the Carcajoù - Disposition of the Carcajoù - The Sagacity of the Animal - Killing a Bear with an Axe - Killing a Bear with an iron-shod Pole-Periodical Disappearance of the Marten - Number of Martens destroyed in Mackenzie's River District - Value of the Marten to the Fur-traders - An Incident in the Woods - Montagnais with the dead Body of his Cousin The Montagnais' Story - The Lynx - Wendigoes - Ferocity of the Lynx - Mr. Peter Mackenzie's Lynx Hunt-Montagnais Mythology - Resemblance between Odahwah and Montagnais Traditions - Assikinack, an Account of the Odahwah Tradition of the Flood - Tradition of Pharaoh and his Host.

'HOW long is your line of traps, Pierre ?' I enquired of the Abenakis Indian.
'Thirty miles,' he replied.
'Thirty miles! How do you attend to them all?'
' I built my winter lodge about twelve miles above the Grand Portage, and made the traps for about fifteen miles above and fifteen miles below the lodge.'
' How long did it take you to visit your traps?'
' One week.'
'And how many martens did you take last winter?'
'Twenty-two ; but a hunter on the Manicouagan took
fifty-seven. I came too late in the fall, and the winter was half over before my marten road was finished.'
'What did you get for your skins?'
' Five dollars apiece.'
'Tell me how you set to work in the fall of the year, when you have made up your mind to build a line of marten traps, or marten road as you call it?'

Pierre took out his pipe at this question, slowly filled it, went to the fire and put an ember on the tobacco, and after a few puffs he returned to where we were sitting under an oil-cloth to shelter us from the rain, and, reclining on the ground, began his description as follows:-
' The winter before last I was hunting on the Manicouagan, but so many Indians came on the river that I made up my mind to try some other ground. In the fall I brought my wife to the Moisie. I got together some flour and pork, and took my canoe up the river, leaving my wife in a little house I built on the Moisie Bay. I found a spot which we shall pass the day after to-morrow, put up a lodge, made a strong câche for my flour and pork, to keep them from the carcajou,,* and set to work to build my traps. It was already late in the season-too late, for the snow was more than a foot deep and the river had taken strong. $\dagger$ I worked hard, but it was nearly Christmas before all mytraps on the linewere finished. I set out early in the morning to visit my traps for about eight miles in one direction, and then returned to my lodge.

[^8]The next day I went the same distance in the opposite direction, always getting home about dusk. The day after I took my blanket with me, some bread, pork, and bait, and walked in snow-shoes straight to one end of my line of traps; here I had a little sleeping-place made of spruce-bark, where I stayed the night. On the following day I went back visiting all the traps and putting in fresh bait when they had been disturbed ; I did the same in the other direction, but sometimes went on to the Bay to see my wife. In this way I spent three months, until the snow began to go and the ice in the river to give. I only got twenty-two martens ; the country hereabouts has been hunted too much; but I think I should have got more if the carcajoù had not taken my bait.'

Some one asked Pierre whether carcajoux or wolverines were numerous on the Moisie, and how many of his traps they spoiled.

- There are not many carcajou here,' answered Pierre, ' but one fellow took all my bait - from my lodge to the farthest end of the line up the river. He followed me from trap to trap, and when I came back I found that he had been at every one and taken all the bait.'
'What do you bait with?'
- Oh, anything that a marten can smell - a wing or head. of a bird, a bit of fish, or meat when I get a bear or fox ; sometimes bits of the martens themselves : anything will do, if it's only meat ; they feed on mice chiefly, when they can get them.'
'Didn't you try to catch the carcajou ?'
' I shot him two days after he took my bait. I went out with fresh bait, and put some in three or four traps,
roL. I.
and then lay down on the snow behind some bushes, and watched for the carcajoù. I watched half a day. Towards evening, just as I was thinking of going back to my lodge, I saw him coming along the line. He stole up to the trap, smelt it, and put in his paw ; the fall came down, but he pulled out the bait just as if nothing had happened. I shot him as he was eating it. It's difficult to make a câche which will keep the carcajoù out; they are very powerful, and will break open almost any house. The best way is to tie your pack at the end of the branches of a tree, about twenty feet from the ground; but that is sometimes very difficult, and if the pack is not high enough, the carcajou will jump on it and bring it to the ground. They are cunning creatures.'

As an illustration of the ingenuity of Indians in preserving their packs of fur or provisions during the winter months where the wolverine abounds, Mr. Anderson, chief factor of Mingan, told me that when he was in charge of the Post of Neepigon, north of Lake Superior, an Indian came to him to get some provision, but did not bring his furs.
'Where did you leave your furs?' he enquired.
' Made a câche of them,' said the Indian.
' But, man, the carcajou will get them; there are plenty in your hunting-grounds,' replied Mr. Anderson.
'No, no ; no fear, I 'll frighten the carcajoù, I think, if he tries to get my pack.'
'How did you make the câche?' .
' I wrapped the furs in birch-bark, and tied the bundle at the end of a large branch twice as high as myself from the ground.'
' Well, that will not keep the carcajoù away; he will climb the tree and jump on the pack, and bring it down with him.'
' No ; I think not,' said the Indian, with a smile. ' I fastened two of my little dog-sleigh bells to the pack with a bit of sinew. When the carcajoù comes crawling down the branch to get at the pack, he will ring the little bells, and then you know how quick he'll jump back again and run off. I have tried this trick before, and it never failed me. No fear - the carcajoù will not get my furs.'
' I should have done well last winter if it had not been for the carcajoù. They are terrible beasts,' said Pierre in a musing manner and shaking his head.
' Did you not find it very lonely work during the long winter in the woods?'
'Lonely? no. Plenty to do; and I went down to the Moisie Bay perhaps once in six weeks. Lonely? yes; once I did find it lonesome. It was in February ; the weather was awfully cold. I have spent many winters in the woods, but I never found it so cold; it lasted three days, with strong wind. I was lonesome then ; I could not visit the traps. After the cold spell the weather became quite warm for one day, then it snowed for two whole days, and snowed me up in my lodge. All was dark. I went to sleep, and woke as usual ; at least, so I thought, but it was dark. I turned round, and went to sleep again, woke again and found it still dark. I got up to get something to eat, and fell on a drift of snow on the floor of the lodge; so I struck a light, and found that the snow had come through a crack in the roof. After I had
eaten, I went to the door, pulled it open and saw a wall of snow. It did not take me long to get out, and when I broke through, the sun was setting. It was at least six days' hard work to clear all my traps after that storm, but then I caught seven martens the next visit, and that paid me well.'

The desire for accumulating property seems to be deeply implanted in the carcajou or wolverine. Like tame ravens, it does not seem to care much what it steals, so that it can exercise its favourite propensity to commit mischief. Mr. Bernard R. Ross, chief trader of Mackenzie River District, in the Hudson's Bay Company's service, writes that he knew a hunter and his family leaving their lodge unguarded during their absence, and on their return finding it completely gutted; the walls were there, but nothing else. Blankets, guns, kettles, axes, cans, knives, and all the other paraphernalia of a trapper's lodge had vanished, and the tracks left by the animal showed who had been the thief. The family set to work, and by carefully following up all the paths, recovered, with some trifling exception, the whole of the property.
' I got a bear,' resumed Pierre, after a pause, 'in a way that's worth telling. One day I was making my traps near the forks of the river, soon after I came here, when I saw a bear-track quite fresh in the snow. I had no gun with me, only a large axe. I followed the bear, and after half an hour came to a balsam tree which the wind had blown down; here I lost the tracks, as a little breeze was sifting them up; so, after looking round a bit, I sat down on the trunk, and the thought struck me that the bear might be underneath. I listened, and I actually
heard him scratching. He was making his winter house. I walked carefully round the tree, and found where he had gone through the branches and got under the trunk. I stepped lightly as possible on to the trunk, and walked along it until I came to where the bear was scratching. I held my axe ready to strike, and stamped with my foot. The bear came out of the hole to see what the noise was; I split his skull in two pieces as soon as he showed his head. We shall come to the place in a day or two, and, if you like to step ashore, you can see the tree where I killed him, and his split skull hanging on a pole close by.'

The periodical disappearance of the marten is noticed by Mr. Ross, C. T., who, with Mr. Gaudet's brother, has been for thirteen years in the Mackenzie River District.

He says * that it occurs in decades, or thereabouts, with wonderful regularity, and it is quite unknown what becomes of them. They are not found dead. The failure extends through the Hudson's Bay territories at the same time ; and there is no tract or region to which they can migrate where the Hudson's Bay Company have not Posts. When at their lowest ebb in point of numbers, they will scarcely take the bait at all. Providence thus appears to have implanted some instinct in them by which the total destruction of the species is prevented.

The importance of the marten in the fur countries may be gathered from the following tables, which exhibit the returns from Mackenzie River District for 1859 :


[^9]| Fort Simpson and | Big |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | ---: |
| Martens |  |  |  |  |  |

Being a decrease on the preceding year of 13,546 martens.

The average return from Mackenzie River District for a number of years was as follows :-

| 1844-1850 | . | . |
| :--- | :--- | :--- |
| Martons |  |  |
| $1851-1857$ | . | . |
| 27,480 |  |  |
| 24,756 |  |  |

Perhaps the year 1859 , in which the number of martens taken in the Mackenzie River District was nearly 10,000 less than the average of twenty-three years, was one of the periodical years of disappearance to which Mr. Ross refers.
'What other furs do you get, Pierre ?'
'We get a few cats, bear, musk-rats, otter, and foxes, but the marten are worth all the rest put together; and as soon as the martens go the Company will go too, and the Indians will starve, for traders will give whiskey for furs, which the Company never do on this coast now; besides, all the Indians are temperance men, and will continue so if the traders don't come and seduce them to break their pledge. I am sure when the Company leave the coast, which they will do in a year or two, the Indians
will die off like the marten or the rabbits during the bad years. But having mentioned cats reminds me of something that you will perhaps like to hear : it happened near the Forks ; we shall come to it to-morrow-it is not far from the place where I killed the bear.
' I was going along my line of traps, when I met an Indian with a sledge hauled by two dogs. He was a Montagnais, so that I could not understand much of his language, but he spoke English a little, and we could easily make one another out. I said to him, " You have a heavy load on your sledge." "A heavy load," he replied, in a mournful tone.
' I saw he did not like to talk, so I asked him to come to my lodge and pass the night. We got there early, and cooked some supper. The Indian had plenty of caribou meat with him, and gave me some, which he took from the sledge. After a smoke he began to talk, and said he came.from the St. Marguerite, which enters the gulf a few miles above Seven Islands. He had a nice little pack of furs with him, more than I had; and the caribou were numerous about seventy miles up the river, but there was a camp of Nasquapees there who were killing them off. After a while, just as it was growing dusk, he asked me if he might bring his sledge into my lodge; " for," said he, "I have a body there, and I am afraid the dogs will eat it if it is left outside."
'He brought the body in, and laid it in the coldest part of the lodge, where there was a little snow drifted through a crack.
""Oh," said the Indian, " if the snow does not melt here the body will take no hurt."
'We sat and smoked together.
'After a while, I said, "Did you bring the body far?"

، "Six days up the St. Marguerite ; perhaps eight days from here. I came with some Nasquapees across the country, who had come from the Trinity River, and were following the caribou. The Nasquapees got enough meat, and went back. I came on to go down the Moisie to Seven Islands, and leave the body there till the spring.
" "How did he die?" I said at length.
'The Indian looked at the fire and said nothing. I knew that there was some very sorrowful tale to tell, or he would have spoken at once.
' After a long pause the Indian said, "He is my cousin ; I am taking him to be buried at the Post. He asked me; I promised him. It is a long journey in winter ; but he wished it, and he will soon be there."
"The Indian then began to tell me how it happened. "He and I," he said, pointing to the body-but he mentioned no name-"were hunting together; we came upon the track of a cat." '*
' By cat you mean lynx, of course,' said one of the listeners.
'Yes; we always call them cats : many white folk call them lynx. It's an animal about the size of a big dog, only lower and stronger, with sharp pointed ears, and a tuft at the end of each.'
'Yes, that's the lynx. Go on.'
'Well, the Indian said, " We came upon the track of a

[^10]cat, and followed it. My cousin was first, and he turned round and said to me, 'I'll go round that mountain, if you go up the valley with the dogs, and we are sure to get him.' We separated. In an hour I heard a gun, and then sat down, and I waited long. Night was coming on ; I thought I would go and look. I could find nothing, so, as it was getting dark, I fired my gun : no answer. I fired again: no answer. Something, I said, has happened to my cousin : I must follow his track as soon as it is daylight.
'" I pulled some sapin,* made a bed on the snow, drew some branches over me, and slept well. Next morning I followed the tracks, and before I got half round the mountain I saw my cousin. He was nearly dead-could just speak. Close to him was the cat, frozen stiff. My cousin had slipped into a crack of the rock just after he had fired and wounded the cat, when he was within twenty yards of it. One of his legs was broken. As soon as he fell, the cat sprang upon him, and tore off part of his scalp; he killed it with his knife, but could not get out of the crack on account of his broken leg; he could not reach his gun to fire it off, and let me know. There he must have remained, and have died alone, if I had not chanced to come. I lifted him out of the crack, but his fingers snapped off - they were frozen. He just said to me, 'Nipi! nipi!' - water! water! I quickly made a fire, put some snow in my blanket, held it over the flame, and got him some water. He told me to take him to Seven Islands or the Moisie, and bury him there. He

[^11]pointed to his gun. I brought it to him ; he put it into my hand, turned round his head, and died."
'The Indian sat looking at the fire for many minutes. I did not want to interrupt his thoughts. After a while I filled his pipe, put a coal in it, and gave it to him. He took it, still looking at the fire. Perhaps he saw the spirit of his cousin there, as Indians often say they do. He smoked for a long time. A length he spoke, looking at the body, and pointing to it, saying, "He said last winter that some one would die before the year was out."
'I knew well enough that it was one of their superstitions that had troubled him, for he was a heathen not more than a year ago ; and a man does not get rid of his heathen notions by being touched with a drop of Manitou water. So I said to him, "Did he see anything ?"
""He came across tracks." '
""Tracks? "
""A Wendigo," said the Indian.
، "Have you ever seen one ?" I asked him.
" "I have seen tracks."
""Where?"
، "On the St. Marǵuerite, the Mingan, the Manitou, the Oa-na-ma-ne. My cousin saw tracks on the Manitou last winter, and he said to me and to many of us, 'Something will happen." ,
"" What were the tracks like?" I said to him.
" "Wendigoes," he replied.
""Well, but how big were they ?"
'He looked at me and said nothing, nor would he speak on the subject again.
'These Montagnais think,' continued Pierre, 'that the

Wendigoes are giant cannibals, twenty and thirty feet high. They think that they live on human flesh, and that many Indians who have gone hunting, and have never afterwards been heard of, have been devoured by Wendigoes. They are dreadfully superstitious in the woods, but brave enough when they get on the coast.'

The lynx is common in this country, and at times quite a formidable animal. Mr. Peter Mackenzie, of Mingan, had a lucky escape from one of them on an island opposite the Post. It was in the spring of the year, shortly after the ice had parted and made them islands again, that Mr. Mackenzie went across the bay in his canoe, more for exercise than for any special object. He took no gun with him - nothing but a Montagnais bow and arrow, a knife, and snow-shoes. Landing on the island opposite Mingan, he saw the fresh tracks of a lynx. He adjusted his snow-shoes, soon found the animal, and followed it closely several times round the island without coming within shot. At sunset he returned to the Post, but at dawn on the following morning he resumed the chase on snow-shoes. Round and round the island he pursued the cat, always at a steady pace ; and towards evening he saw that it was getting very fatigued, for he got two opportunities of striking it with the heavy Montagnais arrow which is used for killing the smaller game. At last he came within twenty yards ; the cat turned round, rose on his hind legs, snarled, and began to paw the air. Mr. Mackenzie discharged another arrow, but at the same moment his snow-shoes tripped him up, and he fell headlong with his face in the snow. The cat instantly sprang upon him, tearing with one stroke the
coat from his back. Mr. Mackenzie turned round at once, and caught the cat by the throat with one hand, and with the other he drew his knife ; but as he made a lunge they both rolled over together, and he received some very severe scratches. Still holding on firmly to the throat of the animal, he was not bitten, although he was in danger of having his bowels torn out by the hind feet of the cat, who was making a vigorous resistance. A second lunge with the knife was fatal ; it passed through the animal's heart, but it left Mr. Mackenzie exhausted and bleeding on the snow. He soon recovered, and carried his booty in triumph to the Post.

Mr. Peter Mackenzie is the brother of the late Mr. Mackenzie, of Pembina, whose melancholy death I have described in the narrative of the Canadian Exploring Expeditions in the North-West.

The lynx is passionately fond of perfumes, among which the odour of castoreum is its chief delight. Trappers frequently employ castoreum in order to capture this animal.

The lynx formerly played an important part in Montagnais mythology. They supposed that the world was created by Atahocam, and that a deity named Messou repaired it when it was old. One day Messou was hunting with lynxes instead of dogs; his savage companions swam into a great lake, and were lost. Messou searched for them everywhere without success, when a bird told him that he would find them in the middle of the lake. He entered the lake to bring back his lynxes, but the lake began to overflow its banks, and finally deluged the world. Messou, astonished, sent a crow to
bring him a piece of earth, from which he intended to reconstruct the land, but the crow could not find any. He made an otter dive into the waters, but the otter was as unsuccessful as the crow. At last he sent the muskrat, who brought him a little bit, from which Messou reconstructed the earth as it now is. He presented an Indian with the gift of immortality, enclosed in a little box, subject to the condition that he should not open it. As long as he kept the box closed, he was to be immortal ; but his curious and incredulous wife was anxious to see what the box contained; she opened it, and ever since the Indians have been subject to death.*

It is curious that the legend described by the Jesuit missionaries as prevailing among the Montagnais in 1634, should be repeated in a slightly different but wholly independent form, by Assikinack, $\dagger$ a warrior of the Odahwahs, in 1857.

Assikinack could not, it is reasonable to suppose, have seen any documents written by the Jesuits; for, although the one from which the foregoing legend was taken was published in Paris by Sebastian Cramoisy in 1635, it was

[^12]not reissued in Canada until 1858, one year after Assikinack had communicated the paper to the Canadian Institute at Toronto. Both editions of the 'Relation of the Jesuits' are published in the old French commonly spoken two centuries ago, and no English translation has yet appeared to my knowledge. It is therefore not probable that Assikinack, who does not understand French, should have derived his ideas from the 'Relation of the Jesuits' or any second-hand source. He says that the tradition is not taken from information derived from reading, but entirely from what he heard from the Indians in his younger days.

The hunting-grounds of the Odahwah or Ottawa Indians were between Lake Huron and Michigan 250 years ago, or about 1,000 miles west of the Montagnais country. Then, again, the Odahwahs were of the Ojibway nation, while the Montagnais belong to the Crees.

A celebrated demigod, styled Nanakboozho, came to reside with men. He fixed his winter quarters near a certain lake; but he was not long there before he became aware that malignant monsters dwelt in the lake. He therefore cautioned his favourite son, Wolf, not to go upon the ice, lest some misfortune happen to him. The young Wolf acted for some time upon the advice of his sire, until one evening he ventured upon the ice and made for the opposite shores ; but when he got about half way, he

[^13]heard a rumbling noise, and the ice began to be elevated on different parts of the lake. The young hunter ran for his life; but before he reached the land death overtook him amid the broken fragments of ice, and he found his grave beneath the waters.

The father, being deeply grieved for the loss of his favourite son, vowed vengeance upon his destroyers. When the proper time arrived, the father took his bow and quiver, and repaired to the lake. Having chosen a convenient spot near the sandy beach, he there took up his position, and, in order to avoid detection, transformed himself into an old pine tree scorched all over. About noon the sea gods appeared on the surface, swam towards the shore, landed, and reclined upon the sand, and soon fell into a deep sleep. The father had now the power of inflicting a deadly wound upon any of them, so he quietly bent his bow, and let fly his flint-pointed arrow into the side of one of the slumbering monsters.

The water deities being thus startled from their repose, and finding one of their companions terribly wounded, were driven in their rage beyond all bounds. They plunged into the deep and began to agitate the waters, which soon overflowed the banks of the lake, sending forth floods in all directions, sweeping everything before them, until the whole earth was buried under water. In the mean time Nanakboozho, perceiving his perilous situation, took refuge on the highest point of the earth, but the flood came up to him rapidly; he then got upon a pine log that was floating by, being the only means within his reach by which he could save himself from immediate destruction. Sitting upon this log, he was driven and tossed
about by the fury of the elements, until at length they exhausted their rage, and the waters became still.

As soon as the fair weather commenced, Nanakboozho considered various schemes by which he might be enabled to recover the lost world. Whilst meditating deeply, he happened to notice a musk-rat that was on his logcanoe; he forthwith commanded the animal to dive, and endeavour to bring up a piece of mud from the bottom.

The musk-rat plunged at once into the water and went down. After a long time he came up to the surface, apparently dead ; his master took him up, and on examining the arms of the animal, he found a lump of clay under one of the shoulders ; this lump he pressed between his hands, and when he made it very thin, he carefully placed it upon the surface of the water. This piece of mud became in the course of a few days a large island, which continued to increase until the earth was formed, as we have it now. The new earth again became the habitation of human beings, covered with luxuriant verdure, and furnished with all things necessary for the use of man and other animals.

Another interesting legend of the Odahwahs, related by Assikinack, is as follows :-
'Several brothers, or a body of men of the tribe, pursued and hard pressed by fierce enemies, were being driven to the ends of the earth. When it was impossible for them to retreat farther, one of them suddenly turned round, and with a stick struck the earth, which immediately opened. All their pursuers were swallowed up in the yawning abyss, when the earth closed again, and thus saved his companions from death. This legend, heard by me in childhood, has almost entirely escaped my memory since, and thus I can only relate the substance of it.'

## CHAPTER V.

## THE GRAND PORTAGE TO THE FIRST GORGE OF THE MOISIE.

> Leave the Grand Portage-A Check-Grandeur and Solemnity of the Scenery - Ice, Rocks, and Trees - Caribou drinking-A Waterfall -Its Appearance in the Spring-Rocks and PrecipicesBeaver - Sounding for Beaver-Bear-tracks - Breakfast-Rocks -The Forks of the Moisie - Pierre's River-Tracking - Swiftness of the Current-First Gorge of the Moisie - Bear-paths - Ice in the Woods-A Canoe - Domenique, the Montagnais ChiefDomenique's Account of the Gorge - Of the Upper Country-Of his Tribe-Of Lake Ashwanipi-Of his People and Ancestors Louis' Diplomacy - One Cause of the Decline of the Montagnais and Nasquapee Nations - Famine during the early History of Western Canada.

RAIN continued to fall at intervals until noon. The canoes were then brought down from the summit of the hill, a road having been first cut through the thick forest to allow them to be passed. At three we started, leaving the examination of the Rapids until our return. With cheerful hearts we left the Grand Portage : it was heavy work, at the commencement of our exploration, before the men were in good condition and training. Under any circumstances, it is no trifle to carry baggage and canoes up such steep hills and rocks and over so rough a country, for nearly four miles, besides having to cut roads through a dense forest, and to be at this kind of work from four in the morning until eight at night. I
vol. I.
did not wonder that the men expressed their disgust at the Grand Portage in no very refined language when talking among themselves, or that some of them wished most heartily that they had never left their homes.

As soon as they got into the canoes, the usual lightheartedness of the French Canadian race showed itself. They stopped to take a look at the Portage when in the middle of the river, and with many a merry laugh raised their caps and bade it a respectful farewell, hoping, as one of them observed, ' never to have the misfortune to cross its path again.'

Our voyage was of short duration; for just as I was beginning to enjoy the beautiful scenery and the magnificent rocks, a series of heavy squalls came down the river, which was bounded by high hills or precipices, and quickly raised such a sea that we were in great danger of being swamped. Making for the mouth of a little creek, we lay to for more than an hour, until the wind had subsided so as to allow us to cross and get under lee of the land on the opposite side. The water-marks showed that the river rises twelve feet above its present level. It must then be a magnificent torrent, broad and rushing, carrying an immense quantity of water - probably not less than the Ottawa at its usual level.

Soon after we started we began to be impressed with the grandeur of the scenes through which we were passing. The wind had gone down, and the river glided with unruffled surface, in quiet contrast with the noise, and whirl, and foam, and rush of the Rapids below.

All voices were hushed, and even the paddles dipped with the utmost quietness into the water, by a simultaneous
impulse, as we passed some stupendous sheets of ice hanging over the edge of a perpendicular rock, at least 150 feet above the river. Blue and white masses of pure ice - in fact, an icicle on a gigantic scale glistened in the light of the evening sun. Clumps of birch in full leaf, growing out of crevices in the rock, hung tenderly over the cold white below, as if to protect it from the destroying warmth, which to them was vigour and even life itself. On each side of this beautiful sheet of white, fringed with delicate green, the red rocks rose stern and unchangeable. White, green, and red, ice, trees, and rocks, blended in exquisite harmony, created a picture at which even the Indians gazed with silent admiration, mechanically dipping their paddles into the water to keep the canoe from drifting down the stream.

This was one of those unexpected and beautiful scenes which go at once to the heart of the most callous and apparently insensible man. Even Louis, so rude and rough, gazed through the matted hair which hung over his face, throwing it aside time after time with a jerk of the head, as the coarse unyielding masses slowly fell over his eyebrows with each motion of the canoe. The spell was broken by an exclamation which I involuntarily made as we advanced between the setting sun and the pendent drapery of ice. From pale bluish-white to exquisite rosered, the change was instantaneous: it was like a prolonged flash of distant lightning - like the rose-coloured streamer of an aurora, vivid, soft, and fleeting, but fixing its image on the memory, like the pictures painted by the sun. 'How lovely!' 'How beautiful!' 'How wonderful!'
were the exclamations which simultaneously arose from the canoes. 'Can you paint that?' I asked my brother. You can paint the rocks, the trees, and ice,' he replied, 'but the radiance and the light are beyond human art.'

The river grew in beauty as we ascended its current. Its waters became clear and swift, but cold as ice : the hills rose into mountains, and the towering rocks frowned magnificently on the stream. Soon after the sun had set, we pitched our tents, enjoying, before retiring to muchneeded rest, the long twilight and the tranquil first hours of the night, with no sound of bird, or beast, or fish to break the stillness, and nothing but the murmur of distant waterfalls to remind us that in this beautiful but desolate wilderness there was anything capable of producing a sound.

We were mistaken. Not much more than a mile from us, opposite a huge wall of rock which sloped suddenly into the river, caribou or reindeer came to drink during the night, and bathe in the waters. The place where their tracks were seen next morning was on a gravelly beach. We did not expect to find them so near the coast; but these animals are great wanderers, and sometimes appear where they are least expected; and as no Indians had come down from the interior this year, the caribou had not been disturbed. The sight of the tracks was very cheering, for it inspired us with hopes that we might meet with this animal sooner than we expected, and in greater abundance than the Indians at the mouth of the river led us to believe. Both Louis and Pierre were surprised, and said that caribou must be crossing to the north-west. But Pierre did not know the country well,
and Louis' opinions on the subject were not to be relied on. We learned more about the caribou and their habits a few weeks later. Had we known them before, we should not have taken the appearance of a few fresh tracks as strongly presumptive of the presence of numbers of these animals higher up the country, although the beautiful caribou moss was everywhere to be found in abundance on the rocks and mountains around us.

At four in the morning of the 17th we were in our canoes. The night had been cold, the minimum thermometer showing one degree of frost. The sky was without a cloud, the air still, and the high rocks magnificently grand. A loon, with its wild note, broke the silence, as we rested for a moment to listen to the sound of a waterfall, whose murmur at intervals reached our ears.
' We shall see it at the next bend,' said Pierre ; 'it comes from the top of yonder mountain. In winter it is all ice above, growing thicker every day, and sometimes increasing so much as to surround the near trees. Domenique told me that one year he was coming down the river just after it opened, and camped opposite the fall. In the morning, as he was starting, the ice broke off near the top, and fell into the valley quite close to him, bringing with it many trees, which were frozen into it as it went on growing bigger and bigger during the winter. You will see the dead trees lying at the foot of the rock when we come opposite to it. There it is.'

As we turned round the bend of the river the waterfall came into full view. It may have been 200 feet in altitude, but the upper part was broken, and I thought I could see it between the trees on the slope of the mountain
some 300 feet above us. Its breadth was scarcely 20 feet; but it was not difficult to trace its great magnitude during the winter, caused by the freezing of the spray, well marked by a clear stripe of rock fully double the width of the fall in its present state.

In deep crevices as well as in valleys between hills, and on the north side of some of the mountains, frozen snow of great thickness still remained. In most instances the edges of these little glaciers were overhung by the delicate foliage of the birch, just coming into full leaf. We passed during the morning perpendicular rocks fully 500 feet high. The flats at the foot of these huge walls were clothed with fine spruce and birch, and in every crevice, high up their sides, where a little soil could accumulate, small birch, larch, and spruce found room to grow. Animal life began soon to show itself. Salmon were jumping out of the water; brook trout glided and shot over the shallows at the approach of the canoes; and barked willows with fresh tracks showed that beaver were near at hand.
' We must be close to a beaver dam,' I said to Pierre ; ' there are plenty of tracks on the soft mud at the edge of the water.'
' Only two,' answered Pierre ; 'two beaver on their summer hunt: perhaps there is a dam up the little river yonder, but the beaver are all away; they will not go back to it until the fall.'
'You don't find beaver generally in the dam, then, during summer?' I said, anxious to draw out Pierre, who was a very observant and accurate hunter, of whom I had heard an excellent character for truthfulness and industry.
'Not often,' he replied; 'sometimes the mother with
the little beaver ; but they generally wander in the summer. The old fellows are all away up and down the river, hunting by themselves. About the end of August they will gather together again, and work at their houses and dams.'
'What time of the year do you hunt beaver?'
'I never go on purpose to hunt beaver, except to eat; their skins are not worth much - only a shilling a pound. In winter, when food is scarce, and we come on a beaver dam, we sound it and find the beaver, and then cut them out.'
'What do you mean by sounding?'
'Beaver,' Pierre replied, 'always make their winter house on shore above the water-level, with a road leading to it from the water ; perhaps the road under the ice and in the earth is eighteen to thirty feet long. They keep their food in the water above the dam, and live in a warm house on shore. We hunters sound the ice close in shore, and near the dam, to find the road to the house where the beaver always run when alarmed. When we have found the roads, or one of them - for sometimes there are many together - we cut through the ice and first stop the road. We then sound again, and find which way the road runs, and then cut close to the house, and pull out the beaver. But it is heavy work in winter, and we only try to get them if nothing else is to be had.'
'I suppose you always find the beaver on the small rivers?'
' No,' he said, 'not always; sometimes on the lakes. I once knew a beaver-house on a little lake between two mountains, which had no outlet. I was sleeping in the
woods on the Bersamits River, and in the morning heard frogs. I went in the direction of the sound, and came to a steep cliff. Looking over the cliff, I saw a small lake with beaver in it. I climbed down, and went all round the lake, but there was no outlet; it lay in a hollow between hills, and there were plenty of beaver in it which had never been disturbed.'
'Are beaver numerous in the country now ?'
'Pretty much; the Indians tell me they are more plentiful than years ago. But here!-a fine beach for landing - would you like to get breakfast?'
'A terre! à terre!' Pierre shouted, as I nodded an affirmative to the question. The canoes soon touched the shore, and Louis a moment afterwards turned round and said, ' Mash-qua !'
'Mash-qua? —why "Mus-qua" is Ojibway for bear. Did you see a bear, Louis?' He pointed to the ground about five yards from the shore, and in the sand we saw a fresh bear-track.
'How long is it since he passed ?' I asked.
'Last night ; perhaps early this morning.'
The cry of breakfast put a stop to further enquiries, and we sat down to our meal with such appetites as health, exercise, hard work, and abstinence can give.

About noon we arrived at the Forks, passing by many grand old rocks, gray and stern, and gradually increasing in height. The Moisie seemed to flow with a winding course in a huge crack between them, for the river swept the bases of a towering wall-like precipice, first on one side, then on the other, of this great crack in the earth. Drift clay, capped by sand, had partially filled the
crack to a height of seventy feet above the level of the river; and through it a channel had been excavated, in the usual manner in which rivers wind through a soft deposit in a narrow valley, forming flats and points, and, as in the present case, at every great bend coming to the


PERPENDICULAR ROCKS ON THE MOISIE.
wall of rocks which limit the Moisie valley on either hand.

Snow was visible in masses on the distant mountains, seen up the valley of the East Branch. A conical hill, perhaps 250 feet high, is the termination of the peninsula which separates the East Branch from the Main River.
'That's my river,' said Pierre, pointing up the East Branch, 'where I hunted last year. My marten line goes over those hills; there's where I killed the bear.'

We held a consultation whether we should take the

East Branch or the Main River. Pierre said he knew the East Branch for about thirty miles ; Louis said he had been fifty miles up the main stream.

The point which decided us was the probability of meeting with Nasquapees, who were expected down from Lake Ashwanipi on the great table land of Labrador. The chart drawn by Indians at Seven Islands showed the portages between the Main River and the East Branch, or one of its tributaries, and the arrows they had made indicated the direction which we ought to take. After some discussion, both Pierre and Louis agreed that the Nasquapees, or any party of Montagnais, coming from the interior would most probably pass by the Main River; and as it was almost essential that we should procure a guide, we determined to follow the old Montagnais route, and, if possible, descend by the East Branch. We continued on the main stream, but soon found our progress materially arrested by the rapidity of the current. We tried first one side and then the other, with much difficulty forcing our way foot by foot against the torrent, sometimes poling, then paddling, then dragging the canoes by the bushes which lined the shore, or hauling them with a line when tracking-ground permitted. In this way we succeeded in making two miles in three hours ; and when we landed to dine, we asked one another how we were to reach the headwaters if the current continued as strong as it was after leaving the Forks.
'Louis, you've been some fifty miles up the river, you say; is it better as we get higher up the country?'
' Worse - more rapid ; don't think we can pass the steep rocks.'
'Steep rocks? Where are they?'
'A few miles up.'
Pierre here asked whether this was the place that Bartelimi spoke of ; and when Louis answered 'Yes,' he said that Bartelimi, a Montagnais Indian, told him before we started that we could not pass these rocks while the river is high - that the rocks go straight up from the water on both sides, leaving no room to track, while the rocks themselves are always wet and slippery.

The river where we stopped for dinner was about 100 yards wide, the current running between six and seven miles an hour. The country is lovely, as far as magnificent rocks, 600 to 800 feet high, could make it so. But the current pressed us sorely, and the anxiety occasioned by the doubt of Louis that we should not be able to pass 'the steep rocks,' made us feel very uncomfortable, and rather desponding for a while. Towards evening we arrived at the foot of the gorge, through which the river rolled its pent-up waters with terrible force.
'Are those your "steep rocks," Louis?' I said, as we landed on a low flat shelf of rock sloping to the river.

Louis shook the hair from his face, pointed his hand in the direction of the gorge, gazed at it for a while, and said, 'There ! - steep rocks ; water very swift - must try to-morrow with light canoe. Perhaps we can pass - don't know.'

As soon as the baggage was landed, I went with Pierre and another man in a light canoe to try the strength of the current. All attempts to paddle against the stream we found hopeless; we could not gain an inch after
entering the gorge. We next tried to pull the canoe up by holding on to the rock with our hands or paddles, but they were perpendicular, sometimes overhanging, and smoothed to a polish by ice. As we could make no way, we glided into an eddy, and proposed to get out of the canoe, climb the rocks to the first ledge, and see if we could find tracking-ground which would enable us to use a long rope. Pierre and I reached a broad ledge twenty feet above the river ; it was overgrown with moss and some small trees, and formed the termination of one of the wooded sides of the mountain on the left bank of the river, whose eastern face, rising perpendicularly to perhaps 800 feet, formed one side of the first gorge of the Moisie. I came to a track, which I took for a Montagnais path, and calling Pierre, said, 'Here's-an old portage path ; can it lead over the mountain?'

Pierre looked hard at it, stooped down and examined it closely, followed it for a few yards, and returning, said, ' Bear-path.'
'Bear-path?' I exclaimed; 'this well-worn track a bear-path?'
"This is a " bear-path;" the road by which the bears cross this mountain. You see they can't come any other way - nothing but steep rocks all around. No other road. See ! fresh tracks,' he said, suddenly pointing to several recent impressions which were visible a little farther on.
'Well,' I replied, 'we can at all events follow this bear-path if we cannot get up the river.'

Pierre shook his head. 'The bear-path goes over the mountain; we can't carry canoes there. It is too high
and too steep - must wait till the water falls before we go up the river. We 'll see to-morrow.'

We went on for some distance, perhaps eighty yards, when a rock, rising many hundred feet directly from the river, stopped our progress. Pierre crept to the edge of the ledge, and carefully surveyed the torrent foaming through the gorge. After a while he came to me, and said, 'That point's the worst part; if we can pass that, I think we shall do the rest to-morrow. We 'll get out a long line; we 'll want one three or four hundred feet long - tie a stick to it, throw one end into the river, and let it float down. The men in the canoe will catch it, and pull the canoe past that point. We can tie the line to this tree.'

I thought the plan proposed by Pierre excellent, and indeed our only chance of passing the gorge. We therefore returned to our tents, and, as it was still early, fished for trout, catching a dozen or so of about a pound each. There was plenty of ice or frozen snow in the woods opposite the gorge, where we camped; and feeling it rather cold as I sat upon a blanket while writing in my note-book, I examined the dead leaves on which the blanket was stretched, and found that they covered a sheet of ice.

On this cold bed we had pitched our tent, in consequence of its presenting a level surface ; a thick layer of spruce boughs soon protected us from the chilling influence of the icy floor, on which we sought and found most refreshing rest after a long day's toil.

We were at supper just as the sun was setting, when a voice called out, 'A canoe! a canoe!' Looking in the direction of the gorge, we saw issuing from it, with the
speed of an arrow, a tiny birch-bark canoe. With some appearance of hesitation the canoe approached our camp, and, when a few yards from us, Louis called out in great delight, 'Domenique!' In another minute Domenique, the chief of the Montagnais of the Moisie River, as well

domentieq, chiff of the moxtacaits of dake ashwastif.
as of Ashwanipi Lake, stepped on shore, shouting 'Quā? Quā?' - How are you? How are you? He was followed by a young Nasquapee, and then by his squaw and four children, a couple of dogs and a young beaver. After a few words and salutations, the delicate canoe was taken out of the water, and the squaw prepared the camp for the night, while Domenique came to
our fire to have a smoke, make enquiries, and answer questions. Nothing could exceed our delight at this meeting ; Domenique would be able to tell us all about the upper country - what Indians we should meet, what game we should find, and perhaps he would go with us as a guide, or let the young Nasquapee show us the old Montagnais road to the interior. These and many other thoughts found expression as we were finishing our supper, while Domenique was smoking his pipe close by, every now and then stealing glances at our faces, and slowly and thoughtfully picking a bit of tobacco from a large plug I had given to him, when he expressed his intention of ' coming to our fire.'

We watched them take their worldly wealth out of the canoe. It contained the produce of their winter hunt, wrapped in a seal-skin covering. A rather worn and dirty blanket, several reindeer skins, a fox-skin robe, two or three tin kettles, some rolls of birch-bark, one or two wooden dishes, a small bag of reindeer skins containing a few fragments of dried reindeer meat, one duck, a pillow of down of the eider-duck for the baby to kick about on at the bottom of the canoe, and a snow-shovel.
'Ask him how he is off for provisions, Louis,' I said.
'Starving,' was the brief reply.
Domenique held up the duck and the few fragments of reindeer meat. 'This is what we have left ; when that is gone, must hunt for more.'
'Are any more canoes coming down the river ?'
' No ; four canoes gone by the East Branch. I thought the river too bad, and came down the main stream. The water is very high.'

Louis acted as interpreter, Pierre not understanding the Montagnais language sufficiently well.
'Ask him, Louis.' I said, 'if we can pass up the river ?'
As soon as Louis had propounded this question, Domenique turned to his squaw and said a few words. Both of them looked towards the gorge. The squaw shook her head, and said 'No.' Domenique looked at Louis, shook his head, and said 'No.' Louis looked at me, and, with a roll of his head from side to side, said emphatically ' No.'

Domenique, turning to Louis, attempted to comfort us by saying, 'When the water falls the canoes can go up.'

A cold thrill passed through me when I saw the squaw's manner, and heard Domenique's answer ; but knowing well how easily Indians are deterred from any efforts involving great labour, especially if waiting a week will enable them to accomplish what they have in view without it, a few minutes' reflection convinced me that it would be very foolish to give up the hope of forcing a passage through the gorge without waiting until the waters fell. After a while I told Louis to ask him about the upper country, whether there was much snow left.
'Full of ice,' answered Louis, interpreting Domenique's reply. 'No snow, but much ice.'
'Where has Domenique been wintering ?'
'On this side of Ashwanipi Lake, close to the dividing ridge where the waters flow the other way.'
'Did he kill many animals?'
'Thirty reindeer and four bears.'
'What furs did he get?'
'Very poor hunt - only eight marten, eleven foxes, one black fox, three otter.'
'Are there many fish in the lakes we are going to ?'
'No; only in "Big Lake." Plenty of trout in the rivers - no big fish.'
'Any duck or geese?'
'Very few ; some geese on Ashwanipi, but much ice.'
'When did Domenique leave his winter camp ?'
'His tribe broke up camp seven days ago.'
'When did the ice leave the upper lakes?'
'Iče broke up seven days ago. Domenique and other Indians left same day.'
'Ask Domenique when Ashwanipi broke up.'
' Domenique says Ashwanipi still full of ice. Some of his tribe came from Ashwanipi a week ago - say it is full of ice ; full, full.'
'Any other Indians on this river?'
' No ; all gone down - four canoes.'
'Any Nasquapees coming down?'
' Perhaps - don't know.'
'Any Nasquapees on Ashwanipi Lake ?'
'Some families near where Domenique made winter camp. Domenique think they will come down Moisie. They have never been to the coast before. Domenique say he gave them a map to show the road and the portages.'
' Are there any Indians at the other end of Ashwanipi Lake?'
'Yes, perhaps; but all Indians on Ashwanipi, who don't come down the Moisie, go to Petichikapau, or the coast of Hudson's Bay.'
'Ask him where the most Indians are to be found now?' voL. I.
' Near Petichikapau, he says; near the Post of the Company.'
'How many families are there?'
'Fourteen.'
'Fourteen! and where are the rest?'
' There are no more on the level high land, in the lake country. The others are beyond, towards Esquimaux Bay (Hamilton Inlet) and North-West River; and far away beyond Petichikapau, towards Ungava, and on the other side, towards the sea' (Hudson's Bay).
' Where are all the Indians gone who hunted on Ashwanipi River?'
' Gone north, or east, or dead-many dead, he says; not many left.'
'Tell him after supper I should like to ask him more questions about his people; now, give the squaw some flour and pork.'

Louis was going to fulfill his mission, when I said, 'Stop, Louis; just ask him where the Nasquapee came from?'
' Domenique met him near Petichikapau, two winters ago, when he was hunting there : the father and mother of the lad are dead, and Domenique adopted him.'
'What are those marks cut over the cheek-bone?'
' Nasquapees always mark themselves so ; it is. a custom of their people.'
'How do they do it?'
'With knife or fish-bone ; then they put in colour powder, perhaps.'
'Do all Nasquapees cut themselves like this one?'
' Mostly all ; once all did ; but now some don't. All
old men and women are marked on the face like this lad.'
' Do you think Domenique would go back with us?'
' Think not ; got children and squaw.'
' Do you think he would let the young Nasquapee go with us, to show us the portages?'
'Perhaps ! better not speak about it to-night; give Domenique good supper; also Nasquapee; make them good friends, and let them sleep well. I will talk to him to-morrow about young Nasquapee; perhaps he let him go, if you make him good present.'
' You think, then, you had better not speak about it to-night?'
' No, no! Let Domenique eat and sleep ; then he talk to-morrow.'

We gave the two Indians a good supper, and sent some flour and pork to his wife, who had made her camp about thirty yards from ours at the foot of a large tree. I proposed to myself the pleasure of visiting them at daylight, to see how the Montagnais made their camp in the woods.
'Where are you going to, Louis ?' some one enquired, as the Indian was rolling off into the woods with a torch of birch-bark, about an hour after supper.
' Get birch-bark for map.'
'What map?'

- Domenique going to make map of portages, to show us the way. To-morrow,' continued Louis, with a knowing leer, 'I speak to Domenique about young Nasquapee; Domenique well pleased - like supper, like tobacco, like everything. Think he will let young Nasquapee go.'

When Louis returned with the sheet of fresh birch-
bark for Domenique to draw his map on, I asked the cause of the scarcity of game in this country.

Two reasons were given by the chief : the first being that the Moisie was the old Montagnais path to Ashwanipi and the table land, just as the On-na-ma-ne River-which will be described in the sequel-was the road to Hamilton Inlet from the coast below Mingan and Natisquhan. The deer, and bear, and smaller animals have been killed and frightened off this river and its tributaries. The second reason was that the country towards the dividing ridge was burned. We should have to pass for three days through a brûlé, or burnt country, where there was no food for animals. He also said there was much burnt country on the old Montagnais road, in consequence of the fires of the Indians having spread so rapidly through the moss.
' When your people were numerous,' I said, ' were not the deer plenty?'
'Yes; plenty.'
'When did the deer begin to diminish?'
' When the white people bought their skins, and gave us guns and ball to kill them with. Before my people had guns, they could not kill many deer ; it was very hard work to shoot them with arrows, and follow them for miles. My people then only killed for food and for clothing. Since the white man gave us guns, they kill them to sell the skins, and the deer soon pass away.'
'Are your people ever starved during the winter?'
' Yes ; when they cannot get deer, they must starve.'
'When deer were plentiful on Ashwanipi, were your people many?'
' Many as the trees you see on every hill; but the country was not much burnt. Indians were careful of fire, and they made much winter meat. White men came and the Indians killed deer for their skins, to get guns and other things. When the deer were gone, my people went away too; they could not live many together. Some went to the coast, some to the north-west, many died - one by one. Only my tribe left now on Ashwanipi. Give me the bark, and let me draw the map.'

The destruction of the reindeer after the introduction of fire-arms, was no doubt one of the chief causes of the decline of the Montagnais and Nasquapee Indians. Even in Upper Canada, during the early period of its settlement, we have records of the ravages committed by wolves among the deer of the country, during winters of extreme severity, having caused a famine. It is a fact which may now be received with astonishment, that, in the memory of many still living in Upper Canada, wolves created a famine in a part of the country which is now one of the oldest settled and most beautiful tracts. So marvellous are the changes which civilisation induces, and so precarious is the existence of improvident man in the woods.
' I am myself * one of the eldest born of this country, after its settlement by the loyalists, and well remember the time when, as Bishop Berkeley observes, "a man might be the owner of ten thousand acres of land in America, and want sufficient means to buy himself a breakfast!" One half of the land on the Bay of Quinté - the Garden of Canada - could, within my remem-

[^14]brance, have been purchased for five pounds a two-hundred acre lot, and many a one has been sold for a half joe. All this cannot be matter of wonder, when I tell you that a great scarcity of provisions prevailed for two or three years consecutively, in consequence of failures in the crops, and what brought on the famine, or "scarce year" (about the year 1790, if I am not mistaken), was the almost entire destruction of the deer by the wolves for two consecutive years. The snow lay upon the ground from December until April, at the depth of from four to five feet. In the month of February of the last of these years, a near relative of mine sent all the way to Albany, in the State of New York, a distance of more than two hundred miles, for four bushels of Indian corn! and this was to be brought all that distance by two men on snow-shoes! It took them about eight weeks to accomplish this journey, and during this time about one-third of the quantity was necessarily consumed by the men ; the residue of this precious cargo, pounded up in a mortar made of a maple stump, with the winter greenberry, and mucilaginous roots, latterly boiled with a little milk, constituted the principal food for two families, consisting of seven souls, for the space of four or five months! It was remarked, I have heard some of the oldest settlers assert, that the usual supply of fish even had failed. The few cattle and horses which the settlers, at great cost and trouble, had collected, were killed for food. The faithful dog was, in several instances, sacrificed to supply that food which he had so often been the means of furnishing to his then kind but starving master. The famine this year was general throughout the Bay of Quinté ; and such was the distress, that, during this
winter, several persons died from starvation. In the Hay Bay settlement, one of the most heartrending occurrences took place. Some time during the month of April, the husband and father was found buried in the snow, which lay upon the ground at an average depth of five feet, whilst within the shanty was exhibited the awful spectacle of the dying mother, pressing to her bosom her dead infant, still in the position of attempting to gain that sustenance which its mother had for some time been unable any longer to afford it.'

If such a calamity as is described in the preceding paragraph could occur in the early settlement of a country like, Western Canada, owing to wolves, need we be surprised that the Montagnais and Nasquapees should have diminished on account of the gradual destruction of the reindeer - their principal supply of food?

## CHAPTER VI.

THE FIRST GORGE TO THE SEE-WAY-SINI-KOP PORTAGE.


#### Abstract

Montagnais Map of the Country - Domenique's Camp in the Woods - Michel, Domenique's adopted Son - Domenique's Objections to the young Nasquapee going with us as Guide-His Energy and Threats-Conclusion of the Bargain - The First Gorge of the Moisie-Difficulties of the Passage-First Falls of the Moisie - The See-way-sini-kop Portage-Trout, Salmon-Salmon-spearing by Torchlight-Appearance of Indians spearing Salmon - Self-control and Skill-Scene at the Foot of the Cataract by Torchlight - The Salmon - The Light extinguished - The Darkness - The Rapid - Coolness and Intrepidity of the Indians - Excitement.


WE sat by the fire till a late hour talking to Domenique and the young Nasquapee. The lad appeared to be very intelligent, and apparently knew the upper country well. He and Domenique together constructed a map of the Moisie and the old Montagnais route, as far as the dividing ridge - showing the point where the Ashwanipi River took its rise, and began its long course of several hundred miles to Hamilton Inlet, on the Atlantic coast of Labrador.

He put in all the portages, and explained the map to Louis and Pierre. The latter took charge of the map, and before we rose went over every little detail to see if he understood it perfectly.

Just before entering my tent, one of the voyageurs,
whom we called Ignace, came to me, gleefully, and said that the water was falling fast: ' It has fallen four inches since we came here ; it will have fallen eight before morning.' 'But the Indians say it must fall two feet before we can get through the gorge, Ignace,' I replied, ' and we cannot wait; we shall consume all our provisions before we reach the Big Lake, at this rate ; we must start after breakfast to-morrow, and see what we can do.'

At sunrise I went to Domenique's camp. They were just waking; but I was in time to see how they had spent the night. Ranged in a semicircle before the fire, placed at the foot of a large balsam spruce, the whole family lay side by side, the mother and father occupying the outer ends of the curve with the four children, and the young Nasquapee between them. The children were covered with a blanket. The father and mother had each a sheet of birch-bark over them ; the Nasquapee a couple of reindeer skins. Two dogs were lying under the birch-bark, close to the fire, at the feet of Domenique. The family bed consisted of spruce boughs laid on the wet moss, with the frozen soil beneath; their roof was the black sky, with twinkling stars coldly glittering between the motionless branches of the spruce, as silent, as lifeless, and as uncharitable as the grave.

Domenique rose as I approached, and saluted me with the customary 'bonjour.' We lit our pipes and smoked ; he said some words to me in Montagnais, but I could not understand them ; so we sat and smoked in silence. Meanwhile the mother rose, put the little baby Indian in a sitting posture on the eider-down pillow, and commenced to rake the ashes together and arrange fresh wood on the
fire. I saw that the children had been lying on the rabbit-skin robe, and looked warm, fat, and comfortable, although the thermometer during the night was $3^{\circ}$ below the freezing-point in the woods, and ice had formed on the edge of the river.

While breakfast was preparing, I called Louis and told him to ask Domenique whether he would go with us; and if not, whether he would allow his adopted son, the Nasquapee, to show us the road. Louis turned to the chief and spoke a few words, interpreting Domenique's reply shortly afterwards to the effect that he could not accompany us : he must go and see the priest; he had promised two years ago. He was sorry the other canoes had not come down this way; if they had, he would have sent one of the young men with us. But if we waited three days, he would catch them below the Forks at the Grand Rapids, and send a canoe back with one man for our guide.
'What did he say about the Nasquapee ?'
'No speak to him about Nasquapee yet,' said Louis. - Wait a bit ; let Domenique get breakfast - think and speak easier after breakfast. Wait a bit.'

Although very anxious to know what he would say, I let the Indians take their own way. We had another long talk during breakfast, and when pipes were filled all round, we left Louis to broach the subject of the young Nasquapee's companionship.

I was sitting on a rock opposite the gorge, admiring the exquisite symmetry of the delicate little Montagnais canoe which lay bottom upwards at my feet, when Louis came with a desponding look and slouching gait over
a sheet of ice, which streamed like an infant glacier from the woods to within a few feet of the river's edge.
'Well, Louis, what does Domenique say?'
' No let him go ; want him to hunt.'
'Tell Domenique to come here,' I said.
Louis called him. With a light and springing step he came from the fire to where we were sitting; held his hand above his eyes, and peered into the gloom of the Gorge.
' Current swift - swift !' he exclaimed ; 'canoes can't get up to-day - too much water.'
'Louis, tell him I want him to let his son go with us; we will take great care of him, and not let him carry anything. We will feed him well, pay him well, and make Domenique a present when we return to the mouth of the Moisie. What is the name of the Nasquapee?'
'Domenique calls him " Michel.",
' Tell the chief what I said to you.'
After a short conversation Louis began: 'He has not got any clothes. His father say he has no shoes, and he cannot go.'
' I will give him clothes and moccasins, a coat, a shirt, and trousers; and I will give Domenique a handsome present.'

Domenique turned to his squaw, and told her to come near. They then spoke together for a while, after which Domenique said:
'White people have often deceived me on the coast down there and at Esquimaux Bay. How do I know you will bring him safe back ?'

Louis said, in his careless way, 'Perhaps if you give

Domenique some tobacco now, and a coat to Michel, he no think white man tell lies.'

I took the hint, and told one of the men to give the chief a dozen pieces of tobacco, together with some flour, pork, and tea to his squaw. This little piece of diplomacy having been finished, I brought a flannel shirt, a rough blue Hudson's Bay coat with brass buttons, and a pair of buffalo moccasins. Laying them at the feet of the chief, I told Louis to tell him that these were the clothes I would give now to his son, and a complete suit when we arrived at the Moisie Bay on our return.

Domenique spoke again to his squaw, and also to Michel. Turning round and looking at me, he said, 'Who is to steer my canoe if anything happens to my son? Who is to hunt for these little ones if anything happens to me? He is my only treasure - my only son. These are little children yet; it will be many years before they can be sons like this one.'
'Tell him we will return his son safely to him; we only want him to show us the portages on the old Montagnais road to Ashwanipi.'

When this had been interpreted to Domenique, he drew himself up, raised his arm above his head, with dilated eyes looked me in the face, and in a loud voice said:
' Michel shall go with you; but if you do not bring him safe back, I follow you to the sea, to the woods, to the place where you live. You 'll remember me until you die, and you'll die soon if you do not bring my Michel back to me safe.'
'Tell him again, Louis, that I will take care of him, and bring him safe back.'
' He says I must tell you,' spoke Louis, ' that white men often tell lies, and deceive poor Indians. He says that if you do not bring back Michel safe, he will track you, and find you wherever you go. He says Michel shall go with you, and show the old Montagnais road; but he says he is terrible when men deceive him, and Michel is his only son.'

I held out my hand to Domenique; he grasped it firmly, and putting the other hand on Michel's shoulder, looked at me with a fiendish glare, hissing out with a slow and distinct utterance sentence after sentence, while he waited for Louis to interpret, still holding me fast by the hand, and apparently working himself into a rage.

Presently, letting go my hand, he returned to his squaw and spoke some words in Montagnais, moving at the same time towards his canoe, which he lifted up and put into the water. The squaw quickly loaded the canoe, Michel standing by. Domenique came and shook hands with me and the other gentlemen, and with Louis, who since he had been called upon to act as interpreter, was getting very talkative and bumptious. They left the blanket with Michel, but, true to their Indian nature, they were not seen by any one to bid him good-bye, or take any notice of him when they embarked in their beautiful little craft. The mother handed the little girl a tiny paddle, the father cried, 'Ya-mah! ya-mah!’ -Good-bye! good-bye! -and with a few strokes of the paddle they reached the middle of the stream, and were swiftly carried down towards the sea.
' Was that passion of Domenique's put on, Louis?'
'Perhaps, perhaps not; likely Dom-nick thought he would frighten you. Make you bring back Michel safe. Dom-nick great man to talk, perhaps he 'll do it ; don't know.'
' Now for the Gorge ; we will make my canoe light, and see if we can pass it. Mr. Gaudet will come in another canoe and help us with a line to pass the first point.'

Following these directions, two canoes started for the Gorge. A long line was thrown out into the river from the furthest point we could reach by land. The stick attached to one end floated down the stream, and was picked up in the eddy at the foot of the first point - the great difficulty in entering the Gorge. Pierre caught the stick, and began to haul in the line which


TRACKING UP THE FIRST GORGE.
was fastened to a tree. Meanwhile Joseph and I fended off, and, when opportunity offered, pushed the canoes on,
with our paddles resting against a slight roughness in the rock, or assisted with our hands in drawing it up against the torrent. We succeeded in rounding the point, and then took to our paddles; with the utmost exertion we made ten yards against the stream, then held on to the rocks and rested. Again we tried the paddles where the rocks on either side were perpendicular and so uniformly smooth that we could not find the least projection or even a crevice to give us a hold. With some difficulty we got into an eddy and rested again. We then shot across to the opposite side, the breadth of the river here being about forty yards, the rocks on either side 800 to 1,000 feet in perpendicular altitude.

We got on better until we came to a rapid, which fortunately had two triangular pieces of rock jutting out of the stream, round which the water foamed and surged with great noise and fury. By dint of taking advantage of the inequalities which occurred in the surface of the rock, and of eddies, we succeeded in surmounting this difficulty, and finally, after two hours' hard labour, we reached the other extremity of the Gorge, with torn hands and tired limbs.
' We can do it,' said Pierre ; 'we know the way now, and that is half the difficulty: we can take two bags of flour at a time, and get through the big creek by tomorrow night; but it's the hardest bit of water I have ever seen.'

Back we went like an arrow, rushing in triumph out of the Gorge into the pool on the banks of which our camp was made, and infusing new life and spirits
into the party, who were getting very down in the mouth at the idea of having to stay under the shadow of those tremendous rocks until the water fell as Domenique had predicted. By the following night we had passed the first Gorge of the Moisie, but canoes and men were strained, bark was cracked, hands were torn with holding on to the rocks, baggage was wetted. But what did all that signify? Our health was excellent, our spirits roused to the highest pitch, and we all felt glad and thankful that we had overcome this difficulty which threatened to bring our explorations to a very sudden and unexpected close.

How noiselessly we paddled into the great pool at the foot of the first falls of the Moisie, half a mile above the Gorge, when Pierre pointed his paddle in the direction of two objects swimming towards the shore, and whispered 'Otters;' and how we laughed and shouted when Louis with a yawn blustered out 'Seals!'

Seals they were, without doubt, sporting among the trout and salmon, which were leaping up the successive steps of the falls on their way to the spawning grounds higher up the river.

It was necessary to repair the canoes after the struggle in the Gorge. Indeed one of the canoes was broken when quite close to the extremity, and we had to wait for more than an hour on a slippery rock to build a fire and mend the bark. Night had closed upon us before our tents were up on the shores of the beautiful basin at the foot of the See-way-sini-kop Portage, so named on account of its passing over a bank of drift-
sand, sixty feet high and one foot broad at the top; a narrow peninsula of drift, wearing away with every shower of rain, as the protecting covering of grass and trees has long been removed by Indians in their passage over it. It is now quite bare near and at the carrying place, needing only time and exposure to level it, or at least greatly reduce its altitude. It is well named the 'Up-and-Down' Portage, for you have merely to ascend sixty feet and descend fifty to the river on the opposite side. The isthmus of sand joins a magnificent rock with a mountain chain. The river rushes over an irregular bed, with a fall of eight feet, and sweeps past the base of a treeless mountain of gneiss on the opposite side, many hundred feet in height.

We fished and caught some fine trout in the beautiful pool below ; and were it not for the difficulty of reaching it, the See-way-sini-kop falls and pool would be by far the most attractive salmon-fishing ground it has been my good fortune to see in the wilds of Eastern Canada.

We were not ready to start until eleven o'clock on the following day. The task of mending the canoes, and carrying the baggage across the portage, had occupied nearly the whole morning.

I made a câche here of some preserved vegetables, powder, shot, \&c., in consequence of the improbability of our meeting with many Indians on the table land, or near the sources of Ashwanipi. A hole was dug in the sand, spruce boughs laid at the bottom, and the articles câched laid on them, and thickly covered with other boughs of spruce. Sand was then heaped upon it, and a few logs voL. I.
or trunks of dead trees drawn over the câche. It was made on the side of a hill forming the boundary of the valley of a small tributary to the Moisie, which came down ice-cold from the neighbouring mountains.

We saw numbers of salmon leaping up the falls, but not one could we catch with the most gaudy and attractive flies. Even the celebrated fiery brown failed to decoy them, and we, who were so anxious to husband our provisions, saw the most noble of fish leap and plunge before our eyes with perfect impunity. No duck or other wild bird, with the exception of a kingfisher, was visible even at this beautiful pool; and although fish life was abundant, there was apparently an absence of four-footed animals of any kind whatever.

The pool into which these falls pour their foaming waters is one of the favourite Indian resorts for spearing salmon by torchlight. This mode of taking salmon is very properly interdicted by the Canadian Government, on account of the great waste of fish to which it leads. But a description of one of the most successful artifices employed by the savage wanderers in British America for procuring food will perhaps be acceptable to the reader.

Spearing any kind of fish during the day time is a tame and monotonous occupation compared with the irrepressible excitement which attends spearing salmon by torchlight, with Indians who understand their work.

It has been my fortune to witness the spearing of different kinds of fish in places far apart, and under widely different circumstances:-whitefish, with Ojibways on Lake Huron ; pike and whitefish, with the Swampies on the Lower Winnipeg ; sturgeon on the Assinniboine ; but
salmon-spearing in the wilds of Eastern Canada far surpasses them all in excitement and skill. It unfolds the real character of the Indian in its most striking peculiarities. It displays untutored man in the full strength of his natural gifts, expresses his capabilities for intense enjoyment, and shows how he may be roused to exert, for hours together, the utmost activity of body and the greatest presence of mind.

See how gently they step into their canoe, in the gloom of the evening-just passing into night. They whisper one to another, although there is no fear of the sound of their voices disturbing the prey of which they are in search. Watch the one in the bow, trying the flexible clasping tines of his ' negog,' or salmon spear, springing them backwards to see if they have lost their elasticity, or if they can be trusted to hold a powerful fish in their grasp.

Now he strengthens the long and slender shaft, and lays it tenderly under the bars of the canoe within reach of his hand. He next examines the rolls of birch-bark which he will use for torches, and fastens to the bow of his canoe a cleft stick, in which he will insert one extremity of the flaming roll. Turning round, he asks his companion if he has 'fire;' receives a low grunt - a reply which is followed by a subdued howh! howh! They grasp their paddles, and away the canoe glides, with a looker-on seated in the middle, towards the foot of the rapids near a well-known shallow, or close to the tumbling waters of the cataract where the fish are wont to lie.

The torch is lit, and the spearman, relinquishing his
paddle, stands in the bow of the canoe, glancing eagerly from side to side. Suddenly he pushes his spear in a slanting direction, and quickly draws it back, lifting a salmon into the canoe; a second push, and another victim. Now he attaches a thin line of sinew to the end of his spear, and twists it round his arm. Like an arrow he darts his spear - it is whirled away with a sudden jerk, and trembles in the stream. Gently but steadily he draws it towards him with the line of sinew, and grasping it when within reach, lifts his quarry into the canoe. Look over the side of the little craft. The salmon are coming to the light; they gaze for a moment, and glide away like spectres into the black waters. Some of them swim round the canoe, and come to look again and again, pausing but for a moment to speculate on its brightness, and the next lie quivering at the bottom of the canoe.

Both Indians at the same moment see a fish of unusual size approach the light-gaze without stopping, and quickly move off-hover about at some little distance, suspicious and mistrustful, but still attracted by the lure. Gently and noiselessly the canoe is urged towards it by the Indian in the stern. No words pass between him and his companion; both saw the fish at the same moment, and both know that they will take it. But look at the Indian with the spear; look at his face, lit by the red flare of the burning torch. His mouth is half open with suspense, but he does not breathe through it; his dilated eyes are flashing intent-he stands so motionless, with uplifted spear ready to strike, that he looks like a statue of bronze. But there is life in that expanding and contracting nostril—life in the two thin streams of vapour
which puff from his nostrils into the keen night air ; and is there not sudden and vigorous life in that swift dart of the spear - in that momentary light which flashes from his eyes, and in that triumphant smile which he throws at his companion, as, without uttering a word or sound, he lifts with both hands the heavy fish straight from the water, holds it struggling over the canoe, and shakes it from his spear? Is this the languid, drowsy savage which you have often seen slouching through the day, indolent and listless, a sluggard and a drone?

We are going to the foot of the cataract; the largest fish lie in little eddies close to the rocks, waiting for an opportunity to take their leap up the tumbling waters to sheltered pools above, where they may rest in their difficult ascent. Now is the full measure of the Indian skill required: the broken water, at the edge of the main rapid at the foot of the cataract, rocks the canoe, and would serve to destroy the spearer's aim; the water is deep, and he must throw his weapon, he cannot push it, as in a shallow or quiet stream. The Indian who is paddling and steering must beware of strong eddies, of whirlpools, of getting under the cataract, or of sidling into the rapid below. He must have his eyes on the canoe, the water, and the salmon, and his hands ready at any moment to edge off from danger, and never may he give way to a momentary excitement, even when the spear is thrown and a heavy fish struck. The rocks, the impetuous torrent, the tumbling waters of the cataract at the bow of the canoe, the flickering light, not always to be relied on, must all be seen and constantly watched, for a slight change in an eddy may
swamp the fragile craft, bring it under the fall, or break it on a rock.

How shall I describe dancing at the foot of a cataract, in a tiny birch-bark canoe, by the red light of a torch, on a night without a moon? You see before you a wall of water, red, green, and white, tumbling incessantly at your feet; on either hand you gaze on a wall of rock, rising so high as to be lost in the gloom, and apparently blending with the sky. You look behind, and there is a foaming torrent rushing into the blackness of night, sweeping past the eddy in which your birchen craft is lightly dancing to the loud music of a waterfall.

No sound but its never-ceasing din can reach you no near object meets the eye which does not reflect a red glare. Suddenly the torch falls, and is instantly extinguished in the seething waters; absolute darkness envelopes you; the white foam, the changing green of the falling water, the red reflected light of the broken waves, all become uniformly and absolutely black. Nothing whatever is discernible to the eye ; but perhaps another sense tells you of swift undulating motion, a rolling ride over stormy waves, with a lessening roar. Your eyes gradually recover their power of vision, and you find yourself either swaying up and down in the same eddy, or far away from the cataract on the main channel of the river, secure against whirlpools and rocks, with the Indians quietly paddling the canoe, and about to turn again to resume their savage sport.

The instant the light fell into the water, an event which often occurs with birch-bark torches, the Indian in the stern decided whether to remain in the eddy
or to enter the rapid and descend until the power of vision was restored.

This is a contingency for which all salmon-spearers in such situations must be prepared. Indecision might prove fatal, for if the eddy were safe in absolute darkness for an eighth of a minute, it would be wise to remain; but if there is danger of being sucked under the fall, it would be well to seek refuge from a sudden deluge, or from rocks and whirlpools, in the swift but tumultuous rapid. This can only occur in a large river, and at the foot of a cataract. Water in rapid motion is a terrible power, and none know how to take advantage of its humours better than the wild Indian salmon-spearer, who avoids its dangers with matchless skill and self-possession, who is prompt to decide in cases of peril or difficulty, and who seeks the excitement it offers as if it were the main-spring of his life or the aim of his existence.

## CHAPTER VII.

THE SECOND GORGE OF THE MOISIE TO COLD-WATER RIVER PORTAGE.

Beautiful Scenery - Second Görge - Magnificent Rocks - An Accident-Michel-Michel's Description of the Upper CountryThe Terrible Current-Rabbits - Their Uses to Indians - Rabbit Pemmican - Forest Medicine - Indian Intermarriages - The Current again - The Cold-water River Portage-Trout-A Land Slide - Labradorite - Rich Forest - Chaos - Crossing the Slide - A Câche - Nothing lost on an Indian Trail - A Beaver Meadow - Cold-water River - Styx - More Trout.

WE sewed, patched, and gummed the canoes on the See-way-sini-kop Portage, and did not get off until noon. Snow still lingered on the mountains before us ; but the weather in the valley was warm and pleasant. The tracks of the beaver were numerous on the banks, but we were not so fortunate as to see this wary animal. The birch grows to a large size on the flats, and spruce two feet in diameter is by no means uncommon below the second Gorge, where we arrived early in the evening.

Against the strong current of the Moisie paddling was out of the question; we used poles and tracking lines, and without them we could not have made any progress. The scenery on the river is everywhere charming, sometimes grand.

The entrance to the second Gorge is perhaps more


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beautiful than the first, but not so difficult to pass. The rocks, rising 600 to 800 feet above the river, are of a deep purple hue, and sometimes exquisitely adorned with thin lines of birch and spruce, following cracks or lines of fracture.

Before entering the second Gorge, one of the canoes was nearly smashed, and had not the men jumped into the river, the least we might have had to deplore would have been a broken canoe and wetted baggage. As it was, the frail vessel was so much strained, and opened so freely at the seams, that it became necessary to gum her, which delayed us for more than an hour.

I had now time to examine Michel, and, by means of Louis' good 'offices, to obtain some information from him respecting the country through which we were about to pass.
'Where did you winter, Michel?
'Near where the water flows the other way.'
'How many portages are there before we get to your winter quarters?'
' Three tens and one nine.'
'Does he mean thirty-nine?' He held up both hands four times, and put one finger down the last time. 'That is thirty-nine, eh?'
' Perhaps - I suppose.'
'Can't you count, Louis?'
' Quite enough for Indian,' replied the imperturbable Montagnais.
'Where did he winter the year before last?'
' On the Esquimaux River, near Esquimaux Bay' (Hamilton Inlet).
'How did he come to the Moisie?'
'By the Ashwanipi River, and by the Ashwanipi Lake.'
'How many portages between the lake where he wintered and the Ashwanipi River?'
‘ One.'
'Shall we see it?'
' Yes ; very low - no high mountains there.'
' Are there plenty of reindeer? - your caribou, I mean.'
' No.'
'Any rabbits in the country where he wintered?'
' No.'
'Any ducks or geese?'
'In the spring and fall ; none now.'
'Any fish?'
'Some.'
'Any bear?'
' Very few.'
'What is the reason why there are so few animals?'
' Much of the country burnt.'
'What! are the trees destroyed?'
' Yes, burnt ; moss, too.'
' Why did Domenique winter there?'
'Suppose good place for marten ; Michel don't know : perhaps winter come on before he got to Ashwanipi, perhaps not.'

The river where we camped at the foot of the second Gorge is a torrent swiftly flowing over a gravelly bottom, with huge boulders here and there in its bed. It is about 150 yards across, and full of shoals. The character of the scenery is greatly changed. Bold
mountain rocks stand out by themselves; others assume a peaked form, and are much higher than those below. Silver waterfalls, coming from banks of snow near their summits, leap several hundred feet down the sides of the purple mountains. Where patches of drift remain, the trees are tall, and of fine luxuriant growth.

The pale bluish clay still appears in sheltered spots fifty to seventy feet in thickness; they are chiefly under the lea of huge rocks, which rise like gigantic bastions from the swift flowing river. But the strong current wearies the men terribly. It is a perpetual conflict, and we have sometimes to abandon both paddles and poles, and take to the tracking line whenever the ground is favourable. The strength of the canoes is astonishing; one would think such frail craft would never be able to stand the wear to which they are subjected in ascending this rapid river. The men had great difficulty in bringing the heavy canoe up to the camp. They waded in the shallow water, pulling the canoe after them. The current in 'the lead,' that is, in the deep water, was too strong for paddles, and too deep for poles.

During the morning of the 20th, we had heavy rain, which did not cease until eleven o'clock. Dense masses of mist rolled magnificently through the Gorge, and enveloped the mountain-tops with a veil of clouds which completely shut them from view. When the rain ceased, and the men were drying their clothes, Pierre set to work to bake bread, others to cut fresh poles, and others to hunt for rabbits. Not even a track was to be seen. No sign of animal life but a few gulls, and a loon.

Rabbits and porcupines formerly existed in great numbers throughout this country, (so the Indians say), but now none are to be found. The first-named animal is of the greatest importance to Indians, and was formerly one of their most reliable sources of food. The disappearance of the rabbit must have been largely instrumental in driving Indians from the Moisie. There are now many parts of Eastern Canada which would not sustain even a few families of hunters, if it were not for the rabbits.

In the region west of Lake Superior, rabbits are very numerous, and form the main-stay of the Indians there. When Mr. Gaudet was exploring the Lake of the Woods in 1858, he visited 'the Pelican,' a chief among the Ojibways. His family consisted of ten persons, and they caught and consumed forty rabbits a day. Rabbits at the best are very poor food, and when Indians are compelled to live for months together on this little animal, they become weak, emaciated, and prone to disease.

A party of fourteen men, including two Indian hunters, took 2,000 rabbits at the Savanne and Prairie Portage during the winter of $1858-9$, and made some capital rabbit pemmican, by boiling down sixty rabbits at a time, with a little pork fat, taking out the bones, and letting the gelatinous soup freeze. The spruce partridge are also very numerous in the Lake Superior region, but here there are none to be seen. They go about the Savanne Portage* in droves of 100 and

[^15]200 , walking on the snow like the prairie hen, and feeding on spruce-buds.
Rabbits are very easily caught with snares, both in summer and in winter. Their tracks in the winter intersect the country in all directions, and make it look like network on a large scale. After a snow-storm, all tracks are obliterated, but in two or three days they are numerous again. During the winter, rabbits burrow in the snow to the surface of the ground and form a warm round nest where they may lie in safety, secure from the most penetrating cold, which, in those elevated regions, is not unfrequently severe enough to freeze mercury.

How difficult and uncomfortable it is to cook breakfast in heavy rain, none but those who have tried can tell. Pierre begged to be allowed to come into my tent to knead the dough for bread, ' or the rain would spoil it.' On receiving permission, he brought a large fresh sheet of birch-bark, which he had just cut from a neighbouring tree, and laying it on the spruce boughs, began to make his bread.

A shout of alarm from one of the voyageurs, who was chopping some wood, drew us from the tent. He had cut his foot with the axe. It was the work of a moment to pull off his loose boot, run to the nearest balsam spruce, get a tea-spoonful of the fresh balsam, and apply it to the wound kept tightly closed with the finger. A bit of rag was then put over the sticky gum, which caused it to adhere so firmly, that the blood ceased to flow, and in three days the wound had healed.
'Pierre, why do these Montagnais and Nasquapee

Indians die so quickly when they go to the coast?' I said, as we returned to my tent.
'Well, perhaps,' said Pierre, ' because they marry so much together in one family. It is the same everywhere in " the woods."

Among the Ojibways, all the way from Lake Superior to Red River, intermarriages form the rule instead of the exception. One may visit a small camp, and find them all cousins, or brothers, or half-brothers, or half-cousins, but nearly always related to one another. It is curious that the children of a brother and sister can marry, but the children of two brothers or of two sisters cannot. They call one another brother and sister. One often finds that the first wife, even if she has no children, is mistress over the others, the younger ones doing the work. The wives call each other sisters, and the children of one call the others aunts.

After breakfast we passed the second Gorge without great difficulty. The labour was severe, but there was no necessity for discharging any part of our cargo. The men and some of the gentlemen were compelled to wade occasionally, when the water was shallow close in shore, and the current too strong for paddles, and too deep for poles in the main channel.

The presence of boulders in the middle of the stream was sometimes very troublesome, requiring great care and hard labour to get past them.

Bitterly did the men complain among themselves of the current of the Moisie, and they looked aghast at the answer Michel gave to the following questions which I put to him when we all stopped to rest.
'Is the current less rapid when we get a mile or two beyond the Gorge? '
' Worse.'
'How far up is the river very bad?'
'The farther you go up, the more rapid is the river ; it gets worse and worse, until canoes cannot be hauled, or paddled, or poled up it, even in summer, when the water is low.'
'Shall we soon get to the portage ?'
'The portage is on the other side of that bend-two points away; we leave the river then, and go to the lakes.'

Suddenly the countenances of the voyageurs changed, as they heard Louis' interpretation of the young Nasquapee's answer to my last question. They shouted, laughed, joked, and sang; took off their caps to the Moisie, and expressed regret that they would soon be compelled to leave it.

Louis muttered, thoughtfully, 'Ka-pi-ta-gan, Ka-pi-tagan.'
'What is Ka-pi-ta-gan ?' I asked.
'Ka-pi-ta-gan is Montagnais for "portage." '
'Well, why are you calling out Ka-pi-ta-gan in such a melancholy strain?'
' Michel just tell me the portages are long, very long. He say, too, that the portages are high, very high; many, very many. I think those men will not laugh so loud when they are halfway across one of the portages: we shall see.'
'What is the name of the first portage we come to?'
' Michel says, Cold-water River Portage.'
'Away, then, for Cold-water River Portage ; and good-bye for a while to the dreadful current of the Moisie.'
' Hup! hup! hup!' shouted the Indians, as they dipped their paddles in the water, some of them little dreaming of what was in store for them, and very far from thinking that the Moisie, notwithstanding its currents, would soon be remembered with regret, in the midst of greater troubles and severer toil.

Another hour brought us in sight of Cold-water River and the old Montagnais portage clearly marked on its banks.

A very remarkable remnant of the drift which formerly filled the whole valley of the Moisie, to a height varying from 120 feet at the Cold-water River to 70 feet below the Grand Rapids, lies under the shadow of a mountain about 700 feet in altitude.

Cold-water River is not more than thirty feet broad at its mouth. Trout abound in it, and we soon caught enough to furnish us with an excellent dinner and supper. The remains of old Montagnais lodges, and a well-worn path, showed that this was once a favourite resting-place, and even now it is one where the few families who pass up or down the Moisie always stay a day or two to fish and hunt.

Rain set in soon after our baggage was landed; but fortunately it did not last long. Late in the afternoon we all started to examine the portage, and clear the path of the trees which had grown upon it, for the passage of the canoes. About fifty yards from our camp, which was made at the mouth of the river, the portage ascends the
mountain to a height of 320 feet. The rise is very abrupt, and even difficult in some places; but when we reached the altitude just named, a wonderful sight burst upon our view. We emerged from a fine forest of spruce and birch, to the border of a complete chaos of rocks and trees. A land-slide, on a stupendous scale, had taken

place during the spring of the preceding year. Above rose a dark-green precipice, several hundred feet high, with trees overhanging its crest; below, and all the way down a steep incline, were masses of shattered rock, mingled with trunks of trees heaped upon one another in the wildest confusion. . At the bottom of this chaotic mass was the forest, which had been crushed into the valley below by the falling fragments. It appeared as if a portion of the mountain, from 200 to 300 feet in height, and half that measure in breadth, had become detached from VOL. I.
the summit, and in its headlong fall was. shattered into countless pieces of all sizes and shapes. These had ploughed their way through the forest, and carried the trees before them in their resistless rush to the valley below, where they lay matted together over roots, rocks, and broken limbs in inextricable disarray.

A close inspection of the mineral characters of the rocks developed another feature of high interest. The rock was no other than the celebrated Labrador felspar, not unfrequently distinguished by the exquisite play of colours which its surface exhibits when seen at particular angles of vision. A mountain range of Labrador felspar, no doubt the fire-rocks of the Nasquapees, small areas of which, under favourable conditions and aspects, charm the eye with changing lustre, and reflect the most lovely greys, the most delicate blues, and the softest golden yellows.

The time I could give to an examination of this stupendous land-slide, and the beautiful rocks of which its ruins were composed, only enabled me to detect in a few instances the lustre of the Labrador felspar.

But the entire mass of the mountains as well as the débris were unquestionably composed of it. After having feasted on the wild beauty of this extraordinary scene, I turned my eyes towards the mountain, on the opposite side of the valley, about two miles distant, where I saw another land-slide, the counterpart of the one at my feet, but of much more ancient date. The birch had begun to grow among the shattered fragments, but the large crushed trees were withered and dead, and lay at the bottom of the slide in most intricate disorder,
easily discerned with a good glass. Those in the valley near me were not all dead; some of the birches had put forth their leaves, and looked green and fresh amidst the forest of broken trunks so rudely torn from the spot where they grew. I was struck with the singular luxuriance of the vegetation, and the comparatively great size of the forest trees in this valley, but the discovery of the Labradorite rocks at once explained the cause. Labradorite is a lime felspar, which, upon decomposition, yields a very fertile soil.

We were almost afraid at first to speak, lest the vibration of a sound should dislodge some of the masses which seemed ready to descend the hill at the slightest touch. We picked our steps over the fragments with great but needless caution, for they had evidently all attained a stable position, and with few exceptions allowed us to pass over them without being displaced or shaken.

The men who, with ' weary step and slow,' had followed us with heavy burdens up the hill, paused in amazement and doubt as they came to the edge of the slide. They looked up at the dark-green mountain-wall from which the shattered masses had fallen ; they looked down into the deep valley where the fragments were strewn and heaped; they looked across the path of the slide and traced our footsteps one by one over the treacherous incline, the foremost calling out in a low voice, 'Is it safe? -can we pass?
' Put your feet in our steps; don't touch any of the loose rocks, or you'll send them tumbling down the hill, and come as quick as you can, one by one.'

We were sitting on a piece of rock on the opposite side of the path of the slide when this reply was given, and we watched them make the traverse with a little anxiety.

There was no difficulty in lightly skipping across the side of the hill at an angle of $45^{\circ}$, loosely covered with débris; but when rapid motion was impeded by a burden of 100 lbs . on the back, great care became necessary in order to secure a firm footing.

All crossed in safety, and lodged their burdens on the other side, returning to camp deeply impressed with the wildness of a scene where disorder seemed to reign, and fully alive to the beauties, and, perhaps, most of all, to the silence of those remote mountain wilds.

They spoke in whispers, lest the sound of their voices should detach loose fragments from the overhanging cliffs; and it was not until they had reached the valley below in the dusk of the evening, and saw the red glow of the camp fires lighting up the forest, that they broke into their usual buoyant spirits, and, brightening up, made those silent woods resound with joke, laughter, and song.

At daylight on the following morning (21st) I was going to the river to fish for trout, when I saw the young Nasquapee at the foot of a large birch close to the portage path, gazing at something about two feet beyond his reach. I went to the object, and saw that it was a roll of birch-bark, tightly tied with sinew and suspended to a branch. I motioned the Nasquapee to get up the tree and take it down ; he did so immediately, and, handing it to me, I was enabled to trace some letters upon it
rudely written with charcoal. They made the word Bar-tel-mi ; on opening the roll I found in it eight narrow plugs of tobacco. 'Ah! I know,' said Pierre, when I showed him the little câche; 'it is some tobacco which Indians have left for Bar-tel-mi ; he hunts on this river, and on these lakes: they have brought it here from the Moisie Bay, and he will find it when he comes back to the portage.'

The birch-bark roll was retied and suspended to the branch where it was found. A thermometer was discovered to have been left at the last camping place. No doubt it will be found by Indians and taken back to the Moisie next spring, if we do not get it as we return.

It is remarkable that a delicate instrument like the thermometer should survive the shocks to which they are subjected in forest travelling. Mr. Gaudet left one on Savanne River, near Fort Pelly, in 1858 ; in 1859, it was brought by Swampy Indians to Fort Garry at Red River Settlement. In 1857, I left one hanging to a branch on the Roseau River, west of the Lake of the Woods; in the following spring it was brought to Fort Garry by the Ojibways, who hunt on that river. Nothing which is not obviously useful, such as a knife or an axe, is lost in the woods on an Indian trail. It is sure to be found sooner or later by the lynx-eyed wanderers, and brought to the nearest fort or post in the fur countries.

At 4 A.M. we despatched the men with a load, instructing them to carry it as far as a beaver meadow on a high valley between conical hills about half a mile from our camp, and then return for breakfast. We fished, and
caught some large speckled trout, wandered in the fine forest which filled the narrow valley, and gathered some beautiful and rare species of flowers which grew with singular luxuriance in the moist woods.

After breakfast the canoes were sent forward to the beaver meadow, and we broke up camp. It was heavy work carrying them up the steep, 320 feet up an incline of $45^{\circ}$, the remains of former land-slides, thinly covered with slippery black mould. This morning's work bruised the shoulders of the men, and damped their spirits. We were compelled to use the line with the big canoe, and haul it inch by inch up the steepest parts. The remains of Indian lodges are not uncommon after reaching the plateau; but the vegetation loses its luxuriance, and dwindles to stunted spruce and birch. But an old beaver meadow in the valley of a little streamlet, at the foot of a rock from 600 to 700 feet in perpendicular altitude, was the most charming little bit of scenery we had yet found. It was the perfection of seclusion, and a most delightful place to camp in; wood and water in abundance, a green sward fringed with low-growing spruce, a huge purple rock sheltering this lovely spot from the midday sun, and near at hand the rotting tentpoles of Indian lodges, telling a sad tale of former life in this now desolate wilderness, and speaking as if from the grave of a race that has passed away. The mosses and lichens grow here with even more luxuriance than on the Grand Portage, and Michel tells me that as we get near the dividing ridge, the country is covered with mosses richer, deeper, and more beautiful than we see here.

We reached the Cold-water River again late in the afternoon, and found the height of the cascades, which the portage avoids, to be 183 feet. They are very much broken and hidden by the foliage of trees, which, in the sheltered ravine through which the river flows, grow to a large size, but are composed almost exclusively of spruce and birch.

The river itself is sixty feet broad, and very much choked with fallen timber, through which we had to cut our way with the axe. It is the most gloomy stream on which I have ever floated in a canoe. The waters are black and sluggish, and high purple rocks rise perpendicularly from it. No ray of sunlight can penetrate part of the Gorge in which it flows, and the narrow flats which occur at intervals are thickly clothed with trees. Otter traps, belonging to Bartelmi, are numerous on its banks; but the transition from the beautiful beaver meadow above to this damp and gloomy defile, is like the sudden change from a bright and breezy day in spring to the dispiriting damp and heaviness of a November afternoon. But these frowning rocks, this black and almost noisome river, slowly winding and creeping along, half choked with trees, and accumulating a scum on its surface at every little jam, this can't last long, surely: 'Listen, Pierre!-what's that?'

Pierre pointed with his paddle to a small mass of froth floating slowly past us, then to another, and another, uttering at the same time the monosyllable, ' Falls.'

In two minutes we turned another point, and the roar of the falls came loud upon the ear; the froth
was more abundant in the stream, and bubbles began to appear.
'There they are!' shouted my bowsman, as we entered a little pool not seventy yards in diameter, and saw the second falls of the little river before us. 'Do you see the trout jumping?'

A capital place to camp, fish, and make a câche of a box of tea. In half an hour we caught a considerable number of trout and one musk-rat, carried the flour and pork across the portage, which was only 150 yards long, and gathered wood for an illumination of the rocks after nightfall. Words-cannot paint the effect of that ruddy light on those grand old cliffs. Lost in the upper air, their summits were no longer visible, however bright we made the flame with fresh supplies of birch-bark. The shadows were black as pitch, the gloomy river, or as much of it as was visible from our camp, looked like what Styx might be supposed to be, and the little cascade, close to which our bonfire was placed, leaped with a cheerful glow in the pool, alive with speckled trout, which came to gaze at our glowing fire.

## CHAPTER VIII.

' THE LAKE WHERE THE SAND LIES' TO ' GNEISS TERRACES.'
Moose - Moose Country - Moose Calling - Shaw-a-Gunsch - A
Moose Story - Another Accident - Canada Balsam again - The 'Lake where the Sand lies'-Stillness and Beauty of the Scene - Effect on the Men - A Race - Trolling-Mosquitoes and Blackflies - The 'Gneiss Terraces' - Their Symmetry and Characteristics - Mosses and Lichens - Making Tents comfortable - Rain

- Wandering over the Terraces - Wonderful Lichens and Mosses
-The Labrador Tea-plant.

Dyou think there are any moose in this country, sir?' enquired one of the voyageurs as he was looking round for dry birch-bark to light the fire at the dawn of day.
'I don't think so. Why do you ask ?'
' I thought I heard a moose call in the night.'
'They don't call at this season of the year, it 's late in the fall before the moose begins to call.'
' I have not heard them myself, in the woods; but Laronde has been away up the Ottawa, and he was telling us last night about moose calling. I thought he said that they did call in the early summer, so I think it must have been the cow moose calling her calf.'
When Laronde came back, I questioned him about the . moose, as we sat round the fire waiting until breakfast was ready - all the things but the cooking utensils being at the other end of the portage.
'Joseph thinks he heard a moose call last night, Laronde.'
'He must have dreamt it, sir ; there are no moose in this country : perhaps it was a wolf he heard.'
' I know the cry of a wolf,' replied Joseph indignantly.
' Besides,' continued Laronde, ' moose don't call at this time of the year. I have often called moose, and killed many a one on the Ottawa and the St. Maurice.'
'How far east have you met with moose?'
' I don't believe there's a moose on this side the Saugenay. I expect there used to be, but they 've been killed off.'
'How do you call moose?' asked one, who was a moose hunter himself when opportunity offered, and wished to know what Laronde knew about it.

Laronde took a piece of birch-bark and rolled it up in the form of a trumpet, and made a noise with it like the deep bellow of a bull.

His questioner made another little trumpet, and answered it with a similar sound.
'Ah!'said Laronde, ' I see you know how to call the moose.'

The experience which several of the party had enjoyed in moose hunting led to the narration of the following extraordinary instance of success in this wild sport, among others of less striking character. In 1859, an Indian was coming into a large lake, near the Lake of the Woods, with his canoe in search of wild rice. He had no gun with him, only his paddle and a knife ; straight before him he saw three moose swimming across the lake - he killed them all.

He paddled as fast as he could alongside one of them,
and threw his blanket over his head. Leaving this one to swim about, he gave chase to another - caught him, and threw his coat over his head, and left him to swim about too ; he then gave chase to the third, but if it had not been for a fair wind, he would never have caught him. As it was, he only came up to him when within fifty yards of shore. The moose was tired, and did not make much way. The Indian hit him on the nose and stunned him for a moment; he then gave him a rap on the head, and finished him after a few more blows. But it requires very skillful paddling to kill a moose in the water, and he would not have done it so easily if the poor animal had not been tired with swimming across a broad lake. After he had dragged this one into shallow water, he turned to look where the others were; he saw them swimming round and round in the middle of the lake - they could not see which way to go. After resting a while, the Indian paddled up to the one nearest him, and turned him towards shore always keeping a little behind, and going from one side to the other, according as the moose wandered from a straight line. When he came near the land he paddled up to him, and served him as he had done the first tied him to his canoe and tugged him into shallow water. He then went after the third, who was still swimming round and round, but very weak. He got him with difficulty near the shore, and despatched him in the same style as the others.*

[^16]
# Formerly the moose* was found as low down as the Bersiamits River, about 230 miles below Quebec. These 

only as I am acquainted with it in this State (Maine), other latitudes causing some slight variation in its habits. When the snows have left the ground entirely bare, which in the favourite haunts of the moose happens about the middle of May, they leave their winter haunts and approach the marshes, ponds, and rivers, where they come to search for their summer food, consisting of all the various aquatic plants which flourish in this region. Their favourite food, however, is the water-lily and rush, in all their varieties, and at this season they crop them, as soon as they appear, close to the bottom, frequently holding their heads under water a minute or eighty seconds, and often wading in water so deep that when they put their heads down under the surface to obtain the small lily-leaves, or to dig up the root of the plant (which they often eat at this season) before the leaves are plentiful, only a portion of the back is visible. About this time the females go apart, seeking the most impenetrable thickets that border on or near the water, and there bring forth their young: those of three years old and upwards almost invariably producing two - still I have occasionally, but very rarely, seen and known three at a birth; those of two years old never produce more than one. They shed their coats of long rough hair, too, at this period, and are soon covered with short, smooth, and fine hair, of a darkbrown colour, which, however, soon becomes a jetty glossy black on the sides and back, and grey on the legs, with the exception of one variety of animal, which is of a grey colour, and which is now very scarce here. As the season advances, the moose frequent the water still more, and remain in it longer at a time. In May or early in June they seldom stay in it more than half an hour at once, but in July and August they sometimes remain in the water several hours, and also frequent the waters very much during the night, especially in hot, dry, sultry weather, or thunderstorms, which they seem particularly to delight in, swimming back and forth, apparently in a high state of enjoyment. During these visits to the water, the female secretes her young with great care, to protect them from the ferocity of the old males who would destroy them. For this purpose they commonly select a very dense clump of large bushes, or a spruce or fir thicket, which, from its density, prevents the male from reaching them on account of his horns, which generally sprout in April. They grow rapidly, and are very tender and easily hurt at this time. By September the horns are out of the velvet, and have acquired hardness, and towards the close of this month the moose leave the water for two or three weeks, and resort to the mountains. At this period the males are frequently very fat (I have killed them with nearly three inches in thickness of fat on the rump), and are often very fierce and savage, sometimes even attacking the hunter; but in the course of

[^17]
## fine animals were mentioned by Père Jean de Quen, in 1652 , in his description of the country of the Oumamiois

a few weeks they become thin and poor, in consequence of their continual roaming and their many combats. They also neglect food at this time. At this period the loud bellow of the male is frequently heard and distinguished by the watchful hunter at the distance of two or three miles, in the stillness of the night. The males also make another noise, which, from its peculiar sound, the hunters call chopping; it is produced by forcibly bringing together and separating the jaws in a peculiar and singular manner, and, as its name implies, resembles the sound of an axe, used at a great distance. They also emit a variety of strange sounds and cries. When they return to the water they spend a great deal of time in it for a week or two, but afterwards they gradually shorten their visits until the sharp frost sets in. Still they occasionally come into it till ice forms an inch thick during the night. Then they leave and return to the mountains, where they select their fall and winter haunts, roaming about, and subsisting on the bark of small trees, which they peel or gnaw off, and the twigs of the fir tree and other woods. When the deep snows fall they select a spot well adapted to their wants, and commence to browse and peel more closely. This is called "yarding," and as the snow deepens and crusts form on its surface, they peel and break down bushes and browse closely, in preference to wallowing through the snow in search of choicer food. A " moose yard " frequently occupies about 100 acres, more or less, but the latter few weeks of the season are frequently spent on an area of ten acres, or less.
'The old males and females never "yard" together, but sometimes the young animals are found occupying the same " yard." Still they are seldom found in close company. The females and their calves frequently "yard" together, the calves remaining with their mother one year. The oldest males invariably yard alone, choosing some lonely knoll or mountain peak, where they reside in utter solitude. Indeed, as age increases, the moose becomes more solitary in his habits, avoiding the common resorts of other moose, and frequenting some lone little pond or stream. The moose of two or three years old, also, often yard alone; but the males between the ages of three and ten years are very gregarious. I have known as many as nine in one yard. When hunted at this time (deep snow), they go off in Indian file, each moose stepping accurately in the footprints of its predecessor, so that any but an experienced hunter would scarcely suppose that more than one moose had passed, when perhaps six or seven had gone in reality. Still, when they are closely pursued, and the one that is first becomes tired - in consequence of having to break the way through the snow - that one turns out a very little, and the rest, having passed him, bring up the rear. So they change in rotation, the males showing the most chivalrous spirit in aiding the females or weaker ones. Sometimes, too, they break their order of going in awkwardly passing a tree, when hard
or Bersiamits Indians, a tribe of the Montagnais nation. In 1670 , Père Albanel states that 'the moose approach the country of the Oumamiois.' On the south side of the St. Lawrence, in the Gaspé District, the moose is still common, and the hunters kill large numbers of this animal for the sake of their skins. 'We were informed,' says Mr. R. Bell,* ' that a party of hunters had procured 300 skins in 1857; and that another party of only three Indians had killed, during the same season, between 90 and 100 on one expedition, as many as six falling a prey to them in one day; yet these noble animals roam in numbers over the district.'

After breakfast, we started full of pleasant anticipations for the lakes. A flock of those merry birds, the
pressed, some going on each side, but instantly falling into line again when the obstacle is passed.
"At this season the "spikehorn," or two-year-old male, is noted as affording the longest and most difficult chase ; and the oldest male for making the most gallant fight. In fact, they often refuse to run at all.
'A moose " yard" presents a strange sight to those not familiar with it, with its broken bushes and peeled trees; for sometimes when the snow is very deep and difficult for them to get through, they break down and browse closely the tops of young fir trees five or six feet from the ground, and where they are two or three inches in diameter. They also reach up and peel and browse ten or twelve feet high above the ground, raising the fore legs and allowing the weight of the body to rest on the hind ones. Although so fond of browsing the fir, they never eat the bark of it, yet they seldom kill any other tree, as they generally peel only one side off those they use for food; they also break down the bushes in one direction, pulling them towards them, so that the direction the moose has taken is known to the hunter by this sign, when he first approaches a "yard."
'The young fir trees are killed by the males rubbing their heads against them - instinct teaching them in that manner to apply the balsam of fir, which possesses great healing powers, to the sore and tender places caused by the loosening and falling off of the horns.
'The favourite winter food of the moose is the twigs of the fir tree and the bark of the mountain ash, and of a species of dwarf maple, and the young twigs of the " moose-wood.",

* Geological Survey of Canada.
whisky-jacks, followed us up the silent and gloomy river, and did not leave us until we entered the Ka-wa-si-ta-gawish, or 'Lake where the Sand lies.'

The quiet lake lay calm and fair as we gently stole upon its waters - smooth as a mirror, and reflecting with perfect fidelity the green and purple mountains on its shores. This is truly a land of contrasts. From a sluggish river coated with slime, with a heavy, damp, dispiriting atmosphere brooding over it, to a bright and limpid lake, full of sunshine and colour, is but a step over which you slip insensibly, but not without instantly realising the change.

The day is hot, but the shadows of the purple mountains are deep, and the waters of the lake ice-cold. Passing from sunshine into shade, a chill thrills through every limb, and you turn back to the pleasant glow again to enjoy the warm air and brilliant light. Ice lingers on those distant cloud-capped peaks, but all around, the trees, where trees can grow on the sloping rocks, wear their summer dress. Still, something weighs upon the spirits which you find it impossible to shake off. What is it? All, more or less, are under its influence. The Indians are silent as the grave. The French voyageurs neither laugh, nor talk, nor sing, but move their paddles mechanically, dipping them carefully into the water to make as little noise as possible. What is it that seems to weigh upon the spirits of us all? It is the absence of life, it is the consciousness of being in a desolate wilderness. Rocks and trees and water are as beautiful as they can be imagined, yet there is no bird, or beast, or fish to give animation to this lovely scene.

Our expectations had been roused by the associations which had hitherto attached themselves to the idea of a mountain lake. We expected to find water-fowl at leastbut there were none. The Nasquapee told us we should see no duck, but we scarcely liked to believe him. We thought that we should see fish rising, but the surface of the lake was like a mirror, and you could detect no difference between the mountain pointing to the sky above and its image below.

The only motion was produced by our own canoes, the only sound by the gentle subdued dipping of the paddles in the water. One blessed little bird suddenly broke out into a sweet song on that desolate shore, and woke me as from a dream.

This will never do, I thought - the men will get superstitious, and want to go back.
'Now for a race!' I shouted, - ' a race to the point a-head.' The men in the other canoes stared at me wonderingly, as if I had rudely broken in upon their meditations, and profaned a place sacred to day-dreams or self-communing, but they showed no signs of increasing their speed or arousing themselves from the half stupor in which they were plunged.

There is nothing like action in such a case, so I told my men to paddle with a will. As soon as the others saw us leaping away from them, they caught the spirit, and in two minutes more we were waking the echoes with our shouts in the brief excitement of a canoe race.
'Suppose we put out a trolling line, and try and catch a trout,' said Mr. Caley. 'I see them about the canoe;
they are small, but anything is better than this unearthly stillness ; and we can't be always racing.'

No sooner said than done. A delicate little spoon, about the size of a tea-spoon, ornamented with a single crimson feather, and armed with a treble hook, was dropped into the water and dragged along by the canoe. One small trout, not half a pound, was the reward of this suggestion; but it served to show us there were fish which would be caught even by spoons, and that was something.

At length we got to the end of the lake, which is about two miles long, and hastened across the succeeding portage.

The 'Lake where the Sand lies' is 330 feet above the sea; in order to reach it from the Moisie it is necessary to rise 293 feet above Cold-water River, and descend 110. In making the passage of the Cold-water Portage, a second rise of sixty feet over a small carrying-place round the Cold-water Falls, about 150 yards long, followed by a mile of river, leads into the lake.

If we complained of no life on the water, there was enough of it on land, for no sooner had we stepped on shore than the mosquitoes and black flies began to torment us, and a kingfisher flew screaming from one leafless branch to another, on the dead larches near the head of the lake. High up on the portage, which rises 292 feet, we obtained a fine view of the surrounding country. The ' Lake where the Sand lies' was seen to have many deep bays, and to join with another lake occupying a valley to the north-west of our course, and consequently lying between us and the Moisie. White streams of water tumbling
down deep declivities of bare rock, glistened in the sun. Long bright-green strips on the mountain sides showed where the birch had found a kindly soil, amidst a sea of dark spruce or a dreary waste of herbless rock.

We bathed in the second lake, but the temperature of the water was not much removed above that of melting snow. Crossing the second lake, we came to the Ka-te-tu-kois-pish-kos, or Level Portage, with a rise of 197 feet, and a length of three-quarters of a mile. Cold-water River falls 270 feet, between the lakes, in a distance not exceeding 1200 yards.

On the Level Portage we found much to admire, and still more to speculate upon. First we crossed a beaver meadow, but the beaver-houses had long since been broken open, and the beaver were gone. As we ascended 100 feet or so of bare gneiss, the half-decayed poles of Montagnais lodges, rotting where they fell, lay near a mountain rill close to our path.

But the Montagnais, like the beaver they hunted, are gone, or wander in scattered bands on the coast. Descending in converging lines to the lake are old caribou tracks ; but the caribou now shun this part of the country, or are only rarely met with in small bands. Both caribou and beaver will come again, and people this desert once more; but there will be no Montagnais or Nasquapees to hunt or disturb them in their secure retreat.

The Labrador tea-plant is in bloom, and casts a faint but delicious fragrance around. The gneiss, which rises in gigantic terraces, one above the other, is covered with brilliant-coloured lichens in rings, crescents, and ovals of every hue, from the pale cream-coloured 'reindeer moss'
to the vermilion 'cup moss,' growing in bunches, groups, and beds all over the grey gneiss. Larches and birches, branching free from the deep cracks in the rocks, are wonderfully symmetrical. A scented breeze drives insect tormentors away, bringing an evening blessing in these desolate wilds.

From the summit of that peaked mountain in the lofty chain to the north, 1,500 to 2,000 feet above, the Nasquapee says he has seen ships in the Gulf of St. Lawrence, and the level country where Ashwanipi flows, the great river of the Labrador table land. And, lastly, there looms, on the opposite side of the valley, another great land-slide, as recent as, and more gigantic than, the one passed over a few days ago. The slowly sinking sun reddens the mountain tops, the black shadows move swiftly across the lake ; loons, with wild prophetic cries, fly like arrows towards their nests; the long twilight fades softly into night, and the silence of a beautiful but lifeless wilderness depresses the spirits and saddens the heart.

Our camp was made at the foot of the gneiss terraces, on the bare rock, as, except in the wet beaver meadow, there was no soil where we could pitch our tents.

Had it not been for the warning note of the loons, we should have rolled ourselves in our blankets, under a starry roof; but the wild birds foretold an approaching change, and admonished us to prepare for the worst. The next day was Sunday, and, in accordance with a rule we always observed in the woods, no work would be done until the day was well advanced. We supported the sides of our tents with stones, found with difficulty, for erratics,
both large and small, were as yet of rare occurrence at a distance from the river.

We made the inside of our tents comfortable with fresh spruce boughs, the most fragrant of beds. The Indians peeled the bark from the birch trees growing in fissures, and laid them on the rock under the canoes, to protect them from the wet in case it should rain before morning. The voyageurs followed their example, and covered the floor of their tent with sheets of bark.

It was late before we retired to rest ; we sat up longer than usual to watch the change taking place in the heavens. Light fleecy clouds came swiftly from the west, followed by others more heavy and opaque ; before midnight the sky was overcast, and a gentle moist wind sighed through the scattered trees. When we bade each other 'Good night,' the sky was black as pitch, and large drops of rain began to fall.

It rained until noon of the following day. The men, jaded with their week's work, slept long and soundly. We did not break our fast until the rain had ceased. In the afternoon the clouds were dispersed, but mists rolled up from the deep valleys and settled around the hill tops. The mountains before us were invisible until towards evening, when the sky and earth again became clear, and even more beautiful than on the preceding day.

Before nightfall the canoes were brought across the portage, and the necessary preparations made for crossing the third lake at break of day.

I spent the afternoon in wandering over the gneiss terraces, five in number, the highest being about 1,000 feet above the sea, and backed by a stunted birch and spruce-
clad mountain, some 800 feet higher still. My tent was pitched opposite these terraces, on a shelf of lichencovered rock, which commands a full view of the valley below, through which a mountain stream foams and frets, coming from the next succeeding lake through which we were to pass.

The prospect from the highest terrace was grand indeed : quiet lakes and rugged rocks, deep jagged ravines, and green wooded valleys, were all within view. I shall endeavour to describe the prevailing character of these terraces, commencing from the highest one.

The sloping sides of these abrupt steps are rounded, polished, and furrowed by glacial action. Cuts half an inch deep, and an inch or more broad, go down slope and over level continuously. Rounded and water-worn boulders are perched here and there on the edge of the uppermost terrace. These strange memorials of the drift begin to be more common. Not many have yet been seen in this part of the country ; but now they are getting numerous. No lichen or even moss grows on many parts of these stern old rocks. They seem to preserve their original integrity, and have apparently contributed little to the detrital matter in the ravine which lies below them.

Descending towards the valley, we come to a spot, however, where the lichens have succeeded in effecting a lodgement. Small, circular grey time-stains, from the size of a sixpence to a foot in diameter, encrust the rock, and begin the process of decay. They are like 'fairy rings,' dark in the centre, and shining at the circumference with brilliant lustre, when the sun first strikes them. Most of
the smaller rings are thin as a sheet of writing-paper, but firmly attached to the rocks, and slowly effecting its disintegration.

A little farther on, and these first efforts of vegetable life give place to a different species, larger, growing in alternate concentric green and grey rings, forming broad circles on the rock. Detaching one with a knife, we find below it some minute grains of sand, the result of its growth - the beginning of a soil. Moving on to a spot more favourable, perhaps, because it is level, small patches of caribou moss begin to show themselves. A few steps farther on and they grow luxuriantly in bunches and round tufts; beneath each bunch is a little collection of sand. They are very feebly attached to the rock, and with a gentle push of the foot may easily be moved. In little hollows club mosses and kindred species have established themselves, and with their deep-green contrast beautifully with the prevailing purple-grey of the caribou lichen. Now we arrive at some scattered clumps of the Labrador tea-plant ; and a little farther on are two acres of this unyielding shrub, through which it is troublesome to walk. It grows amidst a profusion of the preceding mosses, which have prepared the soil for it. Here and there a larch or spruce finds sufficient nourishment for a free and beautiful growth. Dwarf birches occupy crevices wherever they find moisture and plant-food. On tearing up a larch, the roots are seen to stretch far and wide over the rock, under the shelter of the moss and Labrador teaplant. The birch has sent its roots deep into the crack, and defies all attempts to pull it up. Descending still lower down the terraced rocks, we come to the edge of
the valley, where spruce and larch and birch grow freely in clusters. But the soil is composed of sand only a few inches deep, which the lichens have separated and rains have washed from the terraces above. The mosses and tea-plant protect the shallow soil from the sun and retain the moisture. A streamlet runs through the valley in the early spring when the snows are melting, and the beaver have taken advantage of this, and put a dam across the valley half a mile lower down. This has changed the aspect of some hundred acres over which its influence has extended. A beaver meadow has been formed. Rich long grass grows in its centre, and the spruce has invaded it and formed a margin of forest. The centre is marshy and soft, and vegetable soil has accumulated to the depth of two or three feet on each side of the valley. Just beyond the boundary of the gneiss terraces the hills are sloping, and the birch, alder, willow, and aspen grow, which formed the food of the beaver when they revelled in these solitudes.

Such is the aspect of a part of this portage, and such scenes are constantly recurring on the elevated portion of the rocks, whose shape will not admit of the accumulation of vegetable matter, or whose constituents are as unyielding as the hard and impenetrable gneiss.

## CHAPTER IX.

## THE KA-PI-STA-WA-TI-SAGAN, OR RIDGE PORTAGE, TO THE OJIA-PI-SI-TAGAN, OR TOP OF THE RIDGE.


#### Abstract

The Ridge Portage - Beauty and Character of the Lake - A Sawbill Duck and her Young - Tenderness and Sagacity of the Bird Habits of the Saw-bill Duck-A Câche - The 'Top of the Ridge Lake'-A-ta-chi-ka-mi-shish River-Its Descent of Five Hundred Feet in Two Miles and a Half-Mosquitoes and Black Flies-The Mountain Portage - Legend among the Lumbermen respecting the Mosquitoes - Trout - Beautiful Lake and Scenery - Beautiful Variety of Trout-Louis' Ya-mah-pish - Proposed Ascent of a Mountain - The Nasquapee ${ }^{6}$ Ups'-Magnificent View - Reindeer or Caribou - Old Nasquapee Camp - Nasquapee Intelligence Mode of indicating Distance - Mode of indicating Time-Mode of obtaining Fire - Height of the Mountain or Top of the Ridge Portage-Mosquitoes-Laronde.


LEAVING the 'Level Portage' early on Monday morning, we crossed a small lake on the summit of a low dividing ridge, named the Ka-pi-sta-wa-ti-sagan, or Ridge Portage.

The rise is 139 feet, and the descent into the Ojia-pi-sitagan Nipi, or Top of the Ridge Lake, 195 feet. The rocks on the shores of this lake are very grand and imposing. They rise on one side to an immense height, are quite perpendicular, and of a beautiful purple colour. The lake itself is only 781 feet above the ocean; but the summit of the escarpment on its western shores cannot be less than 1,500 feet, and it forms part of a chain of
precipitous mountains which form a small watershed, and whose direction is roughly east and west. I could not approach the purple cliffs, but at the time thought they were composed of labradorite. The rock on the portage was a gneiss.

There are no fish in this lake, at least so the Nasquapee informed us ; it is not more than half a mile broad, and discharges its waters by a small streamlet into Cold-water River. If fish are absent, the larvæ of water-beetles, or blood-suckers, as the voyageurs called them, as well as leeches, are disgustingly abundant. Always on the lookout for ducks, I stole cautiously to the edge of the lake on the other side of the next portage, and observed a saw-bill duck, with a brood of nine young ones, not a dozen yards from the shore. The old bird evidently suspected the approach of something dangerous, for she was gently drawing her young brood farther from the shore, with a low coaxing note. Making a slight noise as I advanced, the old bird instantly called all the little ones to her side, and swam with them as fast as the tiny things could paddle towards the middle of the lake. The mother encouraged the little brood with low cries, and looked continually from side to side to see if they were all there, and keeping close to her. So compactly did they swim, that at a distance of thirty yards they looked like one object. I suddenly showed myself, running to the beach ; not with the intention of shooting them, but rather to watch the manner in which the old bird would act towards her young. She rose with a wild cry of alarm ; the little ducklings, perhaps not a week old, instantly scattered themselves over the surface of the water, some
going on one side, some on another, but always keeping within a certain distance from the shore. The mother flew to and fro across the bay of the lake, alighting about fifty yards from the shore and calling her brood. She remained about ten minutes on each side, swimming about, then flew back again, and so on.

She was evidently gathering the two divisions of her young together on either side of the bay. The time occupied in making the portage afforded me an excellent opportunity of watching the manner in which she would bring them together. After the lapse of three-quarters of an hour, it appears that the little ducklings had all answered the call of the mother, and were collected in two groups about a quarter of a mile apart, for I saw the mother and about five of the little ones swim across the bay and join the other four who had remained on the opposite side. One could easily conceive the quacking congratulations which the ducklings addressed to one another at their happy meeting. The anxious care and tenderness of the mother were quite delightful to witness. The low note of warning ; the gathering flock round her; the wary manner in which she drew them from the shore away from danger; the instinct which prompted them to scatter, then to gather at their mother's call, and quietly wait on one side until she brought them together; - all this was a beautiful and instructive lesson in wild woods remote from help in time of need. The saw-bill duck frequently returns to the same nest year after year. On an island in Rainy Lake, in 1858, we found a saw-bill's nest in the hollow trunk of a pine, which, from the accumulation of feathers, must have been there for many
years. Out of this nest we took ten eggs. On another occasion a voyageur said to me, 'There is a saw-bill's nest on that point: I have taken eggs from that nest for two years past; if we go there now we shall perhaps find some.' Anxious to see whether his prediction would turn out to be true, as well as to get some fresh eggs, I turned the canoe ashore, and found seven eggs in the saw-bill's nest.

We made a câche of a bag of flour on the Dividing Ridge, carefully protecting it from bears and wolverines. The old Montagnais path was in excellent condition over this portage, and at its northern extremity we found an abundance of wild currants and raspberries in flower, growing luxuriantly near masses of ice which remained in fissures of the rocks.

The 'Top of the Ridge Lake' is two miles and a half broad where we crossed it, and contains a few trout. It is drained by A-ta-chi-ka-mi-shish, or Coldwater River, which falls in a series of cascades a little more than 500 feet in a distance of two miles and a half.

The mosquitoes and black flies were terrible after the rain of yesterday in the wet woods. We were compelled to breakfast in a cloud of smoke in order to drive away our tormentors.

Before us lay the dreaded mountain portage, which the Nasquapee called the 'Top of the Ridge.' The mountains around the beautiful lake are worn and rounded, but in the distance, towards the west and north, apparently very much peaked and of great height.

The valleys are well wooded with spruce and birch, but
vegetation appears to cease, except in strips, about twothirds up the mountain sides.
'I should like to know for what purpose these mosquitoes were created,' said one, as we sat at the edge of the lake waiting for the canoes to be brought across the portage.
' Do you know what the voyageurs on the St. Maurice say about the mosquitoes?' asked another.
' No ; what ideas have they on the subject?'
'They believe that a certain saint was banished from heaven for disobedience to the commands of one of the higher angels, and condemned to dwell alone for a long period in one of the uninhabited parts of the earth. She found the time hang heavy on her hands, until at length she prayed that even a few flies might be sent to amuse her.
'The mosquito, the black fly, and the brulôt were forthwith created, and during the remaining period of her punishment they gave her more employment than she wanted in resisting their attacks.
'The saint was restored to heaven, but the flies remained behind to keep us in constant remembrance of the folly of seeking for amusement to distract attention from sorrows which we have brought on ourselves by indiscretion or sin.'

At this moment Michel and Louis came with a load to where we were sitting, in the doubtful enjoyment of a 'smudge' to keep off the tormenting flies.
'What sort of a Ka-pi-ta-gan is that tremendous mountain ahead of us?' I asked.

Michel raised his hand a little, then a little higher,
then a little higher still, and suddenly brought it down again a few inches, terminating his imaginary profile of the mountain with a long horizontal sweep of his hand.
' Michel says,' interpreted Louis, ' you must go up, up, up, and then down until you come to a lake. He says it is high, high, and long as the Grand Portage.'
' Which way does the portage path run?'
'See that mountain with ice on top?'
'Yes.'
'See other mountains, over there?'
'Yes, I see the other mountains.'
' Well, the Ka-pi-ta-gan goes between those mountains,' replied Louis, with a grin. 'Long portage, very high, think we shan't get over it.'
' Nonsense, Louis ; a strong Montagnais like you would run over that portage after a caribou without stopping.'

We often found ourselves very much deceived in attempting to estimate the altitude of precipices or rocks over which we had to pass ; and on this occasion I noted down the opinion of each of the party who was supposed to be able to form one respecting the height of the portage and mountain before us, previously to measuring them with the aneroid. Neither the Abenakis, the Montagnais, nor the Nasquapee could express their ideas in a multiple of a measure, such as feet or yards; but, by comparison, the first two said the portage path between the mountains might be twice the height of the Grand Portage, or about 600 feet. The Nasquapee, who had crossed it several times, said it was three times the height of the Grand Portage. Other estimates (if we judged solely from our point of view, which appeared to be five miles
distant from the highest part of the valley between the two mountains) varied from 400 to 700 feet, and for the mountains themselves from 800 to 1,200 feet above the lake. After careful measurement, both backwards and forwards, we found the highest point of the portage path to be 818 feet above the lake, or about 1,460 feet above the sea, and when we reached this point one of the mountains appeared to us higher than ever, and could not have been less than 1,500 feet above us, or nearly 3,000 feet above the sea.

The men came with the last load, looking very much exhausted with the heat, the flies, and the fatigue of walking with heavy burdens over the steep and slippery rocks.

They wore veils or handkerchiefs tied round the neck and over as much of the face as possible, to protect them from their tormentors, and hastened to load the canoes and push off into the beautiful Ojia-pi-si-tagan Nipi, or Top of the Ridge Lake, to escape from the pertinacious little insects. A breeze soon drove the pests away, and we paddled slowly across the lovely sheet of water, enjoying the new life into which we seemed to plunge as soon as we left the shore.

Soon we began to hear the roar of Cold-water River as it came tumbling down the steep, and our expectations were roused when the Nasquapee informed Louis that we 'should find trout and carp thick as leaves' in the little rapids through which we should have to pass before reaching the foot of the terrible Mountain Portage. The Indian scarcely exaggerated the numbers of fish; they scurried over the gravel and stones in thousands as we
passed up the stream, but none of them were more than ten inches in length. Hastening to the portage half a mile farther on, we unloaded the canoes, and despatched the men with a pack, instructing them to carry a mile, and then return to pitch the tents, while we took a canoe, and hurried back to the rapids to fish for our supper.

We caught 120 trout, sufficient for supper and breakfast all round. The men did not return until late in the evening, having found the Montagnais path very rough, and in many places wet with rills coming from the melting snow and ice in the clefts of the mountain, over the lower part of whose flank the path runs.

We all agreed that the lake was by far the most beautiful we had yet seen ; the still and bright day, coupled with the excellent sport we enjoyed and the absence of insect tormentors, no doubt heightened our appreciation of it. The mountains, green, purple, and grey, as the eye wandered higher and higher, were most sublime; the river rippling over its gravelly bed was 'like a child at play!' The brilliant crimson spotted trout, leaping wildly at our gaudy flies, flashed in the evening sunlight. The pure and invigorating air sighed past us, perceptibly perfumed with the fragrant Labrador tea-plant; and, being all in excellent condition and in the enjoyment of perfect health, we felt glad and thankful that we possessed the rare opportunity of seeing Nature in these silent and distant solitudes.
'To-morrow will tell the tale,' said one; 'we shall not get over that mountain portage without a long and heavy pull at it ; it's 600 feet high if it's an inch.' 'It's 700,'
said another; ' and that mountain where the patch of snow lies is 2,000 feet above us.'

The variety of speckled trout which we caught so freely was remarkably beautiful. Two deep crimson stripes ran down the whole length of the body from the pectoral fin to the tail. The throat and part of the belly were silver white, the back dark green; the side of the fish was speckled with salmon-coloured spots margined with white. Some of the spots were crimson surrounded with a silver ring. The flesh of a few of them was quite white, but of the majority of a deep salmon-colour.

Early on the following morning we despatched the men with a load and went to fish again, catching five and a half dozen. One of the men returned to breakfast quite unwell ; he had drunk too much cold water on the preceding day. I prescribed for him essence of ginger, as usual, and after two or three hours he was able to resume the march.

After breakfast we made the following arrangement. Mr. Caley and I were to go on in advance, and endeavour to ascend the nearest mountain and ascertain its altitude; Mr. Gaudet was to measure the portage, assisted by the young Nasquapee ; my brother was to sketch the scenery from the highest point of the portage. The men were to carry the baggage and canoes to the same spot, and make the camp there.

As Caley and I were about starting, Louis rolled up to me, and said, with a queer expression of countenance, 'You go up top that mountain?'
'Yes, I said, we are going to try.'
Louis held out his hand, saying, 'Ya-ma-pish,'-‘ Goodbye for a little.'
'Why do you say " Ya-mah," Louis?' I said.
'You go top that mountain, not see you again for two or three days; want to wish you good-bye for a little while.'
'What! Do you mean to say it will take us two days to get to that peak?'
'Think not,' said Louis ; 'think you won't get there at all. Nasquapee tell me the way to the top of that mountain is on the other side ; rocks this side too steep.'

This was a poser. The mountain looked accessible enough, but the air was so clear, and distances apparently so much smaller than they are in reality among those lofty hills, that I felt rather uncomfortable at Louis' proffered farewell.
' At all events, Louis,' I said, 'we'll try.'
'Try ; pr'aps you get up there, pr'aps not.'
The 'pr'aps not' was said with such a solemn shake of the head, that I began to think Louis' experience among the mountains of this part of the Labrador peninsula was worth more than a confident reliance on our own powers of endurance.

However, after breakfast, we started, and with what results will be seen hereafter.

Caley and I set out each with a small knapsack containing our aneroids, hammers, and a 'bite,' followed by my brother with his sketching apparatus. For half an hour we followed the Montagnais path through a brûlé, or burnt track of country, in the valley of Cold-water River. The path then turned suddenly to our right, and led us up the side of the mountain. We soon came to a series of gueiss terraces covered with lichens, and, having
reached the highest one, we found its altitude to be approximately 300 feet.
'This must be one of the Nasquapee " ups," ' said my companion ; 'if the others are like it, the portage will be three times as high as the Grand Portage.'

The Cold-water River was far below us, roaring and foaming through a narrow cleft which separated us from the mountain on our left. We gazed up at the mountains, first on one side, and then on the other; and all three agreed that they looked higher than when seen from the lake. Still we talked of ascending the one on our right. After another half hour's toil we reached a second plateau, which was about 250 feet above the last terrace of gneiss. Here we sat and drank in the view, catching a glimpse of the two lakes we had passed the day before. Higher and more rugged seemed the mountains; and yet we had ascended 600 feet. Another half hour brought us to the summit of the 'Top of the Ridge Portage, and we computed its altitude to be 800 feet above the lake from which we had camped. The scene which we beheld was indeed grand. The whole valley of Cold-water River, for many miles, lay below us, bounded only by the distant range of mountains touching the Moisie where we had left it. On our left rose the mountain which we had purposed to ascend, with a deep gulf between us and it, in which the Cold-water River foamed and fretted and fell in numberless little cascades.

My brother took out his sketch-book, and said, with the least trifle of satire in the tone of his voice, ' I will sketch while you ascend one of those mountains.' The


Hanhart Chromo lith
VIEW FROIV THE OJIAPISITAGAN, OR TOP OF THE RIDGE PORTAGE, AT THE SUMMIT
thought of Louis' 'Good-bye' came upon us with full force. We agreed, without the least discussion, that it would take us two days to ascend the one from which the Nasquapee said that ships could be seen in the sea, looking south, and Ashwanipi, on the table land of Labrador, looking north. The idea of ascending either mountain had to be abandoned at once, as we could not afford the time it would have required. A careful survey with a marine glass revealed precipitous cliffs, where not even a stunted birch grew to assist us in scaling.

The summits, fully 1,500 feet above us, as we imagined, and perhaps much more, were bare, bold, and jagged. Perched on jutting peaks were huge boulders, ready, as they seemed, to be pushed over with scarcely an effort; and yet they had remained there for many thousand years - how many, who can tell?

Wandering from the path, I strolled to a ridge of gneiss on the edge of a ravine, in which were the lodge-poles of an old Nasquapee camp, and scattered near it lay the horns and some of the bones of a caribou. This was once a famous deer pass, and several caribou had been killed here during the preceding autumn by a party of Nasquapees, who had wandered far from their own hunting-grounds.

I thought I saw a herd of reindeer high up those mosscovered rocks, lying where the fresh breeze would drive away tormenting flies. I saw two walking apparently on the edge of the precipice, near the summit of the opposite mountain, and stopping now and then to crop the lichens.
'How will they get the canoes up here ?' I exclaimed,
when I returned to where my companion was sitting. 'Well did the Nasquapee say it was " Up - up - up!" All we can do is to leave it to themselves for the present, and if they break down we must take our turn and help them.'

Leaving my brother to complete his sketch, Caley and I walked on to the other end of the portage, descending 300 feet to Cold-water River again. Upon our return we met Gaudet and the young Nasquapee, measuring the length of the portage with a chain. Mr. Gaudet described the remarkable ease with which the Nasquapee comprehended his signs, and how intelligibly he answered the questions put to him. Anxious to know how far it was to the other end of the portage, he placed two sticks on the ground, a yard apart, and, touching one stick, pointed towards the end of the portage from which they had come ; then touching the other stick in the direction in which they were going, he uttered at the same time the word Ka-pi-ta-gan, or portage. He then took a third stick, and placed it between the other two, at an equal distance from both, and pointed first to the stick and then to himself. A gleam of intelligence shot across the countenance of the Nasquapee, who shook his head, and, raising the middle stick, placed it about one-third of the distance from the first, indicating that they had only come a third part of the way. 'Shortly afterwards,' Gaudet added, ' the Nasquapee stopped, and put a stick before his face, and pointed first towards one end of the portage, then towards the other; thus indicating that they had come half the distance.'

After proceeding onward for about half an hour, he
was anxious to know how long it would take them to reach the end of the portage ; and, in order to learn this, pointed to the sun and then slowly moved his hand in the direction they were going, and slowly back again towards himself; pointing to the sun again, he described a small are in the air, and directed his finger to a part of the heavens, where the sun would be in a couple of hours. The Indian smiled, and pointed a little lower in the heavens, indicating that it would take them about three hours before they would get to the end of the portage, and return to where they then stood. On another occasion the Nasquapee was with me, and observed that I took some matches out of a match-box and tried to light one ; but they were damp, and would not ignite. He signed to me to lend him my knife. He cut a stout stick from a neighbouring larch, and taking out the leather thong with which his moccasins were tied, made a short bow and strung it. He then searched for a piece of dry wood, and, having found it, cut it into shape, sharpened both ends, and twisted it once round the bowstring ; he then took a bit of fungus from his pocket and put it into a little hole which he made in another dry piece of wood with the point of the knife. A third piece of dry wood was fashioned into a handle for his drill.

Kneeling down on the ground, he held the stick twisted in the bow-string loosely in one hand, and adjusted it in the handle, placing the other point in the hollow he had made in the piece of dry wood; he then put a bit of the fungus close to the point, and commenced to draw the bow backwards and forwards, thus giving the stick a quick rotary motion. In twelve or fourteen
minutes the wood smoked, but the arrival of the rest of the party, and the necessity for hurrying on, arrested the Nasquapee's attempt to produce 'fire.' Some days afterwards I was walking before the rest of the party with Michel, being perhaps an hour in advance. We sat down to rest on a boulder lying close to the portage-path, when the Indian, who was always doing something, cut a stick about two feet long, and selecting a sandy spot in the path, fixed it upright, and drew a line in the sand where the shadow of the stick fell. His object was to communicate to Louis, who was following us, the time of the day when we passed the spot where he had placed the stick. The position of the sun would of course be indicated by the shadow of the stick, and by referring to the line in the sand Louis could form a tolerably correct notion of the distance we were ahead. When I mentioned this incident to Mr. Gaudet, he said that he once sent an Indian belonging to the Lake of the Woods in the winter to a camp some fifty miles distant, intending to follow him the next day. Three times he observed on the track which the Indian had pursued two sticks stuck in the snow ; so that by drawing a line between them, and looking in the direction to which it pointed, it would show the position of the sun in the heavens at the time the Indian placed them there, and thus indicate the hour at which he had reached the spot.

We returned together towards our camp, and found that the men had already brought all the things but the canoes and tents to the middle of the portage, - a good day's work, considering the ascent, which, by careful comparison, was found to be 818 feet, the Nasquapee
being nearest in guessing its altitude at three times that of the Grand Portage, which we then thought a severe trial. But the men had become accustomed to their work, and could carry much farther than at the beginning of the journey, although they complained bitterly among themselves of the labour involved in ascending the steep and slippery rocks - ' the Nasquapee Ups,' as they termed them - as well as of the heat and the flies. The neck and throat of every man of the party were more or less swollen with the bites or punctures inflicted by these insects ; and my brother's hands were marked with spots of blood, and his face much inflamed, before he had finished his sketch of the magnificent scenery from the summit of the portage. He wore kid gloves, but the mosquitoes found out the seams and little openings made by the stitches. A veil was out of the question, as that would destroy distinctness of vision. But we all found consolation and peace at night in our mosquito-proof tents. It was truly a luxury to write by the light of a lantern, secure against the attacks of these tiny plagues. It is no exaggeration to say that the hum produced by the vibrations of their wings on the outside of the tent, as they were vainly searching for some crevice by which they could obtain admittance, was frequently heard on damp nights before rain.

Throughout the entire length of the Top of the Ridge Portage, the Montagnais path is plainly visible, as well as the remains of old camp grounds. In the low land bordering the lake the canoe birch grew to a fair size, and • with spruce and larch formed a handsome forest.

But this comparative luxuriance of vegetation was con-
fined to the deep valley, not extending one hundred feet above it on the first gentle slope of the rocks, where shallow remains of drift had been preserved, or a soil had been formed by the washings from above.

Late in the afternoon we all started with a load, intending to camp at the other end of the portage, and bring the remaining part of the things over on the following day. I walked a considerable part of the way with Laronde, a French Canadian, who, being talkative, told me some incidents of his life, one of which is related in the following chapter.

## CHAPTER X.

## THE NIGHT-BLIND VOYAGEUR.

Night-blind - Laronde's Account-Effects of Night-blindness Mode in which it affects the Lumberers-The Loneliness of a Night-blind Man - Dreadful Appearance of Night-blind Men Laronde's Story of the 'Night-blind' - The Matawan - The Ottawa-Jerome-Meeting of Jerome and Laronde-The Walk -The Little Beaver Creek - The Crossing - Struck Night-blind -The Discovery - Struck in the Middle of the Stream - A Night on the Rock - Rising Waters - A Flash of Lightning - A Glimpse of the Moon and Stars-Darkness again - The Thoughts of a Night-blind Man - A broken Arm - Light - Vision restored - A Jam-The Escape-Account of the 'Night-blind' Men in the Lumbering Districts.

'HOW did you hurt your arm, Laronde?' I enquired, as the voyageur asked me to help him to raise his load of a bag of flour and two wet tents on to his back.
' It was when I was night-blind,* on the Matawan, two years ago,' he replied.
' Night-blind!' I exclaimed; 'have you been night-

* Night-blindness, or Nyctalopia. - 'When a person is nyctalopic, he can see well enough in the full light of day, but as night approaches, fails to distinguish objects ; and can see little or nothing in a dull light. Nyctalopia is commonly supposed to depend upon a partial paralysis of the retina, existing of course to a very limited extent.' -Walker on Nyctalopia. (The Lancet, 1841.)

Medical men will understand the probable cause of Nyctalopia prevailing among the lumberers in the remote backwoods of Canada.
blind? Tell me how it happened, and all you know about it.'
' Not a difficult affair to do, that; but if you want to see night-blind men, go on the St. Maurice, on the Matawan, and even on the Upper Ottawa. Go in the spring of the year, when the driving begins, and you will find plenty of night-blind men, especially in shanties where they have not a chance of getting a moose or a bear now and then, or where the foreman is not over particular about providing a plentiful supply of peas, and a few potatoes by way of a change, to keep off the scurvy and the " nightblind." But if you will be so good as to wait until we arrive at the camp, after supper, I will tell you a " nightblind " story, which you may believe as you do your eyes now, which show you snow on that mountain-top, and a lake in the valley below us, where we are to camp tonight.'

Laronde stooped while I lifted the load on his back, and adjusting the portage-strap on his forehead, glided rapidly over the slippery gneiss, here and there wet with trickling streamlets, which issued from beneath the moss covering the rocks on one side of the portage path.

Stopping at the beginning of a steep descent which led to the lake below, he leaned back against a shelf of rock, and turning to me said, in an excited tone, 'I assure you, sir, it is a dreadful thing to be night-blind ; it comes on you so suddenly, and you feel so helpless; you stand or sit still without daring to move if you don't know your ground, and you think all sorts of things, when it first begins with a dimness over the eyes. When it's well on, you wonder whether you will ever see the blessed light
again. The cause of it I cannot tell you. The lumbermen, who are mostly troubled with it, have their own ideas on the subject; they may be right, but it's more in the line of you gentlemen to tell us the reason why the darkness comes over us. I can tell you, though, what being night-blind is, and how one feels who is smitten. Just as it begins to get dusk, everything grows dim at first, and then of a sudden all is black - you can't see an inch before you - you might just as well be stone-blind ; you are stone-blind, in fact, as long as the sun is away. It must be pretty light in the morning before you can see. First comes a glimmer, then a brightening, then a sudden light - it's just like dawn and sunrise following close together.'
' Do men suffer in any other way than by being temporarily deprived of sight?'
'That depends on circumstances. Some men are terribly put out; I mean they are frightened and troubled at first, and even when they have been night-blind for days together, and, as one would think, accustomed to it, they at times get nervous and ill at ease. We think they have something on their mind when they feel disturbed. It's lonely work, I know. A man has time to think on the past, and he knows that he is seen and is watched by others : for a man's face is wild when he is struck ; his eyes are wide open, and yet he does not see. He stares at you, or over you, or, as it seems, beyond you, and without any meaning in his look. Some, however, always shut their eyes, knowing how strange their look is from what they have seen of others. But I'll tell you to-night how I felt myself, and - a short ten minutes will
bring us to the lake; it is growing. dark, and although I'm not night-blind now, thank God, yet I always like to be in camp before it grows dark.'

After supper Laronde came to my tent and asked me if I was ready to hear him. Receiving a ready assent, he threw some birch-bark and dry wood on the fire to make a bright blaze, lit his pipe, and arranging a few spruce branches on the moss near the door of the tent, he squatted down and began his narrative.

## ‘The Night-blind Voyageurs.

'Two years ago I was lumbering on the Matawan, which flows into the Ottawa about a mile above Bytown. The place they now call the City of Ottawa, which the Queen has decided shall be the capital of Canada.
'Night-blind is a disease of the eyes not uncommon amongst lumberers in the spring of the year, and even after the snow has passed away, so that you must not think it the same as the snow-blind. Men struck with this malady see perfectly well during the day, but the moment it becomes dusk they are totally insensible to light of any kind. Two years ago I was lumbering on the Matawan, and one of my comrades in the fall, and the best of friends, was a man named Jerome. I had not seen him for several weeks, and met him at the mouth of a creek leading into the Matawan, as I was passing down in a canoe, picking up the lodged sticks.* It was late in the afternoon, and I was thinking of hauling the canoe into the bush, and going back to the shanty, which might be four miles away.

[^18]'Jerome was also on his way to the shanty, having cleared the creek down to the Matawan. For a week before, night-blindness had been growing on me; but I thought that as I should soon get out of the bush and into the settlements, I would get well at once - as most others do when they reach the clearings. I said nothing to Jerome about my malady, and after a smoke we crossed the river, and walked slowly towards the shanty together, talking of what we had been doing during the long winter, and now and then stopping to have a smoke. As near as I can guess, we were about two miles from the shanty, in a rough country, up hill and down hill, with handsome pine, a yard through at the butt, all around us. It began to get dusky, and we both, without saying anything to one another, quickened our steps. I had no fear, for I thought that if my eyes became dark Jerome would guide, and he, as I afterwards found out, thought the same of me. The day had been hot and sultry, a thunderstorm was approaching, and from the hills over which we passed we could see it was raining heavily in the north. We reached the Little Beaver Creek, and the crossing-place lay in a hollow between two hills-the tall pines overhead making it gloomy and dark. There might be three feet of water in the creek; but the current was swift, the crossing bad, and above and below was a rapid which no one could stem in the spring of the year. In the middle of the stream there was a rock, bare, except during freshets. The river ought to be thirty yards wide there; but a mere brook in summer. We reached the creek and entered it together. Suddenly, before we had got to the rock in the middle, Jerome stopped, and stretching
out his arm, put his hand on my shoulder, and said, "Tiens, Laronde ; je ne vois pas bien." (Hold, Laronde; I do not see well.) "What!" said I, at the moment beginning to feel the darkness growing upon me, " are you night-blind ?" "Yes ; and have been so for three weeks. I did not tell you I was on my way to the settlements to get cured."
'At that moment a flash of lightning shot across the sky; Jerome held my shoulder in a firm gripe, but I felt him tremble. I looked and strained my eyes in vain. "Jerome," I said, "I am night-blind, too ; my sight is gone. I am stone-blind now." We reached the rock, which was within a yard of us, and sat down hand-inhand. Neither spoke for a long time ; we listened to the stream gurgling past, and thought how helpless and stricken we were. If we tried to ford the river, it was just as likely we should go slanting off down the stream, and perhaps tumble against the slippery stones. Jerome said he could get across, if he knew the river; but he had never been at this crossing in the spring, and the water was rising fast. I knew the stream would guide us in a direction that we might reach the shore; but if the current should sweep us off our legs, and we be carried to the rapid below before we could swim to the side, it would be a lost game then. We turned over these chances as we sat on the rock, and then neither of us spoke for some time. "What shall we do ?" I said, at length. "We must stay where we are," he replied. "I have been caught before, but it was in the woods, near the shanty, and I heard the shouts and laughter of the men, and groped my way ; but here we can do nothing; we must stay where
we are until daylight comes." Another flash of lightning revealed all around us for an instant. The near thunder told us the storm was approaching. "Jerome," said I, " when the storm comes, we can cross ; the lightning flashes will follow quick enough, and we can find the crossing."
'It seemed a long time before the next flash came; and then we prepared to enter the water again in the direction to reach the opposite bank. Sitting on the edge of the rock, and waiting for the next flash, we both began to feel cold; the water was like ice, being nothing but melted show. Jerome suddenly grasped me tighter, and said, " The river's rising ; we must make haste to cross, or we shall be on the rock all night." Another flash came at length, and showed us that the river had risen at least eight inches during the last half-hour, and that it would be dangerous for stone-blind men to attempt to pass. I suppose the rock might be six feet square on the top, but sloping, and I think it could not be ten feet above the bottom of the creek. Well, we got to the top and sat close together there. Flash after flash showed us how the waters were rising, and the increasing roar of the river became so loud that we could scarcely hear one another speak. Jerome is at best a quiet man, but now he scarcely spoke a word. Once and again he would bend his head down to the rock, holding on tightly to me, and at length he said, "The water is rising fast; it's within three feet of us now ; let me grasp you while I try and reach it with my foot. I can touch it," he said, after a short trial ; " my foot is in it now. God have mercy on us !" He drew himself up again, shuddering, and we sat
in our terrible loneliness close together on that small rock, in black darkness, with roaring waters rising fast around us.
'Fortunately there was no rain nor wind, and the storm was passing to the west of us. A flash of lightning showed us the moon shining, with some stars and silvery clouds, and then left us in darkness again.

، " Now, Jerome," I said, " you never told me you were night-blind before ; the storm is over, the water will not rise much higher, we must wait here till sunrise ; tell me how you first came night-blind."
'" I never liked to talk of it, or I would have told you all about it ; it almost made me give up lumbering, it shook me so. Put your arm in mine; sit close. I will put my foot out to mark if the creek rises, and it may please God that we may get through the night."
' We sat for a long time without speaking, the noise of the river was too much for us. Jerome was just telling me that the water had risen to within two feet of the top of the rock. I was in the act of leaning forward to feel it, when something thumped heavily against the rock. Jerome felt with his foot, to see if it had lodged. At the same moment there was another thump, then a grating and jarring against the rock; something had rested on it, for the water curled up suddenly, and came within one foot of where we were sitting close together. We strained, and pushed, and strained again, but we could not move the lodged stick. Just as we gave up all thought of getting it off, another stick came down, then another, and jammed against the one on the rock, pushing it across. Jerome screamed to
me to step over the sticks and let them pass; he, still holding by my hand, did so at once. I tried, and slipped, and fell between two sticks, just as they were being jammed together, and the arm was broken like a twig, and the flesh crushed. Jerome heard me cry out, and thinking I was falling off the rock, pulled me back with all his force. The stick of timber slid over the rock, followed by the others, and away they went down the stream, while I sank almost fainting with pain into the water. Jerome pulled me back, asking me what was the matter. Suddenly I saw light. The joy made me forget my pain. "It's day again!" I cried. What a sight was then revealed around us! The timber from the upper part of Beaver Creek was coming down with the freshet. Several sticks had lodged on our rock, and it was a mercy we were not both swept away. My arm began to pain me, and yet in my coṇfusion I saw no way of getting off until the creek fell, which we knew would be in three or four hours. I was looking up the river, watching the timber coming down, and nursing my broken arm, when Jerome cried out, "It's jamming at the rapid below ; we shall soon get off." True enough, there was a jam about fifty yards from us at a turn of the river, and near the head of the rapid. Jerome caught a goodsized stick. I held on to it with my sound hand and arm, and soon we were safely landed on the jam.
' We reached the shanty after the men had dispersed to work, but in the course of the day Jerome and I got a ride to the settlement, where I soon got cured of the night-blind and of my broken arm.
' Now, sir, I have told you what I know about the voL. I.
night-blind; and my experience is such as I hope few will ever be troubled with; but one of the gentlemen has been far in the lumbering country, and I've no doubt he has seen many night-blind men. He will tell you as well how it comes on and how it is cured; and now by your leave, sir, I'll light my pipe, just take three whiffs, and turn in.'

I picked my way through the spruce woods to my companions' tent, which shone like a gigantic Chinese lantern, highly illuminated, but of one colour only, and that almost pure white - for the tent was new, and made of very white but strong American cotton. I pushed aside the canvas curtain of the tent, which was closely shut to keep out the mosquitoes, and found my friends on each side of a large sheet of paper, on which they were plotting the day's work. 'I thought,' said one, 'you had turned in half an hour ago.'
'So I should have done,' I replied, 'had not Laronde kept me awake with a story of night-blindness, with which he was attacked when in the Matawan; and I came to ask you whether you ever heard of or saw a night-blind man when you were on the Ottawa or the St. Maurice ? '
'I have known as many as seven night-blind men,' he replied, 'in one shanty of thirty.'
'How are they affected ?' I asked.
'They are absolutely blind during the absence of the sun; they are insensible to any artificial light, although, perhaps, they might see a strong flash from an electrifying machine, as they can see when it is lightning. I myself have led blind men over portages. In lumbering districts
this disease is so well known now, that when driving the timber in the spring, the night-blind men always leave the drive in time to reach the shanty by daylight if necessary.'
'What is the cause of night-blindness? Did you ever have any satisfactory explanation?'
' Never ; the lumbermen think it arises from eating too much fat pork during the long winter months. The men do not seem to suffer much pain. There is no inflammation, as in snow-blindness; the only pain is above the eyes and across the forehead in the line of the eyebrows. It does not interfere with their work in the day-time ; at night they have to be led to their bed, and their food placed before them. They must be treated in every respect like stone-blind men ; but as soon as the sun is about to come above the horizon, they see without difficulty.'
' You do not think that the snow has anything to do with it, then?'
'Certainly not; I have been snow-blind myself, and you know well enough what that affection is; but nightblind men don't suffer at all, as far as I could see. It is worth knowing, perhaps, that night-blind men always recover their sight as soon as they reach the settlements and get a change of diet.'

## CHAPTER XI.

THE MOUNTAIN, OR TOP OF THE RIDGE, PORTAGE.
Cooking in the Woods-Balsam Trees-Michel's Musk-ratMichel's Breakfast-Details of the Top of the Ridge Portage The Mountain-Michel and the Theodolite-Louis and the Canoe -Nipi nipi!-Louis' Caution about drinking cold Water when hot-Death of Indian-Louis' Beverage - Indian Burial Rites Tête de Boule Affection - Swampy Crees, Mode of Burying their Dead-Pope's Allusion to the Dog being buried with his MasterCustoms of Indians never change-Montagnais Burials in 1631 -Curious Customs - Pointing with the Lips-Indian Mode of Snaring the Canada Grouse - Trout Lake - A Camp on Wet Moss -Precautions against Colds - Montagnais formerly anointed their Bodies with Seal Oil-Odahwah Customs.

IT rained all night, and I let the men sleep till late in the morning. They were weary with yesterday's work, and the gentlemen undertook to cook breakfast while they slept. We had had some experience in that department during our explorations of the country between Lake Superior, Red River, and the Saskatchewan Valley. One arranged the fire, - a most important operation in rainy weather when cooking is in contemplation; two were despatched to cut large sheets of birch-bark to knead the bread on ; a fourth chopped wood and assisted in coaxing the fire to burn. Our efforts were quite successful, for, notwithstanding the pouring rain, we made a large fire, which was pronounced fit for any camp in wet
woods. The operations of kneading and baking, or rather roasting in the frying-pan, were successfully performed under cover of a birch-bark umbrella, and before the men had 'finished their sleep,' we had made bread, such as it was, sufficient for the day's consumption. Our fire was placed at the foot of a large balsam spruce. The heat soon made the resinous matter ignite, and while we were in the height of our culinary operations, the tree took fire, and, notwithstanding the rain, the forked flames crackled among the branches with so loud a noise as to wake the Indians who were lying under a temporary tent constructed of spruce and birch-bark. The Nasquapee sprang up, and, running to the burning tree, snatched something from one of the lower branches. It was a musk-rat which he had killed the evening before, and designed for his breakfast. The other Indians after looking at the burning tree for an instant, turned round and went to sleep again. Michel busied himself with his musk-rat, preparing it for roasting, while we threw water on the trunk of the tree and extinguished the flaming resin, which was slowly trickling down and making our fire uncomfortably smoky.

It is not an easy matter to cook in the open air during heavy rain: the bread requires to be protected, both during the important process of kneading as well as when roasting before the fire in a frying-pan; everything is wet and unpleasant, and india-rubber coats are not the most suitable garments for those engaged around a hot fire. Considering the inconveniences under which we laboured, the effort was highly successful and thoroughly appreciated. Michel roasted and ate his rat with great gusto, inviting
each in turn to partake of the delicacy, but we were content with our soup of pressed vegetables and pork, tea cooled by the rain, and innocent of milk or sugar-which were voted useless luxuries for hard-working explorers in these magnificent wilds.

After breakfast we retired to one of the tents, compared notes, and summed up 'The Top of the Ridge Portage.' Its length is two miles and forty-one chains, or a little over two miles and a half. The greatest elevation of the Montagnais path is 818 feet above Ojia-pi-si-tagan Lake, and 1,460 feet above the sea. It descends very suddenly at its northern extremity 312 feet to a lake from which Cold-water River issues. This stream falls consequently 506 feet in about two miles and a half, by a series of cascades, some of which are very beautiful, but broken by masses of rock and boulders without number. The foregoing details will show that this portage is a most formidable obstacle, and it required much exertion to carry our baggage and canoes over it. The men suffered much from the heat and the flies, but, with the exception of one who drank too much ice-cold water, none of them complained.

The gorge or narrow valley through which Coldwater River has found its way is flanked by magnificent mountains rising about 2,000 feet above the lake, wildly rugged, boulder covered, and for the most part without vegetation. The most westerly mountain possesses a peculiar interest on account of its being a long-established land-mark and rendezvous of the different tribes of the Montagnais nation. Michel could not tell me the name by which it was known among the tribes. He called it
the ' Great Mountain,' and usually added, 'from which you see Big-water and Ashwanipi.'

About noon the rain ceased, and we sent the men to bring the canoes and remaining part of the baggage from the summit, where they had been left the night before.

In an hour and a half they began to drop in with their loads, and wretched-looking beings they were, being thoroughly wet with the drops from the bushes and trees bordering the path. The Nasquapee came first, carrying the legs of the theodolite, which Mr . Gaudet had given into his charge, and which he regarded with great respect, always placing them by his side at night. He looked upon the theodolite as a great medicine, and thought he was highly honoured when entrusted with the legs of this instrument. His tatooed face was beaming with cheerfulness as he gently laid his treasure down on the rock and looked towards the owner for the usual genial nod of approbation with which he rewarded him. Next came Louis : in fact, the Nasquapee and the Montagnais were always together; they alone could understand one another, and both being of rather a talkative turn, they lost no opportunity of having a chat. Poor Louis was carrying a canoe, and as he lifted his burden from his shoulders and disclosed his face, he presented a most ludicrous figure. His long hair hung in lank masses over his face; his eyes shone like glowworms beneath and through them ; he was perspiring most profusely, and evidently a little exhausted, for as soon as he laid his burden upon the grass, bottom upwards, he sat down upon a fallen tree, swept the hair from his face,
and said to Michel, 'Nipi, nipi!' (Water, water !). I jumped up and gave him a tin cup full of warm tea; he tossed it off, and I asked if he would like some more?
' Soon, not good to drink too much when hot.'
'Warm tea will not hurt you; cold water is very bad.'
'Seen Indian die, drinking too much cold water when hot.'
'When did that happen?'
' Oh, one day hunting caribou. I was with another Indian; we wounded a caribou, and ran after it far, far. Day very hot, sun hot, rocks hot, everything hot; we came to a piece of ice in a hole, and water near it, Indian stooped down to drink. I said, "Don't drink much, just wet mouth," and ran on. Caribou fell ; I cut its throat and waited for Indian. Indian no come; went back, saw him lying with his face in the water, called him, touched him - Indian dead.'
' And how did you manage to run so far on a hot day without drinking?'
' Drank when I got caribou.'
'What did you drink? - was there water near?'
' No ; drank caribou blood first, then when I got to water where the Indian was dead, drank a little water, by and by a little more.'
'What did you do with the Indian's body?'

- 'Covered it with stones: too far to carry it back to lodge. Squaw come next day, carry him to lodge and bury him.'

Do the squaws among your people carry the bodies of
their husbands or children to their burying places if they die a long way off?’
'Yes, in winter always; in summer sometimes, not always.'

A singular instance of Indian affection or superstition regarding the body of a deceased relative or friend occurred among the Tête de Boule Indians,* on the St. Maurice. A young fellow went out hunting in his canoe, alone, and was absent for several days longer than his mother, a widow, expected; she became anxious, and finally set out in search of him. She knew the lakes well where he was gone to hunt, and examined them one after the other. After three days' search, she saw a canoe on the opposite side of a lake. Paddling towards it, she found her son lying on the sand in front of his canoe, shot through the heart. His gun had evidently gone off as he was lifting it out, the cock having probably caught the bar of the canoe. The mother wrapped the body of her -son in birch-bark and brought it for a distance of thirty miles to her lodge. The country

[^19]is very rough, and the portages many and long, nevertheless this poor Tête de Boule squaw carried the body of her son over them all, that he might lie by the side of his father.

The Montagnais and Nasquapees bury their dead like the Swampy Crees, who dig with their wooden snow-shovels a hole about three feet deep, which is sometimes lined with pieces of wood. The body is placed on its side, as if sleeping, but sometimes it is put in a sitting posture. They wrap it in skins, or a blanket if they have one, with the gun, axe, fire-steel, flint, tinder, and kettle placed by its side. Sometimes the Indian's dogs are hung up at the head of the grave. They always place the body east and west-the head towards the west, the land of the happy hunting-grounds. A medicine man stands before the grave and harangues the soul of the dead, giving it advice how to act in the other world whither it has gone. Then the grave is filled up, and a little birchbark hut built over it. Through the little window which is left the relations thrust in bits of tobacco, deer meat, and other trifles. When a woman is buried, her paddles are placed in the little lodge over the grave, as well as her wooden dishes. When a child is buried, all its little play-things are carefully collected and laid in a little lodge over it, and sometimes tiny snow-shoes are hung before it.
'Who remembers Pope's allusion to the custom of Indians killing and burying the dog along with his master?
' I don't,' said one, 'I don't,' said another, and 'I don't,' said a third.

- Well, here it is :

Lo, the poor Indian! whose untutor'd mind Sees God in clouds, or hears him in the wind ;

But thinks, admitted to that equal sky, His faithful dog shall bear him company.*
'These customs are common, from the Pacific to the Atlantic ; they differ only in minor details-sometimes they lay the body on a platform eight or ten feet from the ground, and sometimes, where there is no soil, as on those barren rocks, they pile a heap of stones over the dead, as on Lake Huron. Indian customs never change ; they are like the Indians themselves, they will all go unchanged down to the grave as long as they remain heathens.'
' Well, but how did Pope know about the dogs?' said one of the listeners.
' I tell you the customs of Indians in a savage state never change, and all the Algonkin races have the same customs. The Montagnais and Nasquapees are Algonkin as well as the Crees and Ojibways. Surely Pope had plenty of opportunity of reading accounts of Algonkin races in his time. Besides, there is not a Huron grave in Upper Canada, or an Iroquois grave in the States that you may chance to open, but you will find the bones of a dog or some other small animal in it.'
'Well, but the Hurons and Iroquois were not Algonkins.' That only shows the custom of burying the dog with his master is common to different Indian families or races. But here are the men coming with the other canoe, so we must let Pope alone for the present.

[^20]When the Montagnais were first visited by the Jesuits in 1631, if any member of a family died in a lodge, the body was not taken out of the door, but an opening was made in the back close to where the dead body was lying, and through this opening the body was drawn. The door was considered to be for the living, not for the dead. In winter, when the ground was frozen hard, the corpse was placed on a stage ten or twelve feet from the ground, there to remain until the ground was thawed in the spring, when it was buried in their places of sepulture. At the death of any member of the family, the relations struck the sides of the lodge, uttering loud cries of ' Oue ! oue! oue!' in order, as they believed, to draw the spirit of the departed out of their dwellings.

All the property of the deceased was buried with the body, and his or her name was never mentioned again in ordinary conversation, or when they were spoken of it was by another name. If the deceased was a man, his bows, arrows, and spear and shield were placed above his grave, and a dog was buried with him ; if a woman, her moccasins and snow-shoes. The body was bent double, the head being placed between the knees.*

It continued to rain at intervals during the afternoon, but we pushed on regardless of the wet. Silver waterfalls were seen tumbling down the sides of the stupendous rocks on the Sixth or Ka-jib-wa-le-ka-pas Lake. The peaks of the mountains were veiled in mist, all was gloomy, silent and grand. As we approached the shore, I felt a gentle touch on my shoulder; it was Pierre, my steersman. I looked round, and observed him pointing with his

[^21]lips towards an object on shore. It was an otter ; but the noise made by the other canoes alarmed the animal before we got within gunshot.

Two kingfishers* were flying from one dead branch to another, but none of us thought it worth while to wake the echoes by firing at such game, although the Indians looked at them as if they thought they would make a capital addition to our smoked bacon.

The manner in which Indians point with their lips is very peculiar, but it is universal among wood Indians, and it arises no doubt from their hands being employed with the paddle, or from a desire not to make any motion which might disturb the object to which they wish to call attention. Long practice enables them to protrude their lips, so as to give them a very unpleasant appearance ; even when on shore they frequently point with their lips, if their hands are engaged.

An Indian steering a canoe has neither of his hands at liberty ; from his position being more elevated, he generally discovers a bird or animal in the water before the bowsman. To avoid alarming the animal he gives a jerk to the canoe, his companion looks at him, and his attention is directed to the object by the steersman pointing with his lips, with a forward and upward motion of the head.

We crossed the next portage in the rain, and, being thoroughly wet, thought it best to move on. The ascent was only fifty-four feet, and the distance to carry eighteen chains, or about a quarter of a mile. Another lake brought us to another portage, also short, and with a rise of fifty-seven feet, which led us into Ojita-scu-tagan, or

[^22]Height of Land Lake, at the foot of a subordinate water parting.

In crossing the portage Pierre saw a partridge, or Canada grouse, sitting on the branch of a tree. He stopped with his load, and said that if I fired I might frighten any larger game which it was not improbable we might see, as he had just observed fresh caribou tracks. He then cut a stick eight feet long, and made a noose of twine, and cautiously approached the bird, which, according to its habit, quietly waited until the noose was placed before it, when it thrust its head in and was caught; but as Pierre was triumphantly carrying his prize towards me, with the bird struggling in the air, the noose gave way and off it flew, after short but very embarrassing gyrations on the ground, during which we vainly endeavoured to catch it. This mode of snaring the partridge, or Canada grouse as it ought to be called, is usually practised by the Indians, as well as by settlers in the inhabited parts of Canada, where the bird is common. Mr. Bell, of the Canadian Geological Survey, took large numbers of this bird in the same manner. His description is given in Sir William Logans' Report for 1857.

On the way we killed a number of Canada grouse every day, but other game was rather scarce. The grouse were always very tame, and we generally killed them in a way that would surprise most people. When we came upon a covey we gave it a sudden start, which made the birds fly up into the surrounding trees. A rod was then cut, to the end of which was fastened a noose. This was held up close in front of the nearest bird, which generally darted its head into the noose; but if it did not do so, then the noose was gently passed over the head, and by a sudden jerk the bird was brought to the ground. In this way we went from one bird to another, and usually
secured all we saw that were within reach. Sometimes they are killed with stones, and it is wonderful to see how pertinaciously a bird will sit, however near the stone may whiz past it, until it receives such a blow as will knock it over. Even when struck, if not severely injured, it will occasionally remain sitting.

Two hours more brought us to the Ma-ta-me-gose-katats, or Trout Lake, which lies at the summit, and from which Cold-water River takes its rise. The portage separating the last two lakes is very steep, wet, and rough. It rises 326 feet, and its summit is 1,556 feet above the sea. The Indians called it the Height of Land Portage ; but it really is nothing more than a spur of the great table land of Labrador, coming from the NW. and separating the waters of the east branch of the Moisie from those of the main river.

Cold-water River, in a course of twenty miles, falls 1,430 feet.

Some idea of the mountainous character of the country may be obtained from this great fall in so short a distance.

The lichens and the mosses on the portages became more beautiful than ever. These pioneers of vegetation assume the most fantastic forms and brilliant colours. Most commonly they grow in circles, some two and even three feet in diameter. They are found in all parts of the rocks, and add a singular beauty to the wild scene. The lichens and mosses are silently destroying the surface rock and preparing it for the disintegrating action of atmospheric agents. I measured the depth of the caribou moss, and found it to be sixteen inches. Other species were of more luxuriant growth still, and in some low and
moist places the lovely carpet was two feet thick, and soft as a bed of eider down.

Fresh reindeer or caribou tracks were seen on the portage, not more than a few hours old; but we could not spare the time for hunting. The country was so much more difficult than we expected, that every hour was valuable which would allow us to make progress and get nearer to the table land. In making our camp, we had to choose between deep wet moss and hard rock. We preferred the moss, although we could push a stick two feet through without any difficulty, and a pool of water soon filled the impression made by our feet after standing for a few minutes. But how were we to make camp in such a wet bed? Nothing more simple when sapin* or balsam spruce is at hand.

The tent is first erected, and a layer of sapin, about a foot thick, is placed over the floor of the tent. It forms a dry and comfortable bed. I often wondered why none of us took cold. We were wet all day long, ever since we left the Moisie. This arose from crossing wet places on the portages, or floundering through acres of Labrador tea-plant covering deep moss. We often slept on wet ground, and when it rained we had nothing but wet sapin with which to cover the floor of our tents ; yet none of us took cold except the Indians, who, not having any very extensive change of garments, were sometimes compelled to sleep in their wet clothes. I always instructed the men to change their clothes at night, and when they were weary and would gladly have slunk off and lain down in their wet clothes, I took care that they should

[^23]change or dry them before retiring to rest. It is to this great caution in avoiding sleeping in wet clothes that I attribute the excellent state of health in which they all were who strictly adhered to the practice of sleeping in dry clothes.

Formerly the Montagnais were accustomed to anoint their bodies, from head to foot, with seal oil. They became by this artifice less sensible to heat and cold, less liable to suffer from the effects of continued exposure to wet and damp, and were not so much exposed to the attacks of mosquitoes, black flies, \&c. It will be shown in the sequel, that since most of them have adopted European habits, and ceased to anoint their bodies with seal oil, they are very liable to colds and influenza, and numbers die every year on the coast.

In former times many of the Indian tribes adopted excellent customs for ensuring hardihood and bodily endurance, some of which, when carried to too great an extent, no doubt proved very injurious to their constitutions. The Odahwah Indians were in the habit of subjecting the young to severe discipline, and one of their regulations was the taking of a bath at daybreak every morning in the spring of the year when the water was cold.*

[^24]humoured and neglected in moral training when young, as they grow up are apt to become turbulent and bad members of society. As one of the most effective means for training and forming the character of the Indian youth, fasting seems to have been established and practised from time immemorial, and prevailed, I am led to believe, universally among the Indian tribes of this continent. As soon as children were thought capable of reasoning they were required to practise fasting, until they were married. Besides their regularly abstaining from food for so many days successively, at different parts of the year, they were obliged to fast before they were allowed to take any of the wild fruits of the earth, at the different seasons as they became ripe. The same rule was observed with regard to the produce of the farm.
'The Indians were most exact in enforcing their rules of fasting. With young children it lasted the whole day, and if a child put anything in his mouth during the day, as, for instance, snow or a piece of icicle-which children are very apt to do when playing in the open air in winter-that day went for nothing, the child was then permitted to eat, with strict injunctions to renew his fast the next day. It was also imposed as a punishment upon those children who manifested a disposition to be disobedient and disrespectful; and was found an excellent means of discipline to make children sensible of their duties, and exercised a wholesome restraint upon the youth. With young men from sixteen to twenty-five years of age it was no longer necessary to remind them of the practice. It was looked upon as a duty by every young man, who had too much honourable feeling to submit to the sneers of his companions as a worthless glutton. They moreover believed gluttony to be highly displeasing to the Great Spirit; and that, in order to obtain special favours from him, it was absolutely necessary to restrain the appetite. The young men frequently spent one or two months during the winter in fasting, taking only one meal in the day after sunset. In summer less time was spent, but the fast was more severe ; it lasted from two to four and even five days, according to the strength of the individual. On these occasions it was usual for the young men to withdraw from the family residence to a retired spot, under the shade of a tree, where they passed their time in fasting and contemplation. To this spot the mother sometimes repaired with a small bunch of wild unripe berries, which she suspended from a twig about a foot and a half from the ground, so that the young man might have the poor consolation of fixing his eyes occasionally upon them. The sight of these berries had the effect of watering the mouth in the same way as we feel before tasting any unripe fruit, especially when we have reason to suspect its being sour. The dreams of the last night which terminated their regular fasting days at any time of the year were considered the most important, and were carefully studied as revelations from the Great Spirit. In the evening small wigwams were put up at a little distance from the family residence, each just big enough for the accommodation of one person. The youths who were practising the rite of fasting had to take up their quarters in these lodges for the night, using, if possible, only new furniture. Next morning it was the duty of the grand-
mother, or some other elderly female, to visit the young fasters by daylight. The first thing she did was to make a very thin corn soup, or some kind of broth, after which she went to ask them one by one of their dreams. She congratulated those who had favourable dreams upon their good fortune; but for those who had unlucky dreams she threw a piece of fur of some animal on the fire, in order to avert the consequences of such ill-omened visions. The longest fast practised among the Indians lasted ten days, during which time it was indispensable that the candidates for the special honours which it secured should neither taste anything nor sleep. They were made to dance every night, and sometimes were put in small cribs suspended from the ground, which were moved sideways, like a cradle, for the purpose of inducing sleep. Those who yielded, and fell asleep, were dismissed forthwith as unworthy. Most frequently all the candidates failed; but on some rare occasions one or two succeeded in completing the time. Even with these, however, this severe undertaking seems to have exceeded the powers of nature, as those who were successful - though regarded ever after with a certain degree of superstitious veneration-never fully recovered from the effects of it. Besides fasting, the young people had to abstain from certain kinds of animal food, and from certain parts of animals, for instance, the head, the meat near the bone, and the marrow. They were also strictly prohibited from eating blood until after they were married, when they were no longer subject to restraint. Girls were considered marriageable at fifteen, but it was customary for a young man to remain single until he was twentyfive years of age, after which he might take a wife if he liked, or rather if his parents chose.
'Young girls when fasting rubbed clay on their temples, whilst the young men partially blackened their faces, or occasionally painted them with one or two other colours. This custom can scarcely fail to recall a similar one recognised among the Jews, as the disfiguring of faces on fasting days is distinctly noticed in the New Testament. Like the Jews, also, the Indians regarded several animals as unfit to be eaten; in fact, they had strong prejudices against their flesh. Among the feathered tribes I may mention the raven, the crow, the blue jay, the owl, and many others ; and amongst quadrupeds the fox, the mink, the wolf, \&c.
'The degrees of relationship extended a great way among the Indians; and it was prohibited by custom to contract marriage within the forbidden bounds. To give an idea of the operation of this usage, suppose that an Indian A. had a cousin B., the son of A. and the grand-daughter of B. would be placed within the forbidden degrees of kindred, and should marriage take place between the parties, the son of A. would be considered as marrying his niece. In the English language, it has often appeared to me, there is a great want of words to express the various degrees of relationship. Instead of using different words, the Englishman says my first, second, third cousin, and so on. In Indian there are appropriate terms to express the different degrees of consanguinity; even in speaking to, or of, female relatives, the same terms are not used as when speaking of the men.'

## CHAPTER XII.

## TROUT LAKE TO LAKE NIPISIS.


#### Abstract

Trout Lake-The 'Outlook' - Magnificent Scenery - Beauty of the Lichens - A Herd of Caribou - Too late-Bear Skull -- Anecdote of a Bear - Dogs scenting a Bear in the Winter Bear Hunts - Ferocity of these Animals - Montagnais Supersti-tions-Bones of Porcupine - Bones and Blood of Bears -Mosquito Lake - A Labrador Trout Stream - Ambro and Ambrosis Michel sick - The Hospital in the Wood - Indian Medicines Dreams and Visions-Causes of Disease amongst Indians - Wolves - Ferocity of Wolves - A Storm on Lake Nipisis - Windbound - Vegetation on Lake Nipisis - Manicouagan Lake The Fire Mountain of the Nasquapees - Père Arnaud - Journey up the Manicouagan - Nasquapee sick -Lamentable Incident among the Tête de Boule Indians - Père Arnaud's Difficulties - Winter Life in the Woods of the Labrador Peninsula - The Ptarmigan - The Return of the Priest.


'THIS is the lake where we separated from the four other canoes,' said Michel to Louis, as we stood on the summit of a bare mound of gneiss, 330 feet above Trout Lake and commanding a magnificent view. 'There is Atachikamishish, or Cold-water River, it rises in Matamegosekatats, or Trout Lake, below us. At the other end of that lake, where we go to-morrow, is a little stream full of trout; it leads to Lake Nipisis, where there is also plenty of trout and ko-ko-mesh (a variety of salmon trout). The east branch of the Moisie flows through Lake Nipisis, and goes past those mountains away round that high peak; we go up Lake Nipisis, then up a river
and through lakes to the Height of Land ; Ashwanipi lies just on the other side.'

Trout Lake is 1,548 feet above the sea, and about a mile and a half broad. It is very shallow and contains numerous fragments of rocks, and abounds in trout: hence its name. But the chief point of interest which attaches to it arises from the fact, that it is the lake where the two trails to the coast meet ; and no doubt in former times it was a place of some importance to the Indians, and a wellknown rendezvous, where food could always be obtained, and an outlook from which they could distinguish the telegraphic fires by night or smoke by day made by their friends to give notice of a successful hunt, of the welcome neighbourhood of caribou, or of the dreaded approach of an enemy. Looking south from the mountain where we were sitting, surrounded by bleached bones of deer, the remains of former feasts, we saw the jagged crests of the range of the Top of the Ridge projected clearly against the blue sky, or wrapped in clouds which rapidly passed away to be replaced by others coming swiftly from the west. Some of the lakes of Cold-water River valley were visible like distant ponds, and glistening patches of snow shone brightly on the north side of the mountains, although July was at hand.

But the colours of the rocks were most striking, and contrasted with the gloomy green of the spruce forest and the narrow strips of birch which intersect them in the valley. Out of those dark solitudes rise the purple mountains in grand walls of labradorite, or sloping away to the sky in cold masses of gneiss ; near at hand are dwarf trees growing from crevices in the rock, but with forms of
exquisite grace as they hang over a precipice or grow under the shadow of a roche moutonné. Language fails to express the beauty of the mosses and lichens. They are of all colours, from frosted silver to vermilion, from deepest orange to velvet black. All countries and all climes have some peculiar beauty which they may claim exclusively as their own. The wilds of the Labrador Peninsula in the interior have their mosses and lichens, for ever eliciting expressions of wonder and admiration from our lips, always making us regret that we could not carry away some of those miniature gardens of beauty, or preserve the wondrous time-stains, which, like fairy rings, cling to the harsh gneiss, and clothed even it with loveliness. From a mere time-stain to a thick, heavy, and pulpy thallus, varying in colour from the most vivid green through all the greys to the richest and deepest velvet black, they creep over the harsh and unyielding rocks, cover the deep cracks with a treacherous mantle, beautify jagged points, growing and flourishing wherever light can come. Sometimes the pendant usnea hung in masses from old trees, and stunted forests for miles are clothed with this hoary livery.

The rock where we were seated is even now a favourite 'outlook' of the Indians who hunt on the Moisie. It has evidently been a spot to which they have resorted for ages past. Michel was just saying that caribou were common here once, and that we might see many old tracks and paths in the valley below.

I was engaged at the time in 'taking notes,' my brother was sketching the landscape, when I heard a
low hiss behind me; it was Louis, who wanted to call our attention without making any noise, and who dared not move in order to touch us. My brother and I turned round just in time to see the Nasquapee stretch his arm cautiously up the rock to get a gun which I had put out of harm's way, and Louis, with suppressed excitement, was pointing towards a herd of caribou which were passing at the foot of the hill, not 150 yards from where we were seated. The deer stopped, hearing the noise of the men bringing the canoes on the opposite side, they pricked up their ears and sniffed the air, and, before Michel could point the gun, bounded off.

Stuck on a dead branch hard by was a bear's skull. Michel said that Domenique had killed it there two years ago. I took it down and was going to bring it with me, but Michel begged Louis to ask me to let it remain-'It was not lucky to take it away, it ought not to be touched. But he would leave a piece of tobacco between the jaws, if I would give him a bit, and that would preserve our luck, otherwise we should see no more bears during summer.'

I asked Louis whether the Nasquapee had any superstition about the bones of animals, and particularly of bears. He shook his head in reply, and said that it was much better to leave the bones alone; he remembered the time when he was hunting with two other Indians and they came to a bear hole, and while he was employed in cutting away the branches which the animal generally draws before the entrance to the domicile he has adopted or scooped out, the bear sprang through
the branches, passed between his legs, and bit the other man, who was standing ready with his gun. He was finally killed by the other Indian, who shot him as he lay rolling on the ground in the very act of folding his victim in his horrible embrace.

Not perceiving the connexion between the bear and the dead bones, I asked Louis to explain himself, which he did characteristically as follows.
'I tell you; Indian who was bit in leg was once standing close to a tree where there was a bear skull like this. Indian saw partridge quite close on branch, he had no gun, no bow, no stick; he took skull and threw it at partridge. When he got home medicine man told him bear would bite him some day and kill him.'

Dogs are very useful to Indians, in finding bears during the winter, when their hiding-places are covered with snow. They smell the torpid animal, and thus discover his den; but in spring the warmth of the bear melting the snow above him reveals his resting-place. A bear hunt is one of the most exciting events to the Montagnais, and it proves not unfrequently both dangerous and disastrous. They love to relate round their camp fires the history of their encounters with this redoubtable animal, and to show the wounds they have received in conflict with him.

The bears of Labrador are large and formidable, and when hungry very ferocious. They have been known to attack and kill Indians during the night-time when sleeping under their canoes. Bears are very fond of blueberries, and are almost always to be seen in brûlés a few years old, where they find a berry which the Montagnais call mask-i-min, or bear-food. When a bear is killed by
these Indians a feast is proclaimed, and all in the vicinity are invited to partake of it.

Louis knew a Canadian who was swamped with his canoe in a rapid on the river St. Marguerite. One month afterwards he found his bones in the bush a mile from the river. 'Bear found body, dragged it into the bush, eat it. Bears often go two, three, four together : don't like them then, let them pass.'

Among the superstitions formerly prevalent among the Montagnais, and still retained by those who do not regularly visit the coast, are the following.

It was considered very unlucky to spill the blood of the beaver, as that would prevent the hunter from being successful in the beaver hunt. Particular bones of the beaver and porcupine were never allowed to be given to the dogs, but were always burnt. A curious custom relative to particular bones exists at the present day among the Ojibways, who hunt between Lake Superior and Hudson's Bay ; the bone forming the cap of the knee of rabbits and beaver is cut off before the animal is cooked.* The Montagnais threw the flat bones of the porcupine into the fire, so that they might judge by the appearance of the flame whether they would be successful in their hunt for these animals. They were very careful that the dogs should not touch the bones or taste the blood of the bears they killed, burying the former and pouring the latter on the fire.

When they threw pine or spruce branches on their lodge fire, and a hissing noise was produced as the

[^25]branches burned, they muttered some words that were considered as a charm, which would enable them to kill porcupine during the next hunt. The Ojibways of Lake Superior have a similar superstition at the present time. If the wood of a hut fire makes a noise like an escape of air, some one must get up and point to the fire, making a similar noise, or one of the inmates of the lodge will die.

The Indians frequenting the Moisie, as well as those of Mingan and Labrador, on leaving the sea-coast in the fall of the year, observe still an ancient custom of preserving the antlers of a doe out of the first slaughter of deer which they may encounter on their march inland. Before they return to the coast in the spring, they place the antlers on a lake, where they sink to the bottom when the ice breaks up, and they are thus not gnawed by any carnivorous animal. This custom is said to arise from the regard entertained by the Montagnais for the caribou, on which their sustenance so largely depends.
'What does Michel say, Louis?' I asked, observing the Nasquapee pointing to the range of hills and mountains through which we had passed, and then to the comparatively level country before us.
'Michel says we have got through the bad country; there are no more high mountains like these - the portages are short and low-lakes many, but the rivers shallow and swift.'

Passing through Trout Lake we arrived at the mouth of a small stream flowing in a northerly direction. There we caught abundance of trout. While the men were portaging to a lake into which the streamlet issued, we

made a way through the boulders for the canoes after having carried the baggage over.

From Trout Lake to Lake Nipisis we descended through four sheets of water and their connecting rivers, having to carry everything over four portages, which separated them.

The lakes are all small, and, according to Michel, have no Indian names. The first we called Mosquito Lake, from the extraordinary numbers of that troublesome insect, which tormented us when crossing it and the succeeding portage.

The little connecting streamlet swarmed with trout, and in it we caught a large number with the fly. The foliage of the spruce and Banksian pine were remarkably beautiful in the second of these secluded sheets of water; but the insect pests were as bad as ever, and scarcely permitted us to enjoy the rocks, trees, and lichens. All the men were compelled to wear veils, their faces and necks were becoming very much swollen, and as they paddled mournfully across these little lakes they looked from a distance like veiled sufferers from snow-blindness in the spring of the year, fearing and shunning the light.

The most ardent sportsman could scarcely stand the attacks of the mosquitoes, even when three fine trout would rise and hook themselves on separate flies at every third or fourth cast. We fished until we caught enough for supper, and then gathered round a 'smudge.'

The last portage before reaching Lake Nipisis was long, being nearly one mile, and letting us down 177 feet, the difference in level between Trout and Nipisis Lakes being 233 feet. On a small island in one of the lakes we
found a câche, containing birch-bark for a tent and fishing-hooks of Montagnais manufacture, a few plugs of tobacco, a little dried caribou meat, and other trifles; they were neatly packed in birch-bark, and suspended to the branch of a tree. Michel said they belonged to Ambro-sis, his brother-in-law.
'Why is he called Ambro-sis, Louis?'
'Michel says that he has two brothers-in-law called Ambroise by the missionaries. One is older than the other, and they belong to different families; but in order to distinguish one from the other, the elder is called Ambro, the younger Ambro-sis, or little Ambro.'
'Sis' is, in Montagnais as in Ojibway, a diminutive, and generally signifies 'little' or 'small' when applied to the names of men or things. Nipi-sis signifies 'little water,' probably so called on account of its shallowness.

Michel complained at night of pains and cramps in his limbs. The poor fellow had been wet for several days together, and sometimes lay down to sleep under a canoe without sufficiently drying his leggings. He found it impossible to find dry spruce to lie on, and being, like all Indians, very careless and indifferent to the future, he would sleep in a wet blanket, regardless of consequences. I made him take off his wet clothes, and wrap himself in a dry blanket, while the men brought a canoe and placed it bottom upwards near the camp fire ; they then collected spruce boughs and made a dry bed under the canoe. The unfailing dose of essence of ginger was then administered, and Michel was told to lie down. His feet were then covered with spruce boughs and the fire kept up. Louis undertook to feed it during the night, but before we
retired to our tent Michel and Louis were fast asleep, and when morning dawned all unpleasant symptoms had passed away.

As we sat before the fire after supper, the conversation naturally turned on Indian remedies. The vapour bath among the Indians of the Labrador Peninsula is as common as among the Ojibways and Crees of the Saskatchewan basin; at almost every portage and old camp ground we saw the stones which had been used in preparing it.

The root of the blue iris (Iris versicolor), which grows on the coast and in the swampy tracts of the interior, is a strong purgative, and a common medicine among the Montagnais.

A decoction of the red willow (Cornus alba vel stolonifera), the red osier cornel of Sir John Richardson, the osier rouge of the voyageurs, is used as a purgative and also as a vomit. It is called the red stick, or mith-wka-pè-min-aktik, by the Crees, which its Montagnais name resembles. They also call the fruit mask-mina, in Cree muskwa-mina, bear-berry. They smoke the inner bark.

Canada balsam (Abies balsamea), from the spruce, is considered an excellent remedy for frost-bites. This is the sapin of the voyageurs. A decoction of the bark of the larch is employed to clear and heal flesh wounds, so also is the thallus of the tripe de roche. The fat of the skunk is considered an excellent remedy in certain diseases. A drop of the fetid secretion is used for toothache and rheumatism. The roots of the white waterlily, the roots of rushes (both as food in times of scarcity
and as a medicine), and the roots of the thistle are all employed medicinally, and when these fail they have recourse to the conjuror's arts, for with many of the Montagnais Indians, when in the woods, the conjuror is still much esteemed and dreaded.

The Indians of the Labrador Peninsula place implicit faith in dreams, and their visions of the night often lead them to commit shocking crimes. The poor ignorant wretches follow their dreams with the utmost precision, wholly regardless of any consequences other than those to which the fulfilment of the dream may lead them. Happily the labours of the missionaries are fast dispelling these superstitions from the minds of those who frequent the coast, but it is to be feared that the medicine men still exercise a powerful influence among the different bands who spend the greater part of their lives in the interior. In the time of the Jesuit missionaries the Montagnais were noted for their superstitions, and for their reliance upon the power of their conjurors.

Many different plants were formerly used by the Indians inhabiting the now more settled parts of Canada. Some of these plants are found as far as the Moisie, and their properties are known to the Montagnais.*

[^26]The late Dr. Darling, Government surgeon at Mauitoualin, had many excellent opportunities of studying the constitution of wild and half-civilised Indians. As many as 5,800 Indians would assemble on that island, in Lake Huron, about eighteen or twenty years ago, to receive their annual presents. In a report drawn up for the information of the Commissioner appointed to investigate the condition of the Indians in Canada, in 1844, Dr. Darling says:-

The diseases to which the Indian tribes are most subject, are those arising from original weakness of constitution; the causes of debility may be imputed to the severity of their climate, their irregular mode of life, constant exposure, deficient clothing, wanting in nutritious food, filthy habits, the alternate periods of repletion, want, and drunkenness, producing more or less derangement of the digestive organs.
the only part used, and the proper time for collecting it is in the latter part of October, when it will be found full and plump. It is an active and certain cathartic. A resinoid, called Podophyllin, is prepared from the root, which contains all its properties in a concentrated form. This is more extensively used by all classes of practitioners, and as an aperient and alterative medicine it takes with the eclectic physician the place of mercurials.

Slippery Elm Bark (Ulmus fulva). -The inner bark is the part used. It is a valuable demulcent and emollient, and in the form of effusion has been found highly beneficial in inflammation of the stomach and bowels.

Stramoniom (Datura stramonium).-All parts of the plant are medicinal. It is a powerful narcotic, poisonous in large doses.

Bloodroot (Sanguinaria Canadensis). -The root is the only part used in medicine. It is a powerful and valuable remedy, acting in small doses as a stimulant and expectorant, in over doses producing nausea and vomiting.

Wild Cherry Bark (Prunus Virgineana).-The inner bark is the part used, and is strongest when gathered late in the fall. Its taste is agreeably bitter and aromatic, with the peculiar flavour of bitter almonds. This bark unites with a tonic and stimulant a sedative influence.*

* A list of Canadian medicinal plants has been published by Mr. W. Saunders of London, Canada.

Scrofula should not be regarded as a disease confined to the unhappy few who transmit it from father to son, from one generation to another, with undeviating regularity, but as a disease of circumstances (if the expression may be allowed), and that it might be engrafted in almost any constitution, provided the causes were permitted to operate. It is well known that this disease can be produced in many domestic animals by unwholesome food. It is a popular opinion that the Indian race is endowed with great vigour and stamina, but a more intimate acquaintance with the subject will prove its fallacy.

The Indians of Lake Huron are seldom above the middle size, slender, but for the most part well formed ; the chief defect in their figure is in their chest, which is generally flat and narrow. They are certainly capable of great exertions, but only for a limited period, and always followed by long intervals of repose.

To enumerate all the diseases to which Indians are liable would be only a catalogue of almost all the ills of which flesh is heir, but a few desultory remarks may be acceptable. Acute diseases of the organs within the skull and abdomen are comparatively rare, while those within the chest are the seat of the most frequent and fatal attack; during the summer heat, great numbers of infants are destroyed by diarrhœea, and survive only to \%e carried off by miasmatic disease. They are likewise greatly infected with worms. The females suffer much from headache, owing chiefly to constipation, and not unfrequently to obstructions. They can scarcely be said to suffer during parturition, and accidents attending it are rare. Fever, in the ordinary acceptation of the term, is almost unknown. Hooping cough is to them a most distressing disease, and when attended with fever between the paroxysms, almost invariably fatal. Tubercular consumption, bronchitis, and pleurisy are the most frequent and fatal diseases.

It is impossible to give an estimate of the comparative mortality between them and Europeans, but Dr. Darling is decidedly of opinion that it is higher amongst the former than the latter. The mortality amongst the chil-
dren is great, and the adults seldom attain an advanced age.*
'What's that?' said one of the voyageurs, who was lying full length before the fire, listening to the conversation, as a distant howl was distinctly audible.
'A wolf,' answered Pierre. 'Be still, and you will hear it again soon.-There!'
'But that is in a different direction, the first noise came from over yonder.'
'One wolf answers another,' said Pierre. 'Perhaps you will hear half a dozen yet; but I don't think there are many wolves here, there is nothing for them to eat.'

Canadian hunters will never fire at a wolf during the winter, if they are alone, unless they are sure of killing him. They think that, if he is only wounded, his cries will attract others as he runs away through the woods, who will first kill and eat him, and then follow the tracks of the hunter and attack him. They are not afraid of wolves, provided the animals have not recently tasted blood. When three or four hunters are together, they can bid defiance to any number of wolves by waiting

[^27]till nightfall and making a large fire. The brutes will come within shot, and when one is wounded the rest fall on him, so that their appetites are soon satisfied, and they slink away and leave the hunters at rest.

On the following morning, the 28th, we entered Lake Nipisis ; but the wind raised such a swell that we were compelled to make for an island and seek shelter under its lea. The breeze rose to a gale, and the gale to a storm, and we found ourselves windbound and prisoners on a rugged rock a few acres in extent. Although the last week in June, ice several feet thick remained in fissures.

The ferns were only unfolding their first fronds, and water-lilies just beginning to appear above the mud in the secluded bogs of the lake, but no leaves had yet reached the surface of the water. Boulders or erratics were very numerous on the hills which surrounded us, many being perched on the crests of precipices, and several apparently ready to roll off with the slightest touch. I employed the time during which we were windbound on the island in obtaining information from Pierre, the Abenakis, who had spent the winter of 1859 on the Manicouagan River. He drew me a map of the route and of the portages with that minuteness of detail which is so distinguishing a feature of the Indian race generally, but particularly of those who inhabit this country. The Manicouagan River enters the St. Lawrence nearly under the 49th parallel, and takes a course about NNE. for 250 or 300 miles. It took Pierre six weeks to reach Manicouagan Lake, travelling with his winter supply of provisions ; but in a light canoe two men have been known to reach the lake in fifteen days
from the sea. The country some distance north of the sources of this river is probably the most elevated on the Labrador Peninsula. Many rivers running in very diverse directions take their rise a little to the NE. of the lake, such as the Ashwanipi, the Moisie, and a river which empties itself into Mistassinni Lake, and then by Rupert's River flows into Hudson's Bay. North-east of Manicouagan Lake there is a very high mountain, which the Montagnais say is the highest in the country. On its summit snow often lingers throughout the greatest portion of the year. Pierre says it is one of the famous 'fire mountains' of the aborigines. A light is said to glow near the summit, respecting which more will be said in another place. Some parts of the valley of the Manicouagan abound in game, particularly caribou. Pierre stated that the lower portion, was very like the Moisie valley, but rich in fur-bearing animals ; he caught fifty-seven martens in one month, while on the Moisie he only trapped twenty-two during the whole winter. Among the few books we brought with us I had some of the Reports of the Roman Catholic missionaries among the Montagnais to the Archbishop of Quebec. I read a portion of them which referred to the Manicouagan to Pierre, who declared the description to be exact. The succession of precipitous escarpments and narrow gorges through which the river flowed like a torrent were similar to the scenes we had witnessed some days before, and are characteristic of most of the rivers which flow into the Gulf.
Père Arnaud, who voyaged up the Manicouagan and wintered among the Nasquapees on one of the upper lakes, describes a copious spring of salt water issuing from
the foot of a high mountain, which he thought might possess some medicinal virtues. He drank frequently of it, and found the effect beneficial. The description given by Père Arnaud of his journey up the Manicouagan, and his residence with the Montagnais in the interior, is very interesting. I met Père Arnaud at Seven Islands, and also one of the Indians who accompanied him on his perilous journey. The Indian drew a map of the country, which I subsequently compared with one which I obtained from Pierre. The delineations of the windings of the river and of the lakes and portages resembled one another so completely, that if I had not seen the Indian draw the map in my tent I should have thought that one had been copied from the other, on a different scale.

Père Arnaud started from the mouth of the Manicouagan on August 29, 1853, in company with a little flotilla, consisting of seventeen birch-bark canoes, eleven manned by Montagnais who were returning to their hunt-ing-grounds, and six by Nasquapees who had come from the far interior to see the priest of whom they had heard so much from their Montagnais neighbours. A singular incident happened to one of the Nasquapees when they were about halfway on their journey, which may account for some of the extraordinary actions of Indians in the savage state. After a very fatiguing portage, under a hot sun, a Nasquapee suddenly fell down in an unconscious state. They brought him to life again by throwing cold water over him, but as soon as he could stand he became furious and rushed into the woods, articulating sounds which none of his companions could understand. The mountainous character of the country prevented him wandering far,
and he gradually recovered his senses, expressing astonishment that his companions should be watching him, and apparently wholly unconscious of his recent vagaries. The other Indians thought that his temporary insanity arose from his having eaten some herb or fruit capable of producing that effect. Another singular but lamentable incident is related by Père Andrieux, who was stationed at Wamoutashing, among the Tête de Boule Indians, which I shall give in his own words:- 'Pendant les exercices de cette mission de Wamoutashing, un des sauvages se tenait ordinairement derrière tous les autres. Il me semble découvrir dans cette singularité quelque chose d'extraordinaire ; ici encore je laisse faire quelques jours, puis j'aborde mon homme et veux savoir de lui la raison de cette conduite si particulière. "Robe-noire," me dit-il alors d'un ton timide et plaintif; "je ne prie pas moi, je ne suis pas chrétien; au contraire, je te fuyais toujours, parce que je ne voulais pas quitter la liqueur de feu; mais l'hiver dernier j'ai été saisi d’horreur à un spectacle déchirant dont j'ai été témoin. Il y avait parmi nous une femme qui disait quelquefois: 'il me faut de la chair: je veux manger de la chair.' On ne comprenait pas pourquoi elle parlait ainsi ; lorsque, un soir, prenant son couteau, elle l'enfonce dans le sein de son enfant, et dans un état de fureur qui ne peut pas s'exprimer, elle le fait rôtir et le mange à la clarté du même feu. Saisis d'horreur, nous nous enfuîmes tous de ce lieu maudit. En même temps mon cour changea; il me semblait que je devais embrasser la prière (religion) qui défend ce crime. Voilà pourquoi je viens te demander de m'instruire et de me recevoir à la prière.""

Père Arnaud lost the whole of his baggage at the foot of a rapid they were endeavouring to ascend, and after a month's toil they reached the borders of Lake Mushualagan at the beginning of October. At this lake the Montagnais who accompanied him determined to winter, not only because it was good hunting-ground, but also on account of its being a great rendezvous in the spring for the heathen Indians of their tribe. Lake Mushualagan is about fifty miles long, and varies from three to nine miles in breadth ; it is surrounded by high mountains, is very deep, and contains pike, the kokomesh, a variety of salmon trout, the meméhil, 'a red kind of fish,' \&c.

Père Arnaud was soon left by the Montagnais and Nasquapee who journeyed with him to Lake Mushualagan. The Indians found that they could not support such a large party by fishing and hunting in one locality. The Montagnais departed to seek better hunting-grounds, the Nasquapees set out to rejoin those of their people who had their lodges on Lake Pletpi, three days' journey from Mushualagan, only one family of Montagnais remaining with the missionary.

Three weeks were spent in endeavouring to lay up a store of food for the winter, when another party in eleven canoes came to the lake from the coast, but many of them were ill, and an unusually large proportion were widows and young orphan children. The fish began to retire to deep water beyond the reach of nets, the hunt in the woods was unsuccessful, and a rigorous winter began to set in. The Indians who had left the missionary some weeks before began to return, having also been unsuccessful in their hunt; so that the entire party were compelled to
have recourse to their supply of winter provisions until the snow became deep and hard enough for snow-shoes, and the caribou to descend from the mountains to the valleys. As soon as the caribou season at the beginning of December arrived, the camp was raised, and the whole band proceeded to fresh hunting-grounds. They soon found tracks in the snow ; but, to their despair, they ascertained that wolves had been in pursuit. The hunters followed the tracks, and after three days returned with the announcement that they had come upon the bones of a freshly-killed deer, and that wolves were numerous in the neighbourhood. 'Wolves are around us; they will block and disperse the caribou: we cannot escape death if this continues," exclaimed the distressed Indians. A party of hunters arrived from a different direction two days afterwards, and brought with them the flesh of six caribou and two porcupines; but they confirmed the impression which began to prevail that the wolves had driven the caribou away, and it would be necessary to seek other and distant hunting-grounds. Their only hope was the tripe de roche when the caribou failed, and they could not support strength for any length of time on such meagre diet. At this period a runner came from the Nasquapees, who had left them at Lake Mushualagan, bringing the intelligence that this people were starving, and begging for some provisions. He was soon followed by a poor Indian with his family, who had become blind during the previous week. The Indian imputed his misfortune, unparalleled in the forests, which cover the country like a sea, to having slept on the snow, with spruce branches for his pillow, without fire or any covering beyond the clothes he
wore. He was overcome with fatigue, and far too weary to make a temporary lodge of spruce boughs, and perhaps, like all his race, too indifferent.to the consequences which might follow the terrible exposure to which he so thoughtlessly submitted himself. Fortunately for the missionary, the ptarmigan, or white partridge, came in large numbers to the borders of the lake where they were at this juncture, so thathe was able to relieve the necessities of the Nasquapees and the blind Indian's family. They also caught some porcupine and a few rabbits, which enabled them to delay having recourse to the tripe de roche. It now became evident that the whole encampment must break up and separate into single families, scattering themselves over a wide extent of country, in order to find the means of subsistence. During three long months Père Arnaud remained in one encampment with a number of the Montagnais who still clung to him ; but no heathen Nasquapees came near their lodges, as he had been led to expect. Provisions now began to fail ; the ptarmigan, which had been the principal means of support, were about taking their flight to the north. They tried to fish, introducing nets below the ice, but without much success. Their misery increased day by day, until at length it became absolutely necessary to separate and hunt in a new tract of country. Père Arnaud returned with a young Canadian, who had accompanied him to Lake Mushualagan, still 279 to 300 miles from the sea. He descended in the spring to the mouth of the river, after having endured much privation and suffering.

## CHAPTER XIII.

## LAKE NIPISIS TO BEAR LAKE.

> Nasquapee Camp - Copper Fish-hook - A Câche - Caribou Horns - Nipisis River - Fresh Tracks - A Fire on the Portage Narrow Escape of the Canoes - Destructiveness of Fires in the Woods - Desolation of Part of the Labrador Peninsula produced by them -- Magnificent Spectacle of a Spruce Forest on fire at Night - Wild Fowl falling into the Flames - Nipisis River Sketching under Difficulties - The Snow-white Rock - The early Morn in Labrador - Silence - Ducks - A Bear - Caribou Beaver smell the Fire - Importance of the Caribou - Its Habits.

AT the northern extremity of Lake Nipisis we came to a fresh encampment, where Indians had been some twenty or thirty hours before us; we all set to work to examine the tracks and endeavour to make out the direction they had taken. It was decided that they had come from the north, that they were going south, probably to the coast, and that they were Nasquapees. I asked Michel how he knew they were people belonging to his race; he answered by pointing to a fish-hook made of wood and copper, which he found suspended to the branch of a tree near the spot where they had camped. He also pointed to a câche, in which we found some clothing of caribou skins, some sinews, two fish-hooks of copper, and some birchbark. We replaced all the articles, with the exception of the fish-hooks, but in lieu of them I left a dozen large steel
hooks attached to gimp. We also found in a câche snowshoes and snow-shovels, and near their camp fire the re-


NASQUAPEE COPPER AND IRON FISH-HOOKS.
mains of salmon trout on which they had fed a few days before, having probably caught them in Nipisis Lake. At the end of this beautiful sheet of water I saw a splendid pair of caribou horns, which had been placed on the branch of a tree during the winter. I did not think it unwise to appropriate them. They are now placed in my collection between a magnificent pair of wapiti horns from the Assiniboine and those of a young buffalo bull from the south branch of the Saskatchewan. Beaver tracks began to be abundant, but we did not succeed in shooting any of these cautious animals. As we left the lake and entered a river, which we took to be the east branch of the Moisie, or one of its tributaries, fresh caribou, fox, and bear
tracks were visible on the banks, and we stole along the river in a state of half suspense and excitement, hoping and expecting to see game at every turn ; but the current began to be strong, and the men had to get out of the canoes and haul them up the stream, wading in the water among fragments of rocks and water-worn boulders. This was enough to frighten any animal in advance of us, and we could not stop to hunt, time being precious, for the water in the rivers was falling fast, and we feared that as we approached the Height of Land it would be necessary to carry the canoes. Breakfasting at the foot of a rapid, we caught plenty of trout, which were cleansed, fried, and ' eaten with almost painful expedition. The country began to grow less interesting in outline ; for although the rocks were grand, yet we had recently seen such magnificent walls towering to the skies, that a precipice three or four hundred feet high was passed by almost without notice.

An incident, which had wellnigh cost us our canoes, occurred here. The day was hot and sultry, the caribou moss dry and brittle, and, notwithstanding every precaution, a fire we made to cook dinner caught the moss and spread with amazing rapidity. The portage we were then making was not more than a third of a mile long, and everything but the canoes had been carried to the other end; the men were returning to fetch their last load, when the increasing smoke informed them of the spread of the fire. They rushed to where the canoes were lying just as the fire reached them; lifting them up, they hastened as fast as they could run with their heavy burdens, but the wind drove the flames with terrible rapidity over the dry moss;
the smoke rose in dense volumes and hid the men from our view ; our anxiety at this moment can better be imagined than described. We ran to meet the men, but the smoke blinded us. We lost the portage path, and were compelled to run towards the river to seek safety in its waters. Most fortunately we passed the path just as the hindermost canoe was being borne on the shoulders of the men at full speed, a few feet in advance of the flames.


ESCAPE FROM A FIRE ON THE PORTAGE.

We offered to relieve them of their load, but there was no time to change, the smoke and ashes surrounded us with a dense cloud, for the wind increased with the spread of the fire, and came in little whirlwinds, driving the thick air in circles and hollow cones before us. The men hurried on without resting for one instant, and did not stop until they had dashed the canoes, one after the other, into the river, which luckily at the end of the portage was still and deep. The Nasquapee, seeing the flames advancing, had,
with his usual presence of mind, moved all the baggage to the edge of the river on to a little beach of sand, where it would be safe from the advancing fire. The voyageurs, as soon as they had relieved themselves of their burden, threw themselves on the ground in a state of utter exhaustion. We crouched low to let the hot smoke and ashes pass over us, and in ten minutes more the air was clear above; but far in advance, following the banks of the river, the fire roared and hissed through the moss until it reached the borders of a lake, through which our course lay. The same fire continued to burn for several days, for we saw the smoke when more than thirty miles away; but its onward progress had been arrested by the wet moss of the forest bordering Lake Iash-ner-nus-kow, into which we entered late in the afternoon of the 29th. The Indians generally exercise great caution in putting out their fires before they leave a camp during the summer season, but notwithstanding their carefulness in this respect, most disastrous conflagrations not unfrequently take place. It is a common practice with a party of Indians to make a large smoke on a hill or mountain when they wish to discover the whereabouts of their friends; this is answered by those of whom they are in search with another smoke, and it sometimes happens that the fires thus made spread over the country and cause a most lamentable destruction of forest trees and moss, thus consuming the food of the caribou on which the Indians depend for their subsistence. A few days later we had a painful proof of the awful change in the features of a country produced by wide-spreading fires, and there appears to be little reason to doubt that a very
considerable portion of the Labrador Peninsula has from this cause been rendered an uninhabitable wilderness.

Mr. Davies, in his 'Notes on Esquimaux Bay and the surrounding Country, gives a graphic description of a great fire of which he was the innocent originator.

In 1840, he ascended the Grand River (Hamilton Inlet) for the purpose of exploring it ; after having been out ten days, he felt anxious to ascertain if any Indians were in the neighbourhood, in order to acquire information from them respecting the country in the vicinity. Accordingly he gave orders to a couple of Indians to make a signal by smoke, so that if any Indians were in the neighbourhood, they might be warned of his approach, and come and meet him. He encamped for that purpose, and while the men were engaged in pitching the tent, the Indians went to the summit of a neighbouring hill, about a mile off, and there collecting a quantity of moss, set fire to it. About half an hour afterwards, while sitting at the door of his tent enjoying a cool breeze that had just sprung up, he was startled by 'a noise like thunder,' and ere he could spring to his feet, he was warned by the frantic shouts of his men of the danger that was approaching. It was with the utmost difficulty that they could launch the canoe, and, hastily throwing the baggage into it, contrive to decamp before the fire reached their encampment. All the haste would have been of no avail, had they not fortunately been encamped in a spot of green wood. Such was the rapidity with which the flames advanced, that one of Mr. Davies's men, who had wandered a little way from the encampment, had the utmost difficulty in saving himself, even at the top of
his speed. Before they reached halfway across the river, which was there about a mile in breadth, the whole mountain, from top to bottom, was one sheet of fire. The fire lasted for upwards of three weeks, and spread over and completely destroyed an area covering some hundreds of square miles.

It may be asked, why fires are more common at the present period than formerly; for, from the age of many forests, it is apparent that fires have not devastated them for centuries, and if a large portion of the Labrador Peninsula were once covered with stunted trees, when did the conflagration take place which consumed them? It must have been in recent times, for the charred stumps are standing over immense areas, many thousand square miles being now a burnt country. No doubt fires have become much more frequent since the Indians became acquainted with Europeans, and learned how to make tinder with powder and to use the flint and steel, and, still more recently, the common friction match. In early times they were dependent altogether on two pieces of flint and 'punk,' a fungus growing on the birch tree, or on the bow and drill, when they wished to make a fire - an operation in itself laborious in damp weather, and very difficult after a prolonged rain. The extent of fires is generally very much exaggerated in a thickly wooded country, but in a region of moss like Labrador it is not improbable that they may sweep over vast areas. But still we find that fires are generally confined to the country through which the main line of communication runs, such as the Moisie, the Ashwanipi, and Rupert Rivers. During dry seasons, fire will run for an immense distance -
probably for some hundreds of miles - and such an event took place in 1857 and 1859 , as will be described farther on. There is also presumptive evidence to show that conflagrations of extraordinary extent occurred in 1785 and 1814 , and gave rise to those unexplained phenomena -the 'dark days of Canada'- which are of sufficient importance to deserve an independent notice.

A burning forest of spruce and birch is a spectacle of extraordinary sublimity during the night; it is like a magnificent display of fireworks on a stupendous scale, and far surpasses the conflagrations of the heavier forests in more temperate climates. A spruce tree flashes into flame from the bottom to the top almost instantaneously, with a crackling hissing roar, which when viewed close at hand rivets a breathless attention, not unmixed with anxiety and fear. The light which it casts is vivid and red, the noise sharp, quick, and loud, like an infinite number of snaps repeated with just perceptible intervals. The awful but splendid light thrown through the forest casts the blackest shadows wherever its rays cannot reach. The birch trees flame steadily, pouring forth huge volumes of dense smoke, which whirling high in the air form an opaque screen above the burning forest, from which a lurid light is reflected; at intervals gusts of wind sweep through the trees, followed by a train of smoke and sparks which, winding through the charred trunks or meeting with violent eddies, rise up in a spiral form to rejoin the black clouds above. When the wind is favourable, a burning spruce forest viewed from an eminence is awfully impressive ; from ten, twenty, to fifty trees at a time columns of flame shoot up, wildly twist-
ing and darting high above the trees, and then subside ; a few minutes later another outburst illuminates rocks and mountains, which appear indescribably vast, silent, and immovable. Wild-fowl, disturbed and bewildered by the dazzling light, fly in great circles high above the burning forest, and sometimes, descending rapidly in spiral flight, plunge into the fires ; others drop from an immense height like a stone into the flames, probably suffocated by the hot air and smoke in which they have been wheeling round and round for hours, fascinated like moths by the fitful glare below them.

Still continuing up what we supposed to be the last branch of the Moisie, we arrived at some very formidable rapids, having a total fall of fifty-eight feet. The following day being Sunday, we determined to camp early and catch a supply of trout, of which there were great numbers at the tail of the rapids. The valley of the river here is broad, and deeply overspread with sand to a considerable extent, which is covered with caribou moss and stunted Banksian pine and spruce. The gneiss hills on either side are about 500 feet high, and run in ranges symmetrically related to one another, and appearing to come generally from the north-east like spurs from the table land. My brother took a sketch of the rapids, but the mosquitoes were so numerous that it was necessary to make a smoke before and behind him to drive off the clouds of insects which issued from the neighbouring forest. The bed of the river is full of boulders, and between them the water flows turbulently in a shallow channel crossed by ledges of rock. We saw several swallows during the day, and a spruce partridge with her
young brood. The tracks of different animals were so numerous that I determined to rise before daybreak and try my luck with a rifle.

The lake where we camped was one of the most singular and beautiful we had yet seen ; it had no striking feature of rock-scenery, but its shores were broken by low


DESCENDING THE NIPISIS.
promontories, thinly wooded, stretching far into it, backed by walls of gneiss from 200 to 300 feet high. Within half a mile of our camp was a snow-white rock, one which we had mistaken for ice many miles before we came opposite to it, and we almost doubted the Nasquapee when he assured us from the first that it was not snow or ice, but white rock. I went early to my spruce-carpeted tent, hoping to wake at dawn, but rather overdid it, waking at half-past twelve instead of two, and fearing to
go to sleep again lest I should miss the opportunity. At two I stole away, and after half an hour reached the summit of a hill, which I had visited the evening before, and selected as the spot where I could sit and watch. It was morning twilight when I reached my point of observation, and the stars were unclouded.

Not the faintest mist was visible, and not a breath of air disturbed a leaf to break the perfect silence that reigned. It was far too cold for the mosquitoes ; they scarcely trouble one when an aurora is quivering in the north, as it did on that cold summer morning. As the light increased, but long before the sun had risen, three ducks alighted on the lake and began to feed. I distinguished a black object walking slowly on the sandy beach in the direction of our tents, and stopping now and then to look at the water ; with my glass I saw it was a bear, not half a mile away, hunting for dead fish. He approached slowly, and was evidently intent upon finding a morning meal. While watching his gradual approach with beating heart, I saw him raise his head and sniff the air. Satisfied of its purity, he continued to advance, and, had he kept the beach, he would have passed within one hundred yards of where I was sitting on the soft caribou moss; but he soon raised his head again, and, gently swaying it backwards and forwards, sniffed the air suspiciously. He smelt the smoke of our fire, the embers of which were still alive. It was enough to turn him, for after a pause he retreated for a hundred yards or so on the beach, and then went into the woods. Disappointed and discouraged, I went to the other side of the hill to survey the magnificent caribou grounds we had passed the day
before, and where we had seen fresh tracks. It was not light enough to see distinctly any considerable distance, so I returned again to my former outlook. Just as I had seated myself I heard a splash in the lake at the foot of the hill : it was a willow bush which had fallen into the water at the mouth of a little stream, and the beaver which cut it down swam towards it, drew it in shore, and began to eat the juicy bark. The faintest tinge of crimson on the summit of the distant mountain which we had passed reminded me that it was time to look for caribou. Returning to the opposite side I scanned the caribou ground with my glass carefully and anxiously; and not without success, for at the distance of half a mile I saw three does with their fawns feeding and walking towards the lake. A loon flew over, uttering its wild note; they looked around, but soon began to feed again. They seemed to be cropping the flowers of the Labrador tea-plant, and of one or two other shrubs which grew among the moss. They came within a quarter of a mile of our tents, when they suddenly stopped; all raised their heads together, and gazed in the direction of our camp. They looked but for an instant, when, turning round, away they galloped with long bounds towards the nearest range of hills. They, too, had smelt the fire. It was then that the caution often given me by Indians came in full force upon my recollection - 'When you want to watch for deer or bear at daybreak, always put your fire out before you go to bed : it is better to make no fire at all.' Slowly I went back to my old post above the lake. Golden light had begun to tinge the summits of the higher hills, still the shadows were deep and well defined. As the sun approached the horizon, the
lines of huge boulders perched on the summit of bare rocks towards the north-east seemed greatly magnified, and stood like giant sentinels on those weather-worn hills. I returned to camp to prepare for a trip to the snowwhite rock, which had excited our curiosity and speculation the day before ; Pierre went to examine the bear-tracks,


BEAR LAKE.
which he pronounced to be those of a young one, not more than two years old.

The caribou* is the mainstay of the Montagnais and

* The Caribou, or American Reindeer (Tarandus hastalis, Agass.), sometimes called the Woodland Caribou, to distinguish it from the Barren Ground Caribou.

When pursued, the caribou immediately makes for a swamp, and follows the margin, taking at times to the water and again footing it over the firm ground, and sometimes twoning towards the nearest mountain, crosses it by another morass. If hard pressed by the hunters (who now and then follow up the chase for four or five days), the animal ascends to the highest peak of the mountain for security, and the pursuit becomes very fatiguing and uncertain. Upon one occasion two men followed up several caribou for a whole week, when, completely tired out, they gave up the chase, which was then continued by two hunters, who at last succeeded in killing a couple of the animals at long shot. Sometimes, however, fresh

Nasquapee races : it is to them as important an animal as the buffalo is to the Prairie Indians.

In the summer they are found on the mountains, whither they go to avoid the flies and to feed on buds, flowers, the fruit of a plant which grows upon the mountain-sides, and on what the Indians call Atik-min, or caribou food, which is wholly different from the caribou moss on which they subsist during the winter. When the snow begins to fall in October, the caribou collect in bands and commence their singular peregrinations, which are characteristic of this animal. If undisturbed by wolves or Indians, they wander in a circle of many miles in radius, always on the move except when sleeping. When the snow is deep, they take it in turn one by one to lead the band when not feeding, and open a way through the snow; as soon as the leader is fatigued, he retires to the rear and another takes his place.

Every third or fourth year they emigrate to a distant part of the country, revisiting their former pasture-
tracks are found, and the caribou is surprised whilst lying down or browsing, and shot on the spot. When the snow is not deep, and the lakes are covered with ice only, the animal, if closely pursued, makes for one of them, and runs over the ice so fast that it is unable to stop, if struck with alarm at any object presenting itself in front, and it then suddenly squats down on its haunches and slides along in that ludicrous position, until, the impetus being exhausted, it rises again and makes off in some other direction. When the caribou takes to the ice, the hunter always gives up the chase. Sometimes, when the mouth and throat of a fresh-killed caribou are examined, they are found to be filled with a blackish-looking mucus, resembling thin mud, but which appears to be only a portion of the partially decomposed black mosses upon which it feeds, probably forced into the throat and mouth of the animal in its dying agonies.
When overtaken in the chase, the caribou stands at bay and shows fight, and when thus brought to a stand-still will not pay much attention to the hunters, so that he can approach and shoot them with ease. - Audubon and Bachman.
grounds after the lapse of the same period. In April, as soon as the snow begins to get soft, they migrate towards the quarters where they intend to pass the summer, travelling always at night. During the day they rest or feed chiefly on the moss which bears their name.

In Forester's 'Game in its Season,' the author gives a very lively description of the caribou, having reference to this species. He states that as regards the nature of the pelage, or fur-for it is almost such-of the caribou, so far from its being remarkable for closeness and compactness, it is by all odds the loosest and longest haired of any deer he ever saw, being, particularly about the head and neck, so shaggy as to appear almost maned.
'In colour it is the most grizzly of deer, and though comparatively dark brown on the back, the hide is, generally speaking, light, almost dun-coloured, and on the head and neck fulvous, or tawny grey, largely mixed with white hairs.
'The flesh is said to be delicious, and the leather made by the Indians from its skin, by their peculiar process, is of unsurpassed excellence for leggings, moccasins, or the like, especially for the moccasin to be used under snowshoes.

- As to its habits, while the Lapland or Siberian reindeer is the tamest and most docile of its genus, the American caribou is the fiercest, fleetest, wildest, shyest, and most untameable. So much so, that they are rarely pursued by white hunters or shot by them except through casual good fortune; Indians alone having the patience and instinctive craft which enable them to crawl on them unseen, unsmelt: for the nose of the caribou can detect
the smallest taint upon the air of anything human at least two miles up wind of him, and unsuspected. If he takes alarm and starts off on the run, no one dreams of pursuing. As well pursue the wind, of which no man knoweth whence it cometh or whither it goeth. Snow-shoes against him alone avail little; for, propped up on the broad natural snow-shoes of his long elastic pasterns and widecleft clacking hoofs, he shoots over the crust of the deepest drifts, unbroken, in which the lordly moose would soon flounder, shoulder-deep, if hard pressed, and the graceful deer would fall despairing, and bleat in vain for mercy; but he, the ship of the winter wilderness, outspeeds the wind among his native pines and tamucks, even as the desert ship, the dromedary, out-trots the red simoom on the terrible Sahara, and, once started, may be seen no more by human eyes, nor run by fleetest foot of man-no, not if they pursue him from their nightly casual camps, unwearied, following his trail by the day, by the week, by the month, till a fresh snow effaces his tracks and leaves the hunter at the last as he was at the first of the chase, less only the fatigue, the disappointment, and the folly.
' Therefore by woodmen, whether white or red-skinned, he is followed only on those rare occasions when snows of unusual depth are crusted over to the very point at which they will not quite support this fleet and powerful stag. Then the toil is too great even for his vast endurance, and he can be qun down by the speed of men inured to the sport and to the hardships of the wilderness, but by them only. Indians by hundreds in the provinces, and many loggers and hunters in the Eastern States, can take and keep his trail in suitable
weather. The best time is the latter end of February or the beginning of March; the best weather is when a light fresh snow of some three or four inches has fallen on the top of deep drifts and a solid crust-the fresh snow giving the means for following the trail-the firm crust yielding a support to the broad snow-shoes, and enabling the stalkers to trail with silence and celerity combined. Then they crawl onward, breathless and voiceless, up wind always, following the foot-prints of the wandering, pasturing, wantoning deer ; judging by signs unmistaken to the veteran hunter, undistinguishable to the novice, of the distance or proximity of their game, until they steal upon the herd unsuspected, and either finish the day with a sure shot and a triumphant whoop, or discover that the game has taken alarm and started on the jump, and so give it up in despair.
- One man perhaps in a thousand can still hunt or stalk caribou in the summer season. He, when he has discovered a herd feeding up wind, at a leisure pace and clearly unalarmed, stations a comrade in close ambush well down wind and to leeward of their upward track, and then himself, after closely observing their mood, motions, and line of course, strikes off in a wide circle well to leeward, until he has got a mile or two ahead of the herd, when, very slowly and guardedly, observing the profoundest silence, he cuts across their direction, and gives them his wind, as it is technically termed, dead head. This is the crisis of the affair ; if he gives the wind too strongly or too rashly, if he makes the slightest noise or motion, they scatter in an instant, and away. If he gives it slightly, gradually, and casually as it were,
not fancying themselves pursued, but merely approached, they merely turn away from it, working their way down wind to the deadly ambush, of which their keenest scent cannot, under such circumstances, inform them. If he succeeds in the inch by inch, he crawls after them, never pressing them, or drawing in upon them, but preserving the same distance still, still giving them the same wind as at first, so that he creates no panic or confusion, until at length, when close upon the hidden peril, his sudden whoop sends them headlong down the deceitful breeze upon the treacherous rifle.
' Of all woodcraft none is so difficult, none requires so rare a combination as this, of quickness of sight, wariness of tread, very instinct of the craft, and perfection of judgement. When resorted to, and performed to the admiration even of a woodman, it does not succeed once in a hundred times; therefore not by one man in a thousand is it ever resorted to at all, and by him rather in the wantonness of wooderaft, and by way of boastful experiment, than with any hope, much less expectation, of success.'


## CHAPTER XIV.

## THE SNOW-WHITE ROCK TO CARIBOU LAKE.

Trip to the Snow-white Rock - Pine Forest - Character of the Snow-white Rock - Young Forest - Beauty of the Scenery towards the East - Awful Desolation of the Country towards the North and West - Character of the Scene - A burnt Country The burnt Portage - The River at the Beginning of the burnt Country-Moss-covered Boulders - Treacherous Walking - Difference between the Country in the Valley of the Saskatchewan and Table Land of Labrador - A Walk through the burnt WoodsTiers of Boulders - Infinite Number of Erratics-Desolate Character of the River - Shallows - River becoming impassable Caribou Lake - River impassable beyond Caribou Lake - Remarkable Erratics - 'Desolation desolate' - Caribou Moss - Its Uses and Beauty - Lichens of Labrador - Their general Diffusion.

$\mathrm{M}^{2}$R. CALEY and I started early in the morning of the 30th to visit the 'snow-white rock' which had excited our curiosity during the past two or three days, being visible from an immense distance in the direction of our route. We took a canoe and crossed a bay of the lake, landing at the foot of a steep bank of sand, clothed with willows and a few Banksian pine. Having securely fastened the canoe, we ascended the bank and found ourselves upon a level plateau extending to the foot of a range of hills about half a mile distant, of which the 'snow-white rock' formed a part. We soon came upon a well-beaten caribou track, and saw several recent
impressions. The forest on the lower part of the hill surprised us: the birch were not less than fifteen inches in diameter, and well grown, thus showing that on a good soil trees will flourish well at the altitude of 1,700 feet above the sea, notwithstanding the rigour of the climate. An examination of the 'snow-white rock' explained the origin of the soil and the luxuriance of vegetation. A belt of spruce through which we passed also contained some very fine trees: they averaged eighteen inches in diameter and about fifty feet in height. After a long and tedious walk, we came suddenly upon the 'snowwhite rock,' and found it to be a very coarse gneiss, such as is commonly, but very erroneously, called granite, consisting of magnificent crystals of flesh-coloured felspar, clear and brilliant quartz, with a sprinkling of mica. The felspar was largely in excess and weathering white : it gave to the rock a brilliant appearance in the sunshine, exactly resembling a mass of snow in the distance. The 'snowwhite rock' was nothing more than a narrow strip of the hill-side exposed by a land-slide ; it was fifty feet broad, and perhaps 300 feet in length, inclined at an angle of $60^{\circ}$ to the horizon. We ascended to the summit of the hill, and arrived at a plateau, where the forest had been burnt; but the second growth consisted of cherry and a great profusion of currant and raspberries.

Crossing the plateau we made another ascent, and sat down to mark the particulars of the wonderful scene which lay before us. We were some hundred feet above the lake, and from that elevation could see the country far and wide in all directions, except the one in which our course lay. A bold projecting peak, 200 or 300 feet
higher than that on which we were perched, obstructed our view towards the north. Towards the east all was beautiful and serene ; a succession of lovely lakes studded with islands filled a valley whose outlet we had passed the day before. Bare rocks rising out of a vast forest were the other elements of the picture towards the east ; but north and as far as we could see north-west, and behind us towards the south-west, there lay an awful scene of desolation, far surpassing any we had seen before. We looked upon a burnt country, where the dead standing trees still wore the marks of fire, or were bleached by years of lifeless exposure. We saw myriads of boulders strewed over the hills and mountains, without a green moss or a grey lichen to show that life had ever been there. This, then, was the beginning of the burnt country which the Indians had told us lay near the Height of Land - the great table land of the Labrador Peninsula.

Michel had told us that it took them a whole day to pass through as they descended a month ago, when the rivers were full from the melting snow. It would take us three days to pass it travelling against the current with the water diminishing every day. One fact we noticed with delight. On that vast gloomy expanse there were numerous little islands of forest which had escaped the fire, little green oases in a black desert; something that might lead us to picture in our minds' eye the aspect of the country before the fire swept over it and destroyed its summer beauty. In descending the hill we took another direction through the really luxuriant forest : the birch and spruce were intermixed with larch, and trees of a size which would have done no discredit to the soil and climate of

Western Canada grew on the steep slope of the hill, and at its base, on a deep rich soil evidently derived from the decomposition of the felspathic rock. The hill-side faced the east, and it was clothed with a forest which had escaped the numerous fires which have devastated the greater part of the country. Not far from our 'snow-white rock' the face of the hill changed, and became a vast mural precipice between 300 and 400 feet high, of a dark-purple colour, but frequently much shattered and broken into masses, which seemed on the point of falling. Returning to camp we found them all ready for continuing our journey, and in a few minutes were again on our way. The lake passed, we entered a shallow and rapid river, up which we were compelled to wade and drag the canoes. We camped where a party of Nasquapees had made their fire a few days before, and left the bones of large trout, geese, and ducks, the remnants of their savage meal.

The portage before us was a formidable one, and well named Kes-ca-po-swe-ta-gan, or the Burnt Portage, ushering us into the burnt country : its length was one mile and three quarters, and its altitude 329 feet, or 1,754 feet above the ocean. A large part of the tract of land over which we passed had escaped the devastating fires, and was beautifully ornamented with free-growing larch and spruce, with the unfailing caribou moss in the richest abundance. The erratics, however, were the most striking features of the scene ; for, besides being very numerous, they were of extraordinary size, and exquisitely painted with green and grey circles of time-stains and other lichens. When hunting for partridge in a lovely valley, fair and beautiful to the eye, I frequently sank two and even three feet
through the moss, sometimes without touching bottom. At the time I thought I had fallen into a fissure in the rocks over which the moss was grown, but the experience of the next few days told a different tale, and laid open the remarkable feature in this country, which might have escaped attention if the fire had not destroyed the beautiful covering which hid from view the chaotic mass of erratics which were piled one above the other in these treacherous glades.

Our observation for latitude showed that we were under the same parallel as the Touchwood Hills in the valley of the Saskatchewan, forty degrees of longitude farther west. What a difference in climate and vegetation at nearly the same height above the sea level! We find in the prairie country luxuriant vegetation, an infinite number of wild-fowl, vast herds of buffalo, and a summer heat sufficiently long to ripen early varieties of Indian corn. In the rocky eastern country, the rivers and lakes are frozen from October to the end of May, the woodland caribou replaces the buffalo, birds are few in number, and their species very limited, consisting of a few varieties of duck, geese, the spruce partridge, the ptarmigan, woodpeckers, and gulls ; the trees in general stunted, and only represented by the birch, spruce, larch, and Banksian pine; flowers almost arctic in their character, and in place of rich and nutritious grasses, lichens and mosses grow over the rocks and swamps, covering everything with green, grey, yellow, purple, or black.

Formerly many animals extended much farther east than they do at present, having been destroyed by the Indians.

Charles Taché enumerates the elk and ground hog as common about the Saugenay previous to 1823 . The elk was hunted down chiefly by the Montagnais Indians for the sake of their skins, which they disposed of to the fur traders. Taché considers the destruction of the elk as one of the reasons of the rapid disappearance of the Montagnais nation from the neighbourhood of Lake St. John and the Saugenay. The moose was also very common in the country drained by this river, and in the time of the Père Le Jeune it formed one of their chief sources of food. In 1670 Père Albanel stated that the moose approached the country of the Oumamiwek on or near the River Godbout.

We found it necessary to adopt an expedient to hurry on the men, who were getting dismayed and scared at the wild and inhospitable appearance of the country as we approached the burnt land. We sent Pierre with a canoe to the end of the Burnt Portage, and told the cook to follow, and cross over to the other side of the next lake, which was a small one, and prepare our supper there.

Leaving the men to carry the things across the portage, we went on in advance, and, in crossing the lake, began to look out for our camp ground. The cook came to me to ask for matches to light the fire, but I had recently changed my coat, as the evening promised to be cold, and left the match-box in the pocket of the garment which I had packed in my leather bag at the other end of the portage path. No one else had any dry matches, and we had to draw the charge of shot and fire off a gun in order to light a lucifer match from the burning wad, not being disposed to wait until Michel could procure fire for us with his drill. We
often observed the caution with which the Nasquapee put out the fire before we left any camp ground; and those who have ever had an opportunity of witnessing scenes similar to some which met our eyes, will readily understand the fear they have of fire spreading and destroying their hunting-grounds.

Leaving the Burnt Portage on July 1, we descended eighteen feet, and came into a lake in the burnt country. What desolation! what dreadful ruin all around! Not ruin from fire only, but ruin exposed by fire.

Close on the banks of the lakes and their connecting rivers lies the burnt country. Sand conceals the rocks beneath and hides what lies below from view ; but ascending a slight eminence away from the immediate banks of the river, the true character of the country becomes apparent. Conceive marching for miles over charcoal, the burnt remains and ashes of moss once two feet deep; imagine your steps arrested by blackened trees, or dead trees with bark fallen off, and the trunks bleached white, in singular contrast to the black ground. Suppose that you pass through this level waste and reach the foot of a hill, a hill of boulders or erratics, all waterworn and smooth, without moss or lichen on them, and piled two and three deep, and, for aught you know, twenty deep. You peer between the interstices of the first layer, and see the second layer; and sometimes through spaces between the boulders of the second layer, and find a third layer visible. The well-worn masses of all sizes, from one foot to twenty feet in diameter, and from one ton to ten thousand tons in weight, are washed clean. Mosses, ever green and bright, once covered them, voL. I.
filling the spaces between, and changing their harsh and unyielding outlines into a level green plain or a gently sloping hill, fair to look at, but dangerous to trust. Lying at full length on a giant erratic, and looking over its well-worn edge, I could without difficulty see three tiers of these ' travelled rocks,' and in the crevices the charred roots of trees which had grown in the mosses and lichens which formerly clothed them with perennial beauty.

Where did all these boulders come from? What brought them? and where are they going?

Turning again to the black wilderness of charred trees standing on the charcoal-covered flats of sand bordering the river, I met the men who were engaged in carrying the canoes and baggage across the portage. They were nearly as black as the ground they walked on, and looked like a procession of weary chimney-sweeps, silently, hurrying through a country especially their own in Indian file. The burnt country looks like a land of the dead; and everything, in fact, is dead. Although the fire in one part of it occurred three years ago, yet no new moss has begun to grow or grass to spring up ; there is no herb on the sand or lichen on the rocks, - all is dead.

It was a pleasant change to enter one of the little oases in this black desert; it was delightful to see the sparkling river, and the trout boldly darting out on flies : there at least was life, and in one of its most beautiful forms.

I asked Michel how far we should have to travel before we had passed through the boulder country, pointing at the same time to the vast numbers which were strewn around us. Michel shook his head solemnly, as he slowly said that rocks like those around us became more
numerous and large the farther we ascended, until we came to Ashwanipi.

Embarking again in our canoes, we paddled slowly against the stream ; but it was dispiriting work. The river reflected the black banks, the dead spruce stretched their bare arms wildly in the air; huge blocks of gneiss, twenty feet in diameter, lay in the channel or on the rocks which here and there pierced the sandy tract through which the river flowed; while on the summits of mountains and along the crests of hill-ranges they seemed as if they had been dropped like hail. It was not difficult to see that many of these rock-fragments were of local origin, but others had travelled far. From an eminence I could discover that they were piled to a great height between hills 300 and 400 feet high, and from the comparatively sharp edges of many, the parent rock could not have been far distant. Although regretting that destructive fires should have so changed the face of the landscape, I could not but rejoice that their occurrence had been the means of displaying the astonishing character of this boulder-covered country.

But why all boulders? Where is the clay which is almost invariably associated more or less with travelled rocks in other parts of the world? It would have been delightful to have lingered in the midst of such awful ruin, and gone back in imagination to the infinite past, striving to trace the history of those 'travelled rocks' which, I felt persuaded at the time, is not yet fully understood. The huge fellows, perched on the very edges of the cliffs, so well seen against the clear sky, were particularly inviting. But we must hurry through this desolate land, painting its picture on our memories and
its moral on our hearts ; we have no time to meditate here. We spent a quiet night in the burnt country, but we looked rather dingy in the morning. The river now began to get very shallow, with scarcely water enough to float the canoes. The bottom was composed of fine and coarse sand, beautifully sorted and ripple-marked by the action of the current. We were evidently approaching the source of the river, for when we came to the next portage the Nasquapee said we could not go any farther with the canoes; there was not water enough on the other side of the carrying place. Anxious to judge for ourselves, we proceeded about a mile farther, to Caribou Lake, in the middle of the broad valley in which the river flowed, and well known to Michel, who said that he had frequently been there last winter. We then decided to go to the summit of a hill which appeared to be about four miles distant. While breakfast was preparing, I crossed the portage and examined the river. It was quite clear that there was not enough water to float loaded canoes. The Indians in descending had to exercise the utmost caution even in their little craft, which did not draw more than five inches, and in ascending beyond the spot at which we had arrived they were accustomed to drag and lift their canoes through the water, except during freshets.

I directed Pierre to make a câche of flour and whatever other articles were not absolutely required, intending to leave the canoes in charge of four men, and push onwards on foot with the rest as far as we could go.

In this solitary lake, connected with the river we had left by a dry channel, probably a small watercourse in the spring, there were some fine trout, a few of which we
caught. On all sides of this little sheet of water, which might be a third of a mile across, the fire has swept away trees, grasses, and mosses, with the exception of a point of forest which came down to the water's edge, and formed the western limit of the living woods. For far to the west and north the raging element had spread and carried desolation with it, but towards the east the country was green wherever trees or herbs could grow. The long lines of enormous erratics skirting the river looked like Druids' monumental stones; for in many instances they were disposed in such a manner as would almost


CARIBOU LAKE, NEAR THE TABLE LAND.
lead one to suppose they had been placed there by artificial means. No language can adequately express the utter desolation of the scenery around this lake. The dead trees were blanched white; the sand was blown into low dunes; the surrounding hills were covered with
millions of erratics, most of them white. Both birds and beasts seemed to shun so dreary a scene, and only here and there did the mosses and willows appear to be making feeble efforts to rise again in greenness and life, and cover the terrible nakedness of the land.

In surveying a vast tract of country profusely covered with lichens and mosses, our thoughts naturally turn to the uses of these beautiful plants, and the part they perform in the general economy of nature. Lichens, it is well known, are distributed over every part of the world, but in some regions they acquire a very extraordinary development, and supply food to man and animals, as well as important materials used in the arts. Deriving their food chiefly from the air, they grow upon dead and living plants, upon rocks and stones; but they appear to prefer certain kinds of rocks in preference to others. We found them most abundantly upon gneiss, and much less frequently upon labradorite: indeed, the uniform purple hue of this rock, when seen in great masses, is probably due to the absence of lichens and mosses, which so frequently beautify the surface of gneissoid hills. First in importance to the wandering Indian in subarctic North America is, indirectly, the reindeer or caribou moss (Cladonia rangiferina), which at every step inspires the traveller in the Laurentian country with admiration for its beauty, its luxuriance, its wonderful adaptation to the climate, and its value as a source of food to that mainstay of the Indians, and consequently of the fur trade in these regions, - the caribou.

The Laplanders not only depend on it as the principal food for their herds of domesticated reindeer, but they gather it during the rainy season and give it to their
cattle. I did not hear whether the Labrador Indians made use of this lichen as an article of food, but we often used to chew a few fragments, and found it not unpalatable: when boiled it is slightly bitter and acrid. The reindeer moss forms the softest carpet when moist with rain or dew, but in the heat of the sun it is so dry and crisp, that when walking over it the stems snap off, and the impression of the foot is permanently left. The tracks of caribou made during the night are easily effaced when this lichen is soft and yielding, but if the animal has wandered during the day-time in dry weather, the impression is lasting. The Indians can often determine by this means the time when a caribou has passed a certain spot, by carefully examining the tracks. If the stems are broken, it must have occurred during the daytime, in dry weather ; if they are merely pressed, it may have been recent, but were made during the night, after a shower of rain.

Next in importance to the caribou moss ranks the tripe de roche (Sticla pulmonaria) throughout the colder parts of the North American continent. It is found in abundance on the trunks of trees, as well as on gneiss rocks, and frequently attains a very great age, probably exceeding the number of years allotted to man. Like the wellknown Iceland moss, it contains some nutritive principles. It is used medicinally, and appears to be not unfrequently employed by the Indians for cleaning and healing wounds, and in times of scarcity both Nasquapee and Montagnais, as well as the Canadian hunters, eat it after being boiled. In order to use it as food, it should be digested for a short time in a weak solution of carbonate of soda, washed, and then boiled; it yields a jelly which is
very palatable when flavoured with lemon or wine. The tripe de roche grows very abundantly in most parts of Labrador, and may yet become economically valuable as the source of a brown dye, for which it is largely employed by the peasantry of Northern Europe. Springing on the edges of tufts of caribou moss, the red cup lichen (Cladonia gracilis) is extremely common ; sometimes it gives to the surface of the rock a vermilion hue for a considerable space round the tufts, under whose shelter it seems to flourish.

The vast distribution of lichens in the Labrador Peninsula, from the mournful beard moss which hangs from the branches of dying spruce to the ever-beautiful caribou moss, will possibly give some importance to those rugged wastes, more especially as the applications of lichens to the arts are daily becoming more numerous; and it is both singular and most interesting that the probability has been shown, on good grounds, that a lichen, the Lecanora esculenta of Pallas, was the manna of the Bible.*

One of the characteristics of this beautiful class of plants is their duration in general. They grow with exceeding slowness, but retain their general form and vitality for very many years. They are truly 'time-stains,' and well do they deserve that harmonious name. They survive the most intense cold, and live during long summer droughts in tropical climates. From the polar zones to the equator, under all conditions of heat and cold, on the most unyielding and barren rocks, on the living and on the dead, wherever there is light, lichens grow.

[^28]
## CHAPTER XV.

## THE BURNT COUNTRY AND THE TABLE LAND.


#### Abstract

An Excursion on Foot - Aspect of the Country - Elevation Scenery - The Dividing Ridge - The Burnt Country - Numerous Lakes - Boulders-Absence of Animal Life - Ruin everywhereReflections - Life in the Desert - The Montagnais and the Nasquapees - Bear Feasts - Caribou Feasts - Winter Life - Michel and his Cousins - Caribou Hunt - His Affray with Wolves Starvation in the Winter - Tripe de Roche and Birch Buds Cannibalism - The Advent of Spring - Thè Geese - The Value of Geese to Indians-The Number of Geese in Hudson's Bay killed by Indians-The probable Number of Geese in Northern AmericaMode in which Domenique and the Nasquapees passed the WinterEmployment of the Women - Shifting Camp - Difficulty of catching Fish - Ojibway Mode of catching Fish in Winter Return to Camp.


THREE of us started from Caribou Lake soon after breakfast to attempt the ascent of a hill which appeared to be about four miles off, and some 400 or 500 feet high. My brother, glad of the opportunity, took his sketching materials to a favourable point of view, with one of the men to make a smoke to drive off the irritating mosquitoes, while he sketched, in all its singular detail of desolation and ruin, the wild surrounding country. The rest of the men were engaged in repairing the canoes, making a câche, and arranging the baggage. In the direction of the hill, from our camp, a strip of woods had most fortunately escaped the fire, so that we
were able to see the character of the forest trees which once thinly covered the burnt region before the conflagration occurred. After toiling for a couple of hours over boulder-strewn rocks, we reached the summit of the hill, and found it to be 450 feet above the lake, or 2,214 feet above the ocean level, and 120 miles distant from the mouth of the Moisie by the course we had taken, which did not deviate materially from a straight line.

The view far exceeded our expectations; it was one possessing a sublimity of character which could only be found among such extraordinary elements as those which composed it. The first striking feature was the number of lakes, occupying distinct valleys, which seemed to lie between low ranges of hills projecting from a table land. A shallow depression in the horizon instantly struck us as the Dividing Ridge, separating the waters of Ashwanipi from those of the Moisie, the waters which flow into the North Atlantic from those which flow into the Gulf of St. Lawrence. The large lake below the Dividing Ridge was the one which the Nasquapee said we should see, where he had wintered with Domenique and his tribe, and from which he had departed scarcely a month before. Far to the north-east was a very high range of mountains, on whose top the snow, glistening in the sun, could easily be distinguished with a glass. We were on the edge of the burnt country, which extended to the north-northwest and south, while towards the east forests of stunted trees bordered the lakes, and crept a little way up the sides of the hills. The whole country appeared to consist of a succession of low mountains, few of them exceeding in height the one which formed our point of view.

I counted twenty-two large lakes, besides numerous small sheets of water, which evidently merged into swamps, and are probably more or less connected in the spring of the year. A countless number of erratics were scattered in every direction, best seen, however, towards the south and west in the burnt country. The hill-sides appeared to be covered with them, and many were of very large dimensions. Those on the bare rock where we stood were well water-worn, lichen-covered, and appeared to consist of gneiss, to the exclusion of every other variety of rock. I looked for glacial striæ, but saw none; I searched carefully for moraines, but could not distinguish any, unless every valley could be said to possess its own moraine, - an idea which the absence of glacial strix for a time dispelled. The striæ may long since have disappeared under the singular atmospheric influences of the climate of this elevated region. The entire peninsula was perhaps once covered with ice as Greenland now is. The erratics appeared to be uniformly distributed; but it must be observed, that in the valleys the caribou moss covered them, so that their number or the manner of their distribution could not be well discerned.

Long and anxiously I looked round in every direction to see if I could distinguish any signs of animal life, but without success. No sound was audible except the sighing of the wind. A marshy lake lay at the foot of the hill, which we had ascended with the greatest caution on the opposite side, but no waterfowl were visible or even fish seen to rise. Not a bird, or butterfly, or beetle appeared to inhabit this desolate wilderness. Behind us lay the burnt country, built up of erratics. Yet what a history
did it unfold! A history of continental glacial ice, wearing down rocks and grinding out lake basins - a history of deep seas, bearing boulder-ladened floes of ice, dropping their burdens as they floated over- a history of stranded icebergs and irresistible currents - a history of gradually emerging land, of changing coast lines, and of continual change in the position of the travelled rocks a history of frosts, snows, swollen lakes and rivers - of long dreary winters, short scorching summers-and, finally, a dreadful conflagration.

But most bewildering of all reflections was the agethe infinite age - of the rocks of the Labrador Peninsula. What exposure to elemental warfare! -what a lonely experience of the changes which this world has undergone! The earliest known continent, the longest above the sea, dry land during the countless ages which formed the great Silurian, Devonian, and Carboniferous periods. First, ice-covered for ages, during which frozen epoch it underwent that change in surface to which Greenland is now being subjected; then, possibly, dry land, when all the south and west was deeply covered with the ocean, and the immense Secondary deposits were being elaborated all the way from the Arctic Ocean to the Gulf of Mexico,-slowly sinking and submerging during part of the Tertiary and post-Tertiary periods to the depth of many thousand feet,-slowly rising subsequently fully 3,000 feet above the ocean level, yet preserving still the same old front, though far more worn but much less troubled than in those dim and distant ages at the close of the Laurentian period, when it emerged fresh and new from a Laurentian sea.

Cartwright, in his 'Sixteen Years in Labrador,' speaks of the boulders disclosed when fire has swept off the covering of moss, and his account refers to the northeast coast, 400 miles from the head-waters of the Moisie.

- When a fire happens on a peat soil, at the end of a very dry summer, the whole of it is burnt away to a great depth, and will not only produce no timber again, but also is both dangerous and troublesome to walk over ; for great numbers of large stones and rocks are then left exposed on the surface, and the Indian tea, currants, and other plants, which grow between, often prevent their being discovered in time to avoid a bad fall ; but if the fire happens early in the summer, or when the ground is wet, the soil takes no damage. The burnt woods are also very bad to walk through, until the trees are felled and pretty well gone to decay; but in how many years that will be I had no opportunity to observe: I know it is not a few, and that.it depends on particular circumstances.'

In the narrow tongue of forest through which we had passed on our way to this mountain, the only trees seen were small spruce, larch, and birch, with a few Banksian pine.

Growing in crevices and hollows of the rock, the Labrador tea-plant was common and caribou moss abundant; time-stains, tripe de roche, with other lichens of similar growth, painted the gneiss, and a few other familiar dwarfed shrubs and flowers decorated this lonely and dreary wilderness. Of birds we saw only one - a spruce partridge, tenderly luring us from her nest and young.

The country we were surveying was on the borders of the table land of the Labrador Peninsula, through
which the great river Ashwanipi flows towards the Atlantic. Domenique, Bartelemi, and our Nasquapee guide, all told us that the portage which separated the lake before us from the tributary of the Ashwanipi was short and low. It seemed to be a broad valley between two rounded hills, apparently on the same level as the one on which we stood. We estimated the distance of the lake on this side of the Dividing Ridge at less than fifteen miles from us in an air line, and deeply did we regret that the low stage of water in the river prevented us from reaching it. Had we been a fortnight earlier, it would have been possible to pass with half loads, if our canoe did not draw more than six inches of water. The old Montagnais path over the portages was quite as clearly marked here as on the Great Portage. The remains of their camp grounds until we entered the burnt country were also numerous; and it is worth observing, that even where the moss on either side had been destroyed by fire on sandy ground, the old well-beaten path was plainly visible.

This is one of the winter hunting-grounds of the tribe of Montagnais of which Domenique is Chief. No doubt before the fire occurred, three years ago, caribou moss was very abundant and the deer sufficiently numerous to sustain a few families. How utterly desolate I thought the whole Ashwanipi valley must be if Domenique preferred living last winter on the shores of the lake before us, with such a wide expanse to the north-east and north to choose from!

He himself killed in this neighbourhood thirty caribou; and yesterday Michel pointed triumphantly to the last

lake we had crossed, saying, 'Here I killed a caribou last winter.' What a life to lead among these rocks and frozen lakes! But no doubt when a pure mantle of white covers rocks, blackened trees, lakes, boulders, and burnt land, the aspect of nature changes, and assumes the same outline as in all other undulating regions where snow falls deep and lasts long. Five or six families wintered on the other side of the low Dividing Ridge in the valley of the Ashwanipi. They were Nasquapees ; and Michel told me that his father's tribe and they were accustomed to pay visits, for the purpose of holding a feast, when either party had been successful in killing two or more caribou.

Savage life, in such a wilderness as the one I am describing, is sometimes joyous to the Indians themselves if they can kill enough to eat. The excitement of the chase, the pride, delight, and temporary comfort of success, more than compensate for privations to which they are accustomed, or for the anxieties which they do not trouble themselves about. They kill a caribou, store away a little, make a gluttonous and wasteful feast of the greater part, sing, boast, and sleep, until hunger wakens them, and the cold reality of their desolation is before them again, to be relieved and forgotten in never-changing routine.

At no time does an Indian look so well, and, if he is fine-featured, so really handsome, as when just returning from a successful and not too fatiguing hunt in the winter. His step is firm and proud, his eye dilated, clear, and brilliant - not bloodshot and contracted, as it usually is from exposure to smoke in his lodge. His cheek is perceptibly tinged with crimson, seen through the dark skin ; his hair is soft and drooping, wet with severe toil
notwithstanding the intense cold. He enters his lodge with a loud shout of greeting, throws down his burden, cuts off a slice, hands it to a relative, saying, 'Eat! Run and tell so and so to come. I have killed a deer; we will feast.' Michel told me of a great feast his father made last winter, when he had killed a fat bear,-how he and one of his cousins were sent on a message of invitation across the Dividing Ridge to the people of his own tribe, bearing also with them a small supply of meat for the squaws and children who could not come such a long distance - a full day's journey on snow-shoes, - that when he was close to their lodges, he met two hunters coming to Domenique's camp, bringing part of a caribou and an invitation to a feast, for they had killed four. The whole party returned to the Nasquapee camp, bringing the news, and on the following morning nine in all set out, each with a little present of meat, and arrived late in the evening at Domenique's camp. The feast then began ; the bear was cut into two halves, and one half placed on each side of a large fire in Domenique's lodge. Each Indian had a short stick and a knife. They cut off bits of meat, roasted it for a minute, and ate it, and so continued feasting until the bear was demolished. Some of them, when satisfied, would lie down, and after a short time rise again and renew their meal. The bear was not completely eaten until daylight on the following morning. They slept during the whole of that day and the following night. On the third morning, Domenique and several other Montagnais went back with the Nasquapees to their camp and had a similar feast of caribou. Nichel spoke of this savage enjoyment without much emotion;
but poor Louis, who eagerly interpreted his friend's narrative, was painfully affected. To use a common but expressive phrase, 'his mouth watered;' he wished he had been there. It did not often happen to the lazy Louis to be the invited guest to such a feast, and his diet during the winter had been seals, which he said were very good, yet not so good as bear. 'Nothing like bear - fat bear very fine.'
'On which side of the lake did you hunt last winter ?' I enquired of Michel, who was surveying the country from the summit of a knoll near Caribou Lake. Louis had to repeat the question thrice before Michel answered, and even then I saw him looking towards the east, moving his hand gently up and down, and apparently following some imaginary object. His face was particularly bright and intelligent, and when he suddenly turned round to Louis and pointed towards the north and northeast, I was very much struck with the peculiar excited expression of his face. 'What's the matter with Michel?' I exclaimed.

Louis made due enquiries ; but although Michel spoke rapidly, and pointed in various directions, yet Louis answered not. Arousing him, I said-
' What is he saying, Louis?'
'Tell you soon ; wait a bit ;' was the only reply I could elicit. Louis now began to question Michel, and an animated conversation sprang up between them, in which Michel made many references to the surrounding country, and Louis listened with more than ordinary attention. At last, with his face brighter than I ever observed it before, VOL. I.
he told me the reason of Michel's excited manner and the subject of conversation.

It appeared that last winter Michel and two of his cousins had been stationed near Caribou Lake by Domenique to watch for caribou, and prevent them from taking a certain path over precipitous rocks which they were known to frequent, and over which the hunter could not follow them swiftly enough when only a little snow was on the ground. The object of the hunter was to drive the caribou through a favourable pass, which would make the death of some of them a matter of certainty. Michel, when we first saw him on the mound, was mentally reviewing the incidents of that day's hunt, and indicating with the undulatory motion of his hand the direction the caribou had taken. The story which he was telling related to a singular incident which happened to himself. He had been watching for some hours with his companion, when they heard the clatter of hoofs over the rocks. Looking in a direction from which they least expected caribou would come, they saw two caribou pursued by a small band of wolves, making directly for the spot where they were lying. They were not more than 300 yards away, but coming with tremendous bounds, and fast increasing the distance between themselves and the wolves, who had evidently surprised them only a short time before. Neither Michel nor his companion had fire-arms, but each was provided with his bow and arrows. The deer came on ; the Indians lay in the snow ready to shoot. The unsuspecting animals darted past the hunters like the wind, but each received an arrow, and one dropped. Instantly taking a fresh arrow they waited for the wolves. With a
long and steady gallop these ravenous creatures followed their prey, but when they came within ten yards of the Indians, the latter suddenly rose, each discharged an arrow at the amazed brutes, and succeeded in transfixing one with a second arrow before it got out of reach. Leaving the wolves, they hastened after the caribou. 'There,' said Louis, ' quite close to that steep rock, the caribou which Michel had shot was dead: he had hit it in the eye, and it could not go far. Michel stopped to guard his caribou, as the wolves were about; one of his cousins went after the deer he had hit, the other went back after the wolves which had been wounded. The wolf-cousin had not gone far back when he heard a loud yelling and howling. He knew ẇhat the wolves were at; they had turned upon their wounded companion, and were quarrelling over the meal. The Indian ran on, and came quite close to the wolves, who made so much noise, and were so greedily devouring the first he had shot, that he approached quite close to them and shot another, killing it at once. The caribou-cousin had to go a long distance before he got his deer.'

Such was the substance of Louis' narration of Michel's story ; and the excited manner and heightened colour of the Nasquapee arose from his killing his caribou over again, in a happy mental renewal of the wild hunt which he and cousins had so triumphantly brought to a close.
'Did you always have plenty to eat during last winter in this part of the country, Michel?' I asked.

The bright eye soon resumed its natural lustreless expression as the young Nasquapee's thoughts reverted to painful scenes of distress, arising from want of necessary food and even absolute starvation, to which he had been
an eye-witness, not three months since, in these same dreary wilds.

In the spring of the year, before the geese began to arrive, the caribou left this part of the country, travelling north. Domenique could not follow them, as it was impossible to transport his family across the country when the snow was beginning to go. The ptarmigan, or white partridge, passed away with the deer, and the interval between the disappearance of these animals and the arrival of the geese is always one of suffering to the improvident Indians of this country.
'What did you eat?' I said to Michel.
He pointed to some patches of tripe de roche which were growing on the rock close to us.
'Is that all?' I asked.
He advanced a step or two, looked round about him, then said something to Louis.
'He says they made broth of the birch buds.'
'Tripe de roche and broth of birch buds ! anything else?'
'Nothing.'
Ask him whether he ever heard of Indians eating one another? Louis asked the question, but Michel made no answer. Louis however volunteered the information, that Indians did eat one another when they were starving, naively saying, 'if they did not, all would starve.'

There can be no doubt that instances of cannibalism not unfrequently occur among the Nasquapees in the winter season. Even Père Arnand, the zealous missionary, states that such is the case. 'On a également à déclarer quelques cas d'antropophagie, mais dont les souffrances excessives de la faim avaient été le seul motif déterminant,
et encore ce sont là des traits tout-à-fait à part. Car nos Indiens se montrent généralement bons, en toute occasion, les uns envers les autres; on voit qu'ils aiment à se rencontrer et à se rendre service.'*

The advent of the geese is a joyful time to the Montagnais and Nasquapees, who winter in the far interior of the Labrador Peninsula. When caribou, partridge, and fish fail, there is little left until the geese come. Indeed throughout North America the advent of the geese is honoured or welcomed in many different ways. Even the name of a month or moon is derived from the 'moon when the goose lays her eggs.' The goose-dance is a time-honoured custom among the Crees of the Saskatchewan; and similar rejoicings and ceremonies exist among the heathen Montagnais and Nasquapees. On the coast of Hudson Bay the coming of the geese is watched with the greatest anxiety. When the long and dreary winter has fully expended itself, and the willow grouse have taken their departure for more southern regions, there is frequently a period of dread starvation to many of the natives, who are generally at that time moving from their wintering grounds to the trading Posts.

The first note, therefore, of the large gray Canada goose is listened to with a rapture known only to those who have endured great privations and gnawing hunger. The melancholy visages brighten, and the tents are filled with hope, to which joy soon succeeds, as the son or brother, returning from a successful hunt, throws down the grateful load. $\dagger$

[^29]It is computed that not less than 74,000 geese are killed annually by the Indians of Hudson's Bay, and that not less than $1,200,000$ geese leave their breeding grounds by the Hudson's Bay line of march for the South, being the probable proportion of the vast army of at least $2,000,000$ geese, which with wild clang pass across the continent between the Atlantic and the Rocky Mountains, to seek a winter home in the South.*

The mode in which Domenique with his tribe of Montagnais on one side of the Dividing Ridge, and the Nasquapees on the other, passed their winter, may be described in a few words.

Having selected their camp ground near the lake, they swept away the snow with little wooden shovels constructed for the purpose, and pitched their lodges of caribou skin. The inside of the tent was lined with spruce branches, with the exception of a space about five feet square in the centre, where the fire was placed. Spruce branches were also placed round about the tents to the height of three or four feet. This miserable shelter formed their home throughout the intense cold of an almost arctic winter, and it has formed the dwelling places of these Nomadic tribes for centuries. When the weather permitted, the hunters went out to seek for caribou or ptarmigan, and to set and visit their traps, which were arranged in a circuit of many miles. Towards evening they brought home the proceeds of the day's hunt. The squaws set to work to skin the marten or

[^30]foxes, and prepare the stretchers. The men lay before the fire after having eaten, and smoked, talked or slept. If they succeeded in killing a caribou, they would have a feast, and eat much more than was absolutely necessary, lying throughout the next day in a half-stupid condition.

The women employed themselves in dressing the caribou skins, either for sale at the Hudson's Bay Company's Post in the following spring, or to convert into articles of clothing. They also made snow-shoes, mocassins, and decorated their new garments with porcupine quills. If the weather was bad, so that the men could not visit the traps, they made bows and arrows or fish-hooks, or wiled away the time in smoking and telling stories of their success in hunting, or other incidents of savage life. After having remained for a few weeks in one place, the whole tribe move camp, following the caribou, or going where fresh tracks of those animals had been observed - perhaps two or more days' journey distant.

The tents are taken down, the baggage and little children placed in sledges made of two thin birch boards, laced together; all who can walk attach their snow-shoes, and the procession sets out in single file. The young men lead the way, making the road through the snow for the others to follow. When they reach the point of their destination, the whole process of raising the lodges and lining them with spruce boughs has to be repeated,indeed, every time they move camp, which, when the caribou are wild, occurs frequently during the winter--for they must follow the wandering animals, on which they depend to a great extent for subsistence. The lakes do
not teem with fish like those north-west of Lake Superior and Huron. It is very difficult for the Montagnais or Nasquapee of the interior to catch fish in winter, both on account of their scarcity, and the severity of the climate, which freezes the lakes to a great depth. In the region between Superior and Winnipeg, the Ojibways plant four or five sticks in the ice, round a hole which they are careful to keep open with their hatchets. A young squaw, on the coldest morning, throws her blanket round her, hurries to the hole in the ice, casts her blanket over the sticks, crouches beneath it, and begins to fish, catching in half an hour a dozen or more pickerel or wall-eyed pike, with which she returns to her lodge.

But the Indians of the Labrador Peninsula have no such resource, and if the caribou fail they must look to the ptarmigan (now that the porcupine is gone), to the accidental proceeds of their traps, or to the tripe de roche -the last resource of sharp hunger. Otelne, a Nasquapee from Ashwanipi, told me at Seven Islands that even 'he remembered the time when starvation was rare among his people; but the caribou and porcupine were numerous then.' Such is the precarious winter-life of these savages, and truly the aspect of the country which they delight to call their home is sufficient to cool the ardour of the warmest admirer of a life in Labrador wilds.

After we had returned from our excursion, and held some conversation with Michel, we became convinced that it was wholly useless attempting to proceed any further on foot, and it would be impossible for us, with our small supply of provisions, to go round the shores of the lakes, and through the swamps which separated them
for many miles. Had there been any hope of procuring caribou, rabbits, ducks, porcupine, or even a sufficient supply of fish, we should not have hesitated; but to attempt to penetrate into such a country wholly dependent upon the provisions which we could carry on our backs, was out of the question. Even if I had been sufficiently selfish to insist on the men subjecting themselves to the mere fatigue of journeying over barren rocks, surrounded by treacherous moss-covered boulders and succeeded by deep swamps, it is not improbable that the mosquitoes and black flies would soon have settled the question. The only way in which we could advance was by dragging the canoes through the river, whose bed was so much obstructed by large stones and boulders, that we might endanger the safety of our frail craft, already, with one exception, much shattered. To lose our canoes would be almost equivalent to losing the lives of the whole party, for it would have been almost impossible for some of us in summer time to have reached the coast on foot.

In winter most of the difficulties of such a journey disappear, for the road then lies over frozen lakes. Caribou are more plentiful, and far more easily tracked and taken; there are no tormenting flies, and rapid progress can be made.

Soon after returning to camp, I made up my mind that it would be as well to prepare to descend without delay, and therefore I arrested the operations of the men, opened the câche which had been made, and, after a few hours' rest, we commenced our return.

## CHAPTER XVI.

'THE DARK DAYS OF CANADA.'

Traditional Accounts of Conflagrations in Labrador-Dark Days of 1785-Chief Justice Sewell's Account of the Dark Days of 1814Ashes, Smoke, and 'thick Weather' - Traditional Account of Volcanoes in Labrador-Henri Nouvel's Account of the Earthquake in 1663-Lieutenant Ingall's Statement-Captain Baddeley's State-ment-M. Gagnon's Account of an Eruption in 1785 in the rear of St. Paul's Bay - List of Earthquakes in Canada from 1663-1861-The Fire-Mountain of the Nasquapees - Probability of 'the Dark Days' having been occasioned by Fires in the Interior burning the Lichens and Mosses - Mr. Davis' Account - Interest of the Subject.

ACCOUNTS of extensive conflagrations in the interior of the Labrador Peninsula are traditional among the Indians, but it is very difficult to form any true conception of the area over which trees and moss were destroyed by fire, from the very imaginative forms of expression frequently adopted by these people, as well as from the difficulty of meeting with those who are personally familiar with the whole of the country overrun. It is very evident, from the description given to me by Otelne and Arkaske, Nasquapees at Seven Islands, by Domenique, who had often hunted in Ashwanipi and below that great lake, by Bartelemi and by Michel, both of whom had hunted near Petichikapau, that a vast portion of the table land of the Labrador Peninsula is a burnt country. Fire has
destroyed the stunted trees, the thick lichens, and luxuriant mosses, and driven the main body of the caribou to the north-eastern and northern part of the country.

The occurrence of a great conflagration is an interesting question in the history of so wild a region as eastern Canada and Labrador; for, with the destruction of the means of subsistence, the nomadic Indian races must disappear. Annual fires in the great prairies of the valley of the Saskatchewan have driven the woods back some eighty miles from their former limit, and the same destructive agent has extended the prairie land east of the Red River on the north towards the Lake of the Woods.

It is not improbable that those singular phenomena, which produced what have been called 'The Dark Days of Canada,' may have been occasioned by the burning of a vast area of moss and forest in the Labrador Peninsula, and have originated much of its present mournful aspect.

In the year 1785 , several so called 'dark days' occurred in Canada, and excited much apprehension among the ignorant and speculation among the learned. Lower Canada only was peopled by civilised man at that time, so that we have no account of the occurrence of the ' Dark Days' in the upper province.

It is recorded in the 'Quebec Gazette' of October 20, 1785 , that on Sunday, October 16, 1785, it was so dark soon after ten in the morning that printing from ordinary type could not be read. The phenomena are described with some degree of minuteness by Chief Justice Sewell.
'On October 9, 1785, a short period of obscurity
occurred at Quebec about four in the afternoon, and during its continuance the sky in the north-east quarter of the heavens exhibited a luminous appearance upon the line of the horizon of a yellow tinge. On the 15 th there was a repetition of the same phenomena at a little earlier hour, with violent gusts of wind, lightning, thunder, and rain accompanied, as on the 9 th. The morning of October 16 was perfectly calm, and there was a thick fog. Towards nine o'clock a light air from the north-east sprang up, which increased rapidly. The fog by ten o'clock was entirely dissipated; black clouds were then seen rapidly advancing from the north-east, and in half an hour print could not be read. The darkness lasted for about ten minutes. At twelve a second period of obscurity took place; then a third, and a fourth, and fifth, at intervals : at half-past four it was dark as midnight.'

Four distinct accounts of similar phenomena are recorded by Chief Justice Sewell* as occurring on July 3, 1814. One from the pen of an officer of the Royal Engineers, supposed to be Captain Payne, taken from Tulloch's 'Philosophical Magazine,' describes the appearances at the Bay of Seven Islands above Anticosti on July 2nd and 3rd. A second describes what occurred on the 2nd at Cape Chat, from observations made by some officers, who were on board the transport Sir William Heathcott, which lay the whole of the day at anchor in the River St. Lawrence at that point. The third contains some additional observations respecting the appearances on

[^31]July 2, made on the same day in another ship, which also lay off Cape Chat. And the last relates to the phenomena which were observed by the Chief Justice himself upon the banks of Newfoundland.
' On July 3rd, twenty miles from the Bay of Seven Islands, the clouds appeared to be coming rapidly from the northward ; the atmosphere was thick and hazy, and at night the darkness excessive. About 9 P.m. a sort of dust or ashes commenced falling, and continued during the night; towards the morning the whole atmosphere appeared red and fiery to a wonderful degree, and the moon, then at the full, not visible ; the appearance through the cabin windows and crystal lights singular in the extreme, as if surrounded by a mass of fire; the sea sparkling much, and in a manner not usual in these latitudes.' On the following day the sea was found to be covered with ashes, the wind having died away to a dead calm early in the morning.

A bucket of water taken up looked as black as writing ink ; the ashes ' appeared as if those of burnt wood.'

On July 4th, the ashes were still observed to be falling in small quantity. 'The ashes collected on deck appeared to be those of burnt wood, but darker and more heavy than the ashes of a tobacco pipe.'

The narrative of the officers who were on board the transport Sir William Heathcott states that on July 2nd, 1814, there was a heavy fall of ashes and sand. The wind blew gently from the north shore of the St. Lawrence. The third account states that on July 2nd, when off Cape Chat, for three days previously some ashes and smoke had been observed, but on the second no appearance of
burnt wood was seen; but at 2.30 P.m. of that day the sun was obscured, and a total darkness set in, which continued until about sunset.

The Chief Justice's own observations were as follows :' July 1814—Sunday.-A most extraordinary day. In the morning dark thick weather, and fog of a deep yellow colour, which increased in density and colour until 4 o'clock P.M., at which hour the cabin was entirely dark, and we dined by candle-light; the binnacle also was lighted shortly after.'

The relative positions of the different observers at the time when the phenomena described in the preceding paragraph occurred, shows that the northerly wind which blew on July 2nd carried clouds of ashes, sand, smoke, and vapour across the River St. Lawrence, in a line from the Bay of Seven Islands, to Cape Chat, and then by the westerly wind which set in on the night of July 2nd across the Gulf of St. Lawrence and the Island of Newfoundland to the great banks, and on July 3rd enveloped the vessel in which the Chief Justice was sailing in the same obscurity with which the other ships off the Canada coast were shrouded on the preceding day.

Chief Justice Sewell attributes these phenomena to volcanic action rather than to an extensive conflagration. He says : 'As to the conflagration of a forest. The facts of which we are in possession, do not appear to warrant a belief that such can be the cause. It seems impossible to suppose that the conflagration of a forest could have produced a mass of smoke so dense and so extensive as to overspread, as it did in October 1785, the surface of a territory exceeding certainly 300 miles in length, and
probably 200 miles in breadth, and producing at its utmost longitudinal extremity, and at mid-day, the obscurity of the darkest night. And as the whole of the cause of this obscurity próceeded, apparently, from the Labrador country, where forest trees are few in number, stunted in size, and spread in isolated patches over a general surface of rock, it is the more improbable.'

The Chief Justice inclines to the view, that the phenomena of the 'Dark Days of Canada' are to be attributed to an active volcano in the Labrador Peninsula, and he draws attention to the coincidence in the facts stated in the narratives of the different observers quoted, and those which are mentioned by Charlevoix in his description of the earthquake in 1663: 'A Tadousac,' says Charlevoix, 'il pleut de la cendre pendant six heures'-tom. i. p. 367; also on page 336 , he adds, 'Une poussière qui s'éleva fut prise pour une fumée, et fit craindre un embrasement universel.'

Tadousac was situated at the mouth of the Saugenay River. The Chief Justice also states that among the Indian tribes on the north shore of the St. Lawrence a traditional belief of the existence of a volcano in the Labrador country is said to prevail.

In the journal of a voyage in the country of the Papinàchois, a Montagnais tribe on Lake Manicouagan in 1664, Henry Nouvel, a Jesuit missionary, states that on May 11th he arrived at a river which the Indians called Kouakoueou, and saw the effects of the earthquake on the rivers, the water which flowed in them being quite yellow, and preserving this colour until they mingled with the St. Lawrence. The same effect was noticed on the

Bersamits River, and the Indians dare not venture on them in their canoes.

He also relates that the earthquake had such a powerful effect upon an Indian conjuror named Ouiskoupi, that he renounced his craft and gave up his medicines to the missionary, who burnt them.*

Lieutenant Ingall, who explored the country between the St. Maurice and the Saugenay in 1828, states that the opinion very generally prevails, borne out by tradition, that an active volcano is somewhere in existence among the mountains south-east of the Saugenay, but, he adds, it wants the confirmation of ocular proof, for not one of the Indians who traverse those regions in search of game have ever seen the slightest appearance of fire issuing from the earth, nor did Lieutenant Ingall hear of any scoriæ or vitrified rock having been discovered in the country. $\dagger$ Without doubt the coast between Cape Tourmente and Malbay is frequently troubled with shocks of earthquakes, but whether these shocks are occasioned by the working of some neighbouring volcano is a matter of mere speculation. Nor does the appearance of the land bear evidence of there having ever existed a volcano to the south of the River Saugenay, as from the well-known fertility of decomposed lava we should find a very different soil from that hitherto discovered. If a volcano is at the present period in a state of active operation, I should be much more inclined to suppose it

[^32]seated among the unexplored mountains of the tableland of Labrador, to the north-east of the Saugenay or the Gulf of St. Lawrence.

In October 1785 the obscurity extended so as to comprehend on one side Fredericton, New Brunswick, and on the other Montreal. A ship, the Adamant, was on the morning of October 16 th off the end of the island of Anticosti. There it was then clear weather ; but towards the west the ship's company saw a heavy black cloud, and by twelve on the same day had sailed into it, and very shortly afterwards found themselves in darkness.

In 1828 Captain F. H. Baddely, R.E., was engaged by the Canadian government in exploring the Saugenay country, and in his Report, which was published at the time, he states that Malbay or Murray Bay, on the St. Lawrence, 90 miles below Quebec, has long been remarkable for the frequency of earthquakes.

Shocks are most frequent in January or February : they occur about nine or ten times a year. 'It is not,' says Captain Baddely, 'perhaps generally known that there exists highly respectable evidence of a volcanic eruption having happened somewhere in the rear of St. Paul's Bay, not far from Murray Bay. No one, we think, will feel disposed to doubt the fact after perusing the following account of it; with which, through the politeness of Messrs. Gagnon and Chaperon, we have been furnished. It is the former gentleman who writes :
' In the place of a journal, which happens to be lost, be kind enough to receive the following :-

- Tuesday, December 6th, 1791.-At St. Paul's Bay, and at other neighbouring places, at about a quarter after vol. I.
seven, a severe earthquake was felt; the whole night was disturbed by small ones repeated at intervals, and by a sudden shaking running towards the east. The shocks werè felt for forty-one days, from two (shocks) to five a day. On Monday, December 5th, the shocks were fully one-third weaker than those of the 3rd; the others were only small ones, or rumbling noises, the weather being always gloomy. Before the night of the 26 th, 27 th, I had not yet remarked any eruption or thick smoke, at times curling into a flame. The temperature at a quarter after seven in the evening was $11^{\circ}$ above zero by the thermometer of Réaumur (plus $56^{\circ} \cdot 7$ of Fahrenheit); the next morning the heat had risen to $21^{\circ}$ (plus $79 \frac{1}{4}$ of Fahrenheit). Two mountains near my dwelling at some $40^{\circ}$ north-west have a valley between them, so that you may see beyond them. It is by this valley or passage that I saw a continual eruption, mixed with smoke and flame, which appeared very plain on the horizon, at other times struggling among themselves, as if too oppressed in their issue. I have remarked several times that this eruption is always followed by shocks of earthquakes the same day, and when it fails a dark and yellowish day follows. When the earthquake arises, yqu can predict that it is going to be so much the nearer as this agitated smoke struggles to get out. Some persons to whom I had shown these preparations of the earthquake, warned me in their turn that in a moment the earth would shake. And the effect confirms it. Finally, on this night of the 26 th, 27 th, a most beautiful spectacle was produced. The whole atmosphere was in flames and agitated, one's face suffered from the heat, the weather was very calm,
the eruption continued the whole night with flames. The certain approach of the earthquake is known when, by the passage between the mountains, you see a cloud, or smoke, quiet or agitated, and on the left and right the horizon is perfectly clear.
'A fall of ashes covering the snow in 1791 was also within the recollection of many of the inhabitants of St. Paul's Bay.'

The following list of earthquakes which have occurred in Canada is from the Catalogue prepared by Mr. Mallet for the British Association.*

| Year | Ionth | Remarks |
| :---: | :---: | :---: |
| 1663 | February | Very violent. |
| 1665 | $\text { October } 15$ | Tadousac and Murray Bay, violent. - Violent. |
| 1672 | March and April $\dagger$ |  |
| 1732 | September 5 |  |
| 1744 | May 16 | Quebec. |
| 1755 | October | Unusual rise and fall of the water of Lake Ontario. $\ddagger$ |

[^33]| Year | Month | Remarks |
| :---: | :---: | :---: |
| 1791 | December | Severe shocks at St. Paul's Bay. |
| 1796 | February | A violent shock. |
| 1816 | September 9 | - A severe shock at Montreal. |
| " | , 16 | - A second shock, less violent. |
| 1818 | October 11 | . Felt near Quebec. |
| 1819 | August 15 | . At St. Andrew's. |
| " | November 10 | - At Montreal, slight, followed by an awful storm, with rain-impregnated with matter like soot. |
| 1821 | February | . At Quebec, a slight shock. |
| 1823 | May 30 | . On shore of Lake Erie. |
| 1828 | August 20 |  |
| 1831 | July 14 | - At Murray Bay, Beauport, \&c. Walls and chimneys thrown down at the former place. |
| 1833 | March and April | . Severe shocks at Murray Bay. |
| 1840 | September 10 | . At Hamilton. |
| 1841 | Spring | . Said to have been felt at Quebec. |
| 1842 | November 8 and 9 | . Montreal, Three Rivers, \&c. |
| 1844 | " " | . Montreal. |
| 1847 | " " | . $\quad$ |

'First. That the lakes are sensibly and rapidly affected by winds and storms, depressing the water on the side from which the wind blows, and raising it on the opposite side. (In November 1859 the ranges due to winds in Lake Erie amounted to $5 \cdot 59$ feet at Monroe, and to $6 \cdot 20$ feet at Buffalo.)
'Second. That independently of the wind fluctuations, the lakes are subjected to changes of level, due to the relative proportions of their supply and discharges - the supply arising from rains and drainage of the watersheds - the discharges arising from evaporation and the flow through their outlets.
' Thirdly. That, as a general rule, these last fluctuations occur annually, there being a high and low stage every year-the former in summer, the latter in winter - and that within small limits of time these annual changes are very nearly simultaneous.
' Fourthly. That these annual fluctuations, both the high and the low stages, vary in degree from year to year, they being the effects of variable causes, and that the extreme ranges, as yet reported between the highest and lowest waters, has amounted to 5.5 feet-in other words, the above phenomena are those of a great river flowing through extensive reservoirs, which receive and absorb the freshets, and thus modify, both in degree and time of occurrence, the ordinary fluctuations.'


The number of earthquakes which have visited Canada since its discovery by Europeans has been at least twentynine,* but it is highly probable that this enumeration falls far short of the actual occurrences of this phenomenon. Respecting the fire mountain of the Nasquapees north of Lake Manicouagan, about 200 miles from the coast, too little is known to assert positively that it is an active volcano. The name is suggestive, although it is probable that, from the long intercourse between many families of this people and the fur traders, such a remarkable feature of the country would have been known to them.

Lake Manicouagan was visited by a Jesuit missionary in 1664 , but although he mentions the earthquakes, he does not allude to the fire mountain.

Assuming that there existed in the great peninsula of Labrador no other combustible material besides the stunted trees, there would be good ground for attributing the 'Dark Days of Canada' to some other agency than that of burning vegetable matter; but when we reflect that the country is almost everywhere covered with a thick coat of lichens and mosses where these have not been

[^34]burnt, and that they are even better adapted, when dry, to burn with extraordinary rapidity and afford during their combustion a greater cloud of smoke than forest trees, it will be apparent that the precise element for producing the phenomena of smoke and ashes existed in the Labrador Peninsula to a remarkable degree. Dry caribou moss burns with wonderful rapidity, as we found to our cost ; it also emits dense volumes of smoke, and leaves behind a great quantity of ash and charcoal. There is no reason to suppose that the table-land of the Labrador Peninsula was covered with forest centuries ago, for the missionary before mentioned, Henri Nouvel, states that an Oumamiois chief told him that in the country north of Lake Manicouagan the trees were very small, and there was no birch bark to make canoes. The whole of the burnt country through which we passed is still covered with charcoal and ashes, where sand forms the substratum: from the rocks they have been washed away by rains, but on the sandy flats they form still a black cake. The occurrence of sulphur in the ashes, as described by the writer in the 'Quebec Gazette' of Oct. 27, 1785, is problematical.

After having witnessed the combustion of caribou moss on a large scale, and the appearance of the burnt country on the borders of the great table-land of Labrador, I am inclined to the opinion that the 'Dark Days of Canada' were the result of a vast conflagration in the interior of the Labrador Peninsula, and that the materials which assisted most in feeding the fires were the lichens and mosses which grow in such rich and extraordinary luxuriance and beauty in that desolate
country. The astonishing speed with which fire runs through the moss is well described by Mr. Davies, quoted in Chapter XIII., and there is no valid reason why a fire should not stretch from Hudson's Bay to the Gulf of St. Lawrence in a few days, as far as the combustible nature of the fuel is concerned; but its progress is arrested by the presence of lakes, many and broad, and the swamps by which many of them are terminated. A broad sheet of flame stretching for many miles across is at once divided by a lake, and as these lakes often occur one after another for many miles, the fires are broken and become local in their effects, except in certain cases when the direction of the wind changes in such a manner as to distribute them more widely. A fire in the Labrador Peninsula, where the trees are few and far between, very much resembles a fire in the prairies; but owing to the extraordinary dryness of the caribou moss it spreads with much greater rapidity. It would be impossible to escape from an approaching sheet of flame in Labrador by speed. The only plan is to scrape the moss from a few square yards, which is done with the utmost ease, as it adheres to the rock or soil very loosely, and then to lie down upon the bare earth. The smoke arising from a fire made from this material is very penetrating, as I experienced when our canoes were in danger on one of the portages. The air is filled with fine dust arising from the ashes ; and on sandy plains, where the lichens and mosses are deep, and other varieties besides the caribou lichens exist in abundance, the charcoal that remains behind covers the soil with a uniform mantle of black. If a volcanic eruption had taken place since the
time when Canada was discovered, it is probable that the early missionaries, the Courriers des Bois, the fur traders, or the officers of the Hudson's Bay Company, would have recorded the phenomenon or learnt the fact from Indians. Still it must be acknowledged that the term 'fire mountains,' taken in connection with the earthquakes which have visited the region of the Lower St. Lawrence from time to time, and the testimony of Monsieur Gagnon, is quite sufficient to turn attention to the probability of such an occurrence having taken place in recent times and the possibility of its renewal.

## CHAPTER XVII.

## THE RETURN.

The Fishing Spoon-Dimensions of Esquimaux Fishing SpoonsA French Half-Breed - Description of a Trout - Trout caught with a Spoon in Lake Superior - In Lake Huron - Large Trout of Lake Huron - Ice in July - Descending Rapids - Ke-way-den - Ke-way-den going down a Rapid - Ke-way-den and the Compass - Nasquapee Letter and Map - Nasquapee Post-Office - Lonely Lake - Muskeg Lake - Vegetation in full Leaf at Trout Lake - Tradition of a Battle near Trout Lake - Paul le Jeune in 1632, and the Montagnais - The Death of an Iroquois The Incursions of the Iroquois into the Labrador Peninsula The Mistassimi Indians - Names of Places and Rivers derived from Historical Incidents - The Falls of She-wa-na-he-gan The Kou-kou Câche - The Tête de Boule Indians - Majeshk Indian Graves - Beauty of the Scenery near Trout Lake - A Lizard - The Sawbill Duck again - The Game of Bones - Tea - Effects of Ice-cold Water - Ginger as usual - A Ludicrous Accident-Louis Tabognaying - Louis's Loss-Canada Balsam Beauty of the Moisie - Salmon - Gambling common among the Ojibways and Crees-The 'Dawn of the Day'-'Stony'-Ke-wayden again; his Gambling Propensities - Indian Repugnance to mention Names - Paul le Jeune's Account of this Repugnance in 1633 - Indian Customs at the naming of a Child - Superstitions respecting Names - An Accident - The Descent of the Rapids of the Moisie - The Third Rapid - Seals - A Narrow Escape at the Fourth Rapid - The Steep Rock Portage - The Fishing Station.

LATE in the afternoon of July 2nd, we put the canoes in the water and turned their bows down stream. Our progress was very rapid from the swiftness of the current, but the large canoe was several times in
considerable danger, the water in the river having fallen so much as barely to admit her passage, although she did not draw more than six or seven inches. When we came to a shallow place the men jumped out and lifted the canoe over the pebbles, so that the bark, already in a very shattered condition, might not touch a stone. We arrived at sunset at the lake where the Nasquapees, whose recent camps we saw a few days before, had caught some large fish, the bones of the head and vertebræ being strewed round the camp fire.

Under the direction of Michel we set a gill net, some sixty yards in length, and while it was light I trolled with a spoon, but without success.

Although the spoon is unknown to the Indians of this country, yet it appears to be in common use among the Esquimaux, for when we reached Mingan a few weeks later, Mr. Anderson, C. F., showed me two Esquimaux spoons made of bone, with a hook of iron attached, which he had obtained from the Esquimaux at the mouth of Anderson's River, between the Mackenzie and the Coppermine. These spoons were very ingeniously contrived, and the line is adjusted first through two holes at the end of the spoon, afterwards passing to one in the side, so as to give it, to a certain extent, a revolving motion when drawn quickly through the water, similar to that produced by a swivel.

The following are the dimensions of those in Mr . Anderson's possession : -

[^35]The spoon is in common use in Lake Superior, and many of the largest lake trout are caught by it. The size to which this fish grows in that inland sea is remarkable.

Mr. Mackenzie, the officer in charge of the Hudson's Bay Company Post at Fort William, took a trout in a net at the close of the fishing season in 1858, which weighed eighty pounds. A French half-breed caught one of nearly the same dimensions, and when asked to describe it, naïvely said, 'You see that little woman there? well, she is my wife. She gave me a little son last November ; I caught my trout in October. I measured my wife when I caught the trout; the trout was just two span bigger than my little woman-you understand.'

A correct idea of the vast number of fish which are taken annually in Lake Superior by the spoon may be derived from the perusal of the following paragraph from the Report of the Fishery Overseer for the district of Lakes Huron and Superior for 1859 :-
' On Lake Superior, in September 1858, John Finlayson, a subordinate officer of the Fort William Post, with a common spoon hook and line, caught, in two hours and a half (paddling), over four miles of coast, between Pigeon River and Big Trout Bay, seventy-four trout, averaging five pounds each. He told me that he was tired of pulling them in, or could have filled his canoe two or three times. On September 27, 1859, on the shoals between Horse and Yeo Islands, Joseph Trudeaux with a common spoon hook and a railroad spike for a sinker, caught (sailing) 152 trout in six hours. I saw the fish next morning ; they averaged eight pounds each,
and some of them weighed sixteen pounds. At the same time, and on the same shoals, greatly to the annoyance of the lessees, four boats of Indians and half-breeds were similarly occupied, tacking about the shoals, with two trolling lines attached to each boat. I was told that in 1858, on the same shoals, an Equimico Indian in one day caught 250 trout of about the same weight. In October 1859, E. Boucher, of Vail's Point, in two hours caught, with trolling tackle, fifty-eight trout. On the 27th of the same month, round and amongst the islands at the entrance of the Georgian Bay, Indians and half-breeds were catching, with the trolling line, two or three barrels of trout per day.

During the night of July 3rd, ice formed on the canoes; the morning was bitterly cold until the sun rose. We all hoped that the frost had killed the mosquitoes, but this hope was vain : they soon appeared again in millions, and allowed us no rest. During the day we descended many rapids, up which we had toiled wearily or portaged round, but in one instance the large canoe was nearly swamped, and had it not been for the presence of mind of the men she would have been lost. Wholly regardless of themselves they sprang into the water, and the lightened canoe bounded over the rock against which she had struck. Two of the men held on to her sides as she cleared it; but one unfortunate fellow was too late, and he was left standing in the middle of the stream, just able to keep himself from being swept down by the force of the current. The depth was so small that he might easily have escaped with a ducking, but the force of the current was such that he would have been swept against some of the
boulders in its bed and probably received severe bruises. With difficulty a paddle was thrown to him, which he dexterously caught, and with its assistance he succeeded in stemming the torrent and reaching the shore.

Descending rapids is certainly one of the most delightful features of canoe travelling. With skillful canoe men there is little or no danger, if the water is sufficiently deep, but many sad accidents have happened from want of proper caution or skill. Indians generally delight in running rapids, and, being accustomed from their youth upwards to use the paddle, they thoroughly understand its power, as well as the force of the water against which they have to contend. Ke-way-den (North wind), an Ojibway, was one of the most daring Indians in the descent of a rapid I have ever met with. The Seven Portages on the magnificent Winnipeg are very formidable, almost cataracts, and can only be descended by well-manned canoes, thirty to thirty-six feet long. When shooting these rapids with some of the Canadian exploring party in 1857, Ke-way-den would stand in the bow of the canoe just as the frail craft was about to make the plunge, and, whirling his paddle round his head, he would utter a wild scream of excitement, turn round, and look at the men in the canoe, who were as intent and earnest as if they were paddling for their lives. As the bow of the canoe dipped, Ke-way-den would resume his* proper position and glance back with a smile, as much as to say, 'There 's fun for you.' But poor Ke-way-den, bold as he was at the head of a rapid or battling with its heaving and surging billows, shrank with superstitious awe from a little harmless compass.

He was employed by the Expedition in 1858, and during a passage across a broad bay of Lake Winnipeg, a dense fog came on, so that the Indian in the stern did not know which way to steer. Ke-way-den, who was bowsman, insisted on one direction ; the steersman was equally positive that the point they wished to reach lay in a different course. In order to settle the dispute a compass and map were referred to, and the steersman instructed to guide the canoe accordingly. Ke-way-den grumbled, and said if they went on they would be far out of their course, but in half an hour the desired point was reached. Ke-way-den was astonished, and ever afterwards, when disputing on any subject, and rudely maintaining his own opinion - a sad failing with him it was only necessary to draw the compass out of its case and look at it, holding it before him ; when Ke-way-den would instantly relapse into silence and quietly yield to his antagonist.

On Lake Tash-ner-nus-kow we found a 'letter' stuck in a cleftpole overhanging the bank. It was written on birch bark, and consisted of a small map of the country, with arrows showing the direction the writer had taken, some crosses indicating where he had camped, and a large cross to show where he intended to make his first winter quarters. It was probably written by some Nasquapees as a guide to others who might be passing up the river or hunting in the country. Near the letter was a small birch-bark roll containing a little tobacco. These articles were found in the neighbourhood of an old camp ground which had evidently long been frequented by Indians. The men took their dinner here, and were
sketched during their repast with their handkerchiefs and mosquito nets about their faces.

The water of the lake had already fallen a foot since we passed through it before.

On our return through the small lakes between Nipisis and Trout Lake, we fished with great success, catching as many trout as we wanted for our noon-day and evening meal. We also had an opportunity of securing a sketch of Muskaig and Lonely Lakes, which the interference of the mosquitoes prevented during our upward journey. Lonely Lake is very picturesque, and full of trout.

On the 5th we reached Trout Lake, and found a great change in the vegetation as well as in the little river through which we had passed the canoes.

The Labrador tea plant was in full bloom and scented the evening air; the water lilies were beginning to show their leaves on the surface, and every kind of tree, with the exception of the larch, was in full leaf.

There is a tradition respecting a battle which was once fought near Trout Lake between the Montagnais and a people from the west. But neither Domenique nor Bartelmi nor Otelne could give any information respecting the name and country of the people. They were probably the Iroquois, whose excursions extended far to the east of their own hunting grounds.

The wars between the Montagnais and the Iroquois are of very ancient date. Paul le Jeune * relates that when

[^36]he arrived in Quebec in 1632, or 230 years ago, he found several Iroquois prisoners in the hands of the Montagnais, and that, while he remained there, they inflicted on the Iroquois the most dreadful tortures before putting them to death. He describes one Iroquois chief as singing while at the stake, and when he finally sank beneath the awful cruelties to which he was subjected, the Montagnais tore out his heart, cut it into little pieces, and gave it to their children.* At this period the Montagnais lived in daily dread of a surprise by the Iroquois.

In 1665 the Iroquois penetrated into the country of the Mistassinni Indians, whose hunting grounds interlocked with those of the Montagnais. The Iroquois, one hundred in number, divided into three parties, one going towards Mistassinni Lake, another into the Montagnais country, where they came upon a fortified camp on Lake Piagouagami. The Iroquois killed several of the unfortunate Montagnais and took some prisoners; but as they were retracing their steps, the Montagnais, having gathered their friends, came up with them. A battle ensued, in which the Iroquois were routed, but not before they had tortured and killed some of their prisoners. $\dagger$ In 1672 le Père Albanel passed through Lake Mistassinni, which he describes as so large as to require twenty days of fine weather in order to voyage round it in a canoe. He states that, eight or ten years before he arrived there, the Mistassinni Indians were numerous, but, on account of the invasion of the Iroquois, they had deserted the shores of

[^37]that magnificent lake, which abounds in game of all kinds common to the country. He found a large fort, constructed of trees by the Iroquois, guarding all approaches to the lakes, and from which these warlike Indians made excursions against the Mistassinni and Montagnais. No aboriginal nation appears to have made such extensive conquests as the Iroquois. From the Gulf of St. Lawrence to the head of Lake Superior they pushed their victorious marches, always leaving behind them terrible memorials of their success and cruelty.

In eastern Canada, the names of many falls and rapids on some of the larger rivers are derived from the treacherous murders committed by that ferocious and conquering race. On the St. Maurice, at the magnificent cataract of She-we-na-he-gan, 150 feet in perpendicular descent-and about twenty-five miles from the present town of Three Rivers, a terrible slaughter of the Algonkin tribes took place about 180 years ago. These Indians were accustomed to visit the St. Lawrence during the summer months, and on their journey down the St. Maurice they had to make a portage round the She-we-na-he-gan or 'eye of the needle.' The Iroquois, whose object at that time appears to have been the total destruction of races to the north and east of the great lakes, selected the portage round these falls as their place of ambush. A large number of Algonkin canoes descended the river together, and the camp was made at the head of the falls. During night time the Iroquois came with deadly stealth upon the sleeping Algonkins, and did not permit one to escape. They then made their way up one of the tributaries of the St. Maurice, called the Vermilion River, and stationed
an Iroquois in a tree to watch for the canoes which one of their prisoners had told them would arrive in a day or two. The Iroquois was to imitate the cry of the owl when he saw the canoes; the others lay in ambush ready to kill and destroy as soon as the unsuspecting Algonkins came within reach of their unerring arrows. The note of the Kou-kou was sounded, but it excited no surprise among the Algonkins; in a few minutes they were all within range, and mercilessly destroyed. The remnant of the Algonkins tribe at the present day always approach the Kou-kou câche or owl-ambush with the same feelings as an Ojibway of Lake Huron visits the scenes of former surprises by the Mohawks.

The falls of She-we-na-he-gan are also memorable in Indian traditions on account of the death of a party of Hurons, under circumstances very characteristio of the Indian race in former times. After the dispersion of the first-named people in 1648, a large number established themselves north-east of the St. Maurice, that river being fixed as the boundary between them and the Algonkins. A party of Hurons had been hunting on the banks of the river, and were returning with loaded canoes down stream. They were at that time at war with their neighbours the Algonkins. On approaching the head of the She-we-na-he-gan they heard a signal, and, looking up, they saw a party of their enemies half hidden in the foliage of the surrounding trees. The Hurons had advanced too far to recede: it was impossible to paddle back against the stream, and to land at the head of the falls was to throw themselves into the hands of their enemies, and submit to the unsparing scalping-knife. The Huron chief, glancing
at his enemies, gave a war-whoop of defiance, and steered his canoe to the edge of the falls. In this resolute action he was followed by his people, and the whole party were precipitated down the dreadful abyss and for ever lost to view.*

The upper part of the valley of this river is now occupied by the Tête de Boule Indians, also speaking a dialect of the Algonkin tongue, and once a formidable tribe, but reduced by small-pox, measles, and rum, to a small remnant of their former numbers. They attain to a great age : from reliable data, it was formerly not at all an uncommon event to meet with a Tête de Boule 100 years old. The name is not characteristic of the people, for although they have very bushy hair, yet they are decidedly good-looking. Their hunting grounds interlock with those of the Mistassinni Indians, who border on the Nasquapees. They are exceedingly careful of their burying-places, and generally place a little pile of wood near the grave for the use of the spirit of the dead.

So far back as 1830 , one of them, named Majeshk, was supposed to have been a century old. He remembered the English Conquest of Canada, and at that time he had been for some years a married man. In his prime he was an ambitious and successful warrior and chief, having conquered all the small Indian tribes, who after the destruction of the Iroquois had returned and reoccupied the territories of the great Algonkin nation, from which they had been driven by their powerful and victorious enemies. The extent of country over which Majeshk

[^38]ruled reached about seventy miles from east to west. He parcelled off the different lakes and waters to the several members of his family as they grew old enough to hunt for themselves. He was alive and well in 1830.

In Chapter IX. the view from the Top of the Ridge Portage was described as magnificent. So it appeared then, in the full glare of noon-day; but on our return it even seemed to be more beautiful than before, more imposing and sublime. It was one of those scenes which one likes to contemplate in silence and alonewhen the thoughts which it suggested might come without restraint and be wholly in keeping with such beauty and loneliness.

The distant mountains at this time were enveloped in smoke, which rolled in vast masses from the west, and evidently came from an extensive conflagration.

The day was hot, and it was with great difficulty that I prevented two or three of the men from drinking copious draughts of water from a little rill which issued from beneath a mass of ice, which partially filled one of the numerous crevices on the portage. On the Top of the Ridge Portage I saw a lizard five inches long, the only reptile of the kind observed in the Moisie Valley.

When we arrived at the lake where I had seen the sawbill duck and her brood, I searched for them again with my glass, and found them swimming near the opposite shore, close to the spot where they were first noticed. I could only count seven : two had disappeared, having probably fallen a prey to foxes and martens. When we approached within 200 yards the wary bird uttered her warning note, and the whole family quickly made for the
shore and hid themselves among the Labrador tea-plant, which grew quite close to the water's edge. During our rapid descent we saw the tracks of deer and caribou on the portage path, and in one instance we were quite close to a bear; but the noise made by the men carrying their loads through the trees alarmed the animal before I could get ready to fire, and he sprang into the bushes out of sight. One evening during our return I observed Michel, who was always doing something when in camp, making some little disks of wood, with a hole in each, and stringing them on a piece of leather; he attached a thin strip of wood to the end of the string, and, with Louis, was soon engaged in a game similar to our Cup and Ball. Upon enquiry I found that the game was common among his people, and was frequently played by them at their lodges.

According to his description, the apparatus is made in exactly the same manner as the Nah-bah-wah-tah of the Ojibways, or the game of bones (the Nah-bah-wah-gunnuk). The Nah-bah-wah-gun-nuk, or instrument with which the game is played, is constructed in the following manner : - The bones are made from the hoof of the deer, or caribou, and made to fit one within the other to the number of twelve, the one nearest to the hand when the instrument is held for play being the largest. A hole is bored through the centre of each, and the bones are strung upon sinew or a short deer-skin thong; at one end of the thong a bone needle or skewer is attached, and at the other extremity a piece of leather four inches long and one and three-quarters wide, cut into the shape of an oval. Small holes are made in the piece of leather, which is called the tail, and four holes are drilled into the last
'bone.' The thong is weighted with a piece of lead close to the tail, the last bone slipping over it. The players agree upon the stakes, which are placed before them in the lodge, and one of them takes the bones and begins to play. His object is to catch as many as he can on the needle or skewer in a certain number of trials; the last bone, if caught singly in one of the holes drilled into it, counts the highest; if the tail is caught, it also counts next to the last bone.

The other bones count one each, and a skillful player will sometimes catch eight or ten at one throw.

One morning everyone of the party, with the exception of the Indians, complained of restlessness during the night. This appeared the more strange, as we had all undergone unusual fatigue during the preceding day, and were glad to retire to our tents at an early hour. I have no doubt the inability to sleep arose from drinking too much tea. I was fearful lest the men should be overcome by thirst, and be tempted to drink ice-cold water while the blood was in a very heated state, and with a view to prevent this, I sent the cook forward to the end of the Top of the Ridge Portage to make a large supply of tea. We were all very thirsty, and drank copious draughts of this most refreshing beverage, besides tea at breakfast, dinner, and supper ; the consequence was that none of us could sleep for several hours.

Notwithstanding the precaution I had taken, three of the men drank ice water on the portage, and during the night were seized with vomiting and severe pains. It required several doses of ginger in hot tea to restore them.

On the morning of this day we arrived at the mouth of

Cold-Water River, and saw the Moisie once again. In descending the steep mountain where the land-slide before described had occurred, an accident happened, which might have been very unfortunate both to Louis and myself.

The path was wet with rain which had fallen during the night, and in many places very slippery. I was a few steps in advance of Louis, who was carrying a canoe; my burden consisted of a knapsack rather heavily freighted with geological specimens, weighing between sixty and seventy pounds. When we arrived at the steep descent I called to Louis to be careful of his footing, and began to pick my steps with the caution enjoined on him. When about a quarter of the distance down the steep, I heard a loud ' Ugh' just behind me, and at the same moment the bow of the canoe touched my knapsack, drove me off my balance, and down the precipitous hill. I caught hold of the bushes, as I was rushing wildly forward, and so checking my fall, was brought up against a spruce tree with a violent shock, the effect of which lasted some time. No sooner had I touched the tree than the bow of the canoe passed over my head, taking off my cap, besides giving me a severe scrape; it was also brought up by the trunk of the same tree. Turning round I saw Louis sitting on the ground with the canoe still on his shoulders, holding on to it with strong determination that it should not be injured if he could help it. He was glad to be relieved of his burden, and when he had swept his long hair from his face he looked at me with a piteous expression, placing his two hands beneath him.
'Are you hurt?' I said.
' No, not hurt.'
' Why don't you get up, then ? - the canoe 's all right.'
Louis smiled faintly, but did not stir.
' Did you slip, that you came down the hill as if you were tabognaying?' *

- Yes, I slipped - I didn't want to break the canoe, so I sat down and slid as if I was tabognaying.'

I looked up the hill, and saw Louis' track over the wet soil and moss. About twenty yards above us there was a piece of a garment which had been torn from Louis during his rapid descent.
'Louis,' I said, 'you've lost part of your trousers.'
'Seems like it,' he said, assuming a recumbent position by leaning against the trunk of a small tree near him, and having apparently no intention of rising from the ground.
'Shall I give you a pair of trousers - will that do?'
'Thank you, do very well.'
The same evening I saw him collecting some balsam from the tree near our camp, and storing it in a little birchbark cup he had made.
'What are you getting that for?' I said.
'Oh, nothing - just a little balsam.'
'Well, what 's the balsam for?'
Louis looked round cautiously to see if anyone was within hearing, and whispered to me-
'Got bit of linen? '

- Yes,' I said.
'Very glad if you give me bit of linen.'

[^39]'Are you scratched?' I said.
'Yes, scratched.'
'Does it hurt you?'
' Not much; think I put a little balsam on ; better to-morrow.'


ALMOST AN ACCIDENT.

I brought Louis the linen, and he retired into the woods. The men observed that he sat with considerable uneasiness for two or three days, but he put off their enquiries by saying he had hurt his leg a little. The
poor fellow was afraid of the ridicule if they became aware of the nature and seat of his trouble.

Once again we embarked on the rapid Moisie, but then it was descending instead of ascending, and the torrent carried us along with delightful rapidity. We travelled in a few hours the same distance that had taken us several days' hard toil to win as we strove against the stream.

The great exertion we made during the last three days to get to the river, in consequence of the torment to which the mosquitoes and black-flies subjected us, caused the sickness of three of the men, so that when we floated on the Moisie the canoes were but half manned. But the relief obtained from the cessation of the attacks of the flies soon had a good effect upon our health and spirits. I was glad to find that the impressions produced by the magnificent scenery as we ascended the river were by no means changed or modified during our descent.

It was most delightful to glide past the towering purple rocks of the second gorge of the Moisie, and to gaze on the lovely scenery without any harassing cares, or distressing doubts. The current bore us swiftly along, and we scarcely heeded the salmon rising with sudden leap to their full length in the air. At the Si-way-si-ni-cop Portage we stayed to take up a câche, and fish for half an hour at the foot of the falls. One of us caught a very fine trout and some salmon fry; but all attempts to lure the grilse, which were numerous at the foot of the falls, proved unavailing. Louis had evidently recovered from his slip on the Cold-Water River Portage, for he rolled down the steep hill of sand which forms the Up and Down Portage
in the highest state of glee, looking wilder and more truly savage than at any other time.

I sometimes thought it strange that neither he nor Michel or Pierre ever seemed to think of gambling during rainy weather when we were compelled to remain in camp. The Ojibways and Crees with whom I have come in contact near Lake Winnipeg seem to embrace every opportunity to indulge in their favourite pastime. But Pierre said that the priest had forbidden it, and none dare to disobey the injunction in this particular, at least when in a mixed company, lest it should come to his ears. The taste for gambling is very determined among Indians generally, and especially among heathen Indians, and even among those who, having become Christians, are yet frequently thrown into the society of heathens.

Some singular instances of this passion occurred when encamped near the Lake of the Woods during the winter of 1858 . There were two Indians belonging to the party named Stony and Ka-jig-a-kanse, or the 'Dawn of the Day.'

One winter's evening, when the thermometer was at zero, they went away to a camp of Ojibways about three miles off to indulge in their favourite game. They returned just before daylight in the face of a cutting wind, the thermometer a few degrees below zero. Mr. Gaudet was surprised to find the two men apparently sleeping under one blanket on some pine branches laid on the snow. He called them, but received no answer; he went to them and tried to pull the blanket off them, but they held it fast. After some enquiries and a sudden pull he found that they were both naked, and that they had only
just returned in that condition across the prairies, having gambled and lost every article of clothing except their waist-bands and breech-cloths, to the Ojibways of Lake Plat. They did not even deign to borrow a blanket to shelter them from the cold of the pitiless breeze blowing in their teeth. 'They ran for it,' Stony said, ' and they beat the frost, for when they got to the camp they were too warm, but were getting rather cold now.' They were supplied with fresh clothing, and cautioned not to go from the camp again without leave. At sunset Ka-jig-a-kanse, who was spokesman, begged leave to go with Stony and try to win back their clothes, saying that he was sure they would be successful this time--in fact, he knew it.

The two scamps returned in the morning triumphantly bringing back all their old clothes and some others they had won. It appears that, before they departed, they had concocted a plan to cheat their antagonists, which they worked out successfully. Stony was a curious Indian full of contradictions. Every month he would go into the settlements at Red River and spend or gamble away his earnings; he was excessively fond of whiskey, and nothing could keep him from it, if it could be obtained anywhere in the neighbourhood by stratagem or money. After a week's dissipation he would return sick and humble, and ask to be employed again. He was very well liked, and an excellent hunter, so that he was generally forgiven. He exhibited his pride, like most Indians, in a rather singular manner. It became necessary that some of the men should haul some sledges laden with provisions over the snow, because the dogs were
already overworked. Stony was asked to give a helping hand, several French voyageurs having willingly taken a sledge.
' What! do you take me for a dog, that you ask me to haul a sledge?' said Stony ; 'I am an Ojibway, and a hunter-let them haul the sledge!' pointing to some Red River half-breeds.

Kewayden, of whom I have before spoken, was a terrible gambler ; he would often lose all his clothes and his wages for months to come, but he was generally fortunate enough to get them back again either by fair play or foul. He was brave, unscrupulous, and superstitious, but a splendid hand with a paddle; and in going down a rapid none could excel him.

I asked Michel his Indian name while we were waiting for the men to exhume the câche we had made at the Up and Down Portage, but he made no reply. Neither Louis nor Pierre knew his Indian name, nor would he tell it to them ; merely saying, 'Ask my father-ask my father.' The indisposition to tell his name reminded me of the difficulty I have before found among the Ojibways and Crees of the Winnipeg Valley. They will rarely repeat their own name or that of their children ; and so tenacious are the Montagnais of this custom, that I do not at the present time know the Indian name of Michel or Domenique, although Otelee and Arkaske, Nasquapees, told me their names at once. The objection which the Montagnais have to tell their names has been handed down from remote times, for Paul le Jeune speaks of it in his narrative written in 1633 . He says, ' $I$ asked the name of one of them ; he bent his head without saying anything.

A Frenchman asked another, saying to him, "Khi-gaichenicasson?" -What is your name? He replied," Namanikis-teriten"-I know nothing about it. I have since learned that they will not tell their name to anyone, I don't know the reason. Nevertheless, if you ask anybody else the name of such a person, he will tell you at once, but he will not tell you his own name.'* An Indian's name is just as often the result of accident as otherwise, and sometimes they are the reverse of pleasing and flattering titles. Among the Ojibways north of Lake Superior, when a child is formally named, a feast is prepared, and other Indians are invited. Some time before the company are assembled the kettles are arranged before the master of the feast, who is generally the grandfather of the child, if it has one.

When the guests are assembled, he smokes for a few minutes, and makes three separate speeches with a smoke between each. The child is then handed to him ; he kisses it on its cheeks, and names it. It is then handed round to the guests, who repeat the name, and kiss the infant.

If the child is a girl, a woman generally names it.
Each guest places a piece of tobacco before the master of the feast, after which ceremony the most attractive part of the entertainment begins, when, Indian fashion, they demolish the good things prepared.

If a child is ill, the father or mother will not unfrequently change its name, under the impression that its life will thereby be saved. But they sometimes carry the superstition still further, and give the child two or

[^40]three names, to prevent the incantations of other Indians inimical to their tribe having any effect upon their offspring.

A heavy thunder-storm induced us to land during the afternoon, and while we were discharging the canoes of a portion of their load, one of those accidents happened which no doubt cause the death of many Indians in the woods. One of the men, while endeavouring to take a gun from beneath the bars of his canoe, struck the hammer against the side and discharged the gun. The shot passed through the side of the little craft, blowing a large piece of bark out. This compelled us to shift a portion of the baggage into my canoe, as the broken one could not carry more than two men without taking in water. We went on until nightfall proposing to repair the canoe after we had camped.

At sunset on the 7th we reached the sixth rapid of the Moisie, but to our astonishment found that the river had fallen so much that we could pass it without any delay. This rapid lies at the end of the Grand Portage, and rather than again encounter that stupendous barrier, we determined to go down the river, running those rapids which were passable for small canoes, and portaging round the rest. The second rapid involved a short portage, and at the third we camped.

The spot where we pitched our tents was by far the wildest and most inhospitable we had yet encountered. The river flowed in a huge crack or gorge, with polished rocks rising on each side to about twenty feet, backed by steep crags or rocky hills, between 400 and 500 feet high. In order to procure fuel, the men had to
climb above the wall of rock, and throw dry wood down. Our tents were pitched upon a spit of sand, which had formed in a little bay of the gorge, and lay, for about one foot in depth, on the flat polished rock which during high water formed the bed of the river. The scene after nightfall was very picturesque. The narrowness of the gorge did not admit of our seeing the sky unless we gazed upwards; the river rushed over a ledge of rocks about seven feet high, and when illuminated by our fire, looked terrible in its fury. Holding a flaming piece of birch bark over the angry waters, in the eddy below the fall, salmon came, looked, and darted into the stream. When we glanced upwards and northwards, an aurora, a comet, and brilliant stars turned our thoughts from the gloom of a narrow crack in the earth to the fields of space in which the shining diamond glittered, the lost manitou wandered,* and the dancing spirits of the dead held their nightly frolics. $\dagger$

Early on the following morning I observed seals swimming towards us; and having fired at one fellow, I was not a little surprised to see fifteen or twenty of these animals roll off flat rocks into the water. They had been sleeping there during the night, and the report of the gun woke them suddenly, and for the present spoiled our prospects of getting a seal. At the fourth rapid we had some difficulty in carrying the canoes over the gigantic fragments of rock which obstructed our passage. Many

[^41]
of these were fifteen feet high, and all symmetrically arranged, one lying against the other. The general inclination being down stream, ice had no doubt brought many of them from the Upper Country, and packed them close at the bends of the river. It was very trying and indeed dangerous work to bring the canoes across them; for we could not yet afford to break a canoe, being still about sixteen miles from the fishing-station at the mouth of the river. At the foot of the fourth rapid, a little accident occurred which for the moment alarmed us all. I had crossed the river in safety, although the swell was terrific ; yet the skill of Pierre was so great, that we only shipped about a bucketful of water. As soon as we reached the eddy on the opposite shore, Pierre said I had better tell Mr. Gaudet not to attempt to cross in the large canoe with six men in it, as the water was too rough, and there was danger of their being swamped. I turned round in my canoe to beckon to Mr. Gaudet, but it was too late; he had already started, and was pursuing the same course across the tail of the rapids which we had just taken. We watched his progress with breathless anxiety; the canoe came two-thirds of the distance in safety, but when it entered the swell of the rapid, the water came over the sides of the frail craft. One of the men called out, 'We 're sinking!' Gaudet replied, in a voice which could be heard above the roar of the torrent, ‘ Nage! Nage!’ (paddle! paddle!) Inch by inch we saw the canoe settling deeper, as they forced it through the water ; the men, with Louis in the stern, exerted themselves to the utmost. It seemed doubtful whether they would reach the shore ; they succeeded, however, just VOL. I.
in time; for as the bow touched the rocks, the stern was level with the water. One of them jumped out and held the canoe, the rest sprang on shore with the exception of Louis, who bravely maintained his place, and swept the canoe round with his powerful steering paddle, so that the men could take hold of it. It was half full of water, but in another minute it was hauled on the rock, turned over, and launched again.

The fifth rapid (descending the river) involved the most formidable portage. It was first up and then down a mountain path, so steep and slippery that I had serious misgivings about the men, fearing they might slip and hurt themselves. The two Indians Pierre and Louis, being accustomed to such rough work and very surefooted, engaged to carry the small canoes across, and four men, two before and two behind, were detached to bring the large one. No accident happened, and we accomplished the short but formidable portage in safety. The first or sixth rapid of the Moisie was passed also without any mishap, and at noon we found ourselves at the beginning of the Grand Portage. We hurried on to the first fishingstation, and taking a salmon from a net, made for the shore and dined luxuriously. After dinner all hands washed and changed their clothes, and before sunset we reached the fishing-village at the mouth of the Moisie, and took up our quarters under the hospitable roof of Mr. Holliday, the lessee of the Moisie Salmon Fishery.

## CHAPTER XVIII.

THE MOISIE BAY AND THE FISHERIES OF THE GULF.
New Arrangements - The King's Post - A Nasquapee - His Clothing-His Arms-Stalking a Cow-The Nasquapee's Astonishment at seeing a Horse - His Antics - The Impressions of Nasquapees when they see Ocean - Louis' Wife again - The Fishing Station at the Mouth of the Moisie - Mr. Tétu's Deep Sea Fishery. - The Importance of the Canadian Fisheries - The Cod Fishery Habits of the Cod - Mode of Fishing for Cod - Importance of Fresh Bait - Preparation for Foreign Market - The Stage - The Processes of Dressing - The Header, the Splitter, the Salter, \&c. - Difficulty of Drying Cod - Fish Offal - Fish Manure - Its Value - Its Composition - Compared with Guano - Value of Phosphate of Ammonia - Vast Importance of Fish Manure.

SOON after our arrival at the mouth of the Moisie, I N heard that a schooner would sail at daybreak for Seven Islands. This was an opportunity not to be missed; therefore at three on the following morning, my brother and Mr. Caley, with four men, the baggage, and a fresh supply of provisions, set sail for the beautiful Bay of the same name. Mr. Gaudet and myself remained behind with a view to collect information on various subjects. We proposed to walk in a day or two from the Moisie Bay to Seven Islands, the distance being only sixteen miles. Louis, Pierre, and Michel remained with us to act as interpreters in case we should require their services.

Mr. Holliday, the lessee of the Salmon Fishery, occupied the house which had been built by the Hudson Bay Company before the station called the King's Post came into the possession of the Canadian Government.

All the Indians whom we saw encamped here upon our arrival had gone to meet Père Arnaud at Seven Islands. A Nasquapee with his family arrived on the second day after we had reached the Moisie Bay, from Lake Ashuanipi. They were dressed in caribou skins, and had suffered much distress on their journey from want of food.

On the last day before reaching the fishing-station, the father had eaten his mocassins, after dividing the small quantity of caribou meat which was left out of their little store among his children and wife.

He wore his hair in two long plaits tied with a bit of ribbon like the Ojibways of Rainy Lake and Lake of the Woods ; his arms consisted of a bow six feet long and a number of arrows of two different kinds, one with a broad heavy head about two inches in diameter with a bit of flint fastened to the extremity, the other armed with an iron barb. The first kind of arrow was for birds and small animals, the second for caribou, bear, and lynx. He had a long knife of European manufacture, some fishing lines made of sinew and fastened in the manner described in Chapter XIII. He had also a small net made from the sinews of the caribou, which was used for catching speckled trout. This family had never been to the coast before, and were, like many others, induced to leave their hunting-grounds by the Montagnais and some of their own tribes, whose accounts of the sea, the ships, the white
men, and the robe noire (the priest), had excited their curiosity.

As he was descending the Moisie in his canoe a few miles from the station, he saw a cow on the edge of the river. A cow to the Nasquapee was a new species of animal, larger than the caribou and as strong as a bear. He saw it drink in the Moisie when half a mile away. What could it be? He took it for a large deer of a kind he had never seen or even heard of before, and with stealthy caution he landed, left his canoe in charge of his squaw, and advanced through the forest to stalk the cow. Fortunately he was seen by two men, born on the coast, and in the employment of Mr. Holliday, who were going up the river in a flat to set salmon nets. They had landed to prepare some stakes, and at the time when the canoe appeared round the bend of the river were sitting half hid in the long grass on the bank, smoking a pipe near the spot where the cow was drinking. They saw the canoe stop, then turn towards shore, and an Indian clothed in deer skin get out and cautiously ascend the bank. They immediately suspected that the stranger was a Nasquapee who had never seen a cow before, and that he had mistaken the animal for a large kind of deer and was going to stalk it. Creeping up the bank so as not to be seen by the squaw in the canoe, they got between the cow and the place where they thought the Nasquapee would come, concealing themselves in the underbrush.

Five minutes after they saw him approach with great caution, bow and arrow in hand.

He reached the top of the bank, peered over it, gazed
for a few moments at the unsuspecting cow, and fitted an arrow to his bow.

One of the men thinking they had seen quite enough, and that another moment lost might be followed by an arrow in the side of one of the very few cows on the coast, called out aloud, 'Nitchee!' - brother or friend. The Nasquapee in amazement tųrned round, paused for a moment, and replied, 'Ho! Ho!' The men showed themselves, and walked towards the Indian, saying a few words in Montagnais ; and pointing to the cow, told him it was not wild, that it belonged to them, that he might approach it without fear of its running away. The Nasquapee, evidently much astonished at first, soon recovered himself, and went with the men towards the cow. The animal, unaccustomed to such visitors, strolled off into the woods. The Nasquapee called to his squaw, and soon after stepped into his canoe. The men, seeing the disappointed look of the whole party and their emaciated appearance, gave them some biscuit and a little cold pork, which was equally divided by the father, and devoured by parents and children in a manner that showed that hunger with them was a sharp pang.

We met this Indian again at Seven Islands a few days afterwards ; there he saw a horse for the first time, but his astonishment appeared to be much greater than at the first sight of a cow. He walked round and round the animal, laughed, shouted, and clapped his hands. The horse began to partake of the Nasquapee's astonishment, and after looking at his wild admirer for a few moments, trotted off.

The first impressions of Nasquapees when they see the
ocean are strongly exhibited by their behaviour as well as by the questions they ask. They gaze at it without speaking for some minutes, approach the huge waves rolling up on the sandy beach, and look long and wonderingly to the right and the left. Stooping down, they touch the water with their finger and taste it, spitting it out quickly. They ask many questions about the size of


NASQUAPEES ON THE MOISIE,
the ocean, how far it is across to land, its depth, the kind of fish it contains, and whether devils live in it. After their curiosity is satisfied on these points, they appear to take no further interest in the matter. They laugh at the schooner sailing by, gaze with astonishment at the immense number of cod fish which they see lying on stages on the beach or brought in by the fishing boats,
and many of them mentally resolve, no doubt, that they will take up their abode in a country which appears so rich in the good things of this life. But sickness soon seizes them with the first change of weather, and they begin to sigh for the pure dry air of their native mountain wilds.

I took a canoe and crossed the Moisie Bay to visit the fishermen on the opposite side, and there saw Louis' wife in company with two half-breed girls; she was cold, haughty, and handsome, taking no notice of Louis, who had paddled me across the Bay. The poor fellow was very disconsolate, but recovered his spirits when some one told him that the priest intended to effect a reconciliation when they came to Seven Islands.

The fishing-station at the mouth of the Moisie Bay, like most other similar places on the north shore of the Gulf of St. Lawrence, presents during the summer season a busy and animated scene, but in the winter it is desolate. In 1859 the population in the summer was 1,500 engaged in fishing for cod, with 300 boats. In 1860 the population was 1,000 , with 250 boats ; in winter the total number of people remaining to take care of the fishing establishments was twenty-one, in 1859-60. The Bay, especially on the east side, presented a very lively aspect when we visited it, and there were some ten or a dozen schooners at anchor taking in cargoes of fish. The beach was lined with stores and 'flakes' on which some $100,000 \operatorname{cod}$ fish were drying at the time of our visit. We went to see Mr. Tétu's patent deep sea fishery in which he had taken 150,000 cod fish in a fortnight. It consists of an immense net divided into eight compartments, into which the fish enter without
difficulty, but from which they cannot or do not escape. This huge trap catches all kinds of fish, from the capling to the salmon. The fishermen take the fish out with scoops after lifting one of the compartments of the net nearly to the surface of the water. The entire net rises and falls with the sea, and is not affected by storms, but it is liable to be coated with slime, and to rapid deterioration. On looking over the side of the boat into this deep sea fishery, we observed thousands of cod fish swimming about in the 'pound.' Mr. Tétu informed us that he allows the fish to remain in his nets until he requires them; they feed as in a preserve, and he can supply his neighbours with fish at any time to keep their workmen employed when the weather is too boisterous for the boats to go to sea. Mr. Tétu is subjecting himself to a fine for using a mesh smaller than that allowed by law ; but he says that the profits of his fishery will enable him to pay the fines. On the day of our visit he took $9,000 \operatorname{cod}$ fish out of his traps.*

The Canadian fisheries on the lower part of the river

[^42]and Gulf of St. Lawrence are of the highest commercial importance. The extent of coast under the jurisdiction of the Canadian Government, washed by salt or brackish water, exceeds 900 miles, and at different seasons of the year the sea which it confines abounds in a great variety of fish and marine animals.

The shoals of herring, cod, and mackerel which approach the Canadian shores during the spring and summer are immense, and apparently inexhaustible.

Towards the end of November, and at the beginning of December, there are seen to enter the gulf, by the straits of Belle Isle, innumerable herds of seals, which, after having followed the coast of Labrador as far as Cape Whittle, proceed to seek in the middle of the gulf floating fields of ice, on which the females deposit their young ones in the month of March.*

Certain shoals, such as those of Mingan and St. John, are frequented every year by a considerable number of whales of different kinds; the pursuit of this huge animal engages many vessels from the Port of Gaspé.

The salmon, justly called the king of fresh-water fish, is found in most of the rivers of the North Shore, of Labrador and on the coast of Gaspé.

The sea-trout, the haddock, the halibut, the eel, the caplin, the lobster, furnish the settlers along the shore with abundance of excellent food. The cod, herring, salmon, and the seal and whale, among warm-blooded animals living in the sea, have attracted more or less the

[^43]attention of the fishermen of Canada. As to the mackerel fishery, it may be said to have been hitherto almost entirely neglected. The advantage of prosecuting this branch of industry on a large scale is left to the United States fishermen, to whom it is a source of considerable gain. In Canada, at present, the mackerel fishery is practised only in boats along the shore, when the cod fishery is not productive.. It has never been made a special object of pursuit.

## THE COD FISHERY.

The cod is abundant on the coasts of the different provinces of British America in the Gulf of St. Lawrence. It is generally found at a depth of from twenty-five to sixty fathoms, and is seldom taken in more than seventyfive fathoms. But when the instinct of reproduction is felt, it approaches the shore in pursuit of the caplin, which it then makes its chief food, and remains for six or eight weeks in twelve, eight, and even five fathoms. It is then that the taking of this fish can be most successfully carried on.

The cod appears on the Canadian coasts at uncertain dates, generally between the 10th of May and the 1st of June, but sometimes later. It has some favourite feeding-grounds where it is found in far greater quantities than elsewhere. These are also the places which present the greatest advantages for the preservation and hatching of the spawn. Having deposited its spawn, the cod withdraws to the banks, where it always finds food in sufficient quantities to satisfy its well-known voracity.

Cod are found in great quantities along the coast of

Gaspé, from Cape Chat, in the River St. Lawrence, to Paspebiac, and even as far as New Richmond, in the Bay of Chaleurs. Formerly they were taken in abundance even at Rimousky, at Escoumins, and in Carleton Bay. But for the last thirty or forty years they have appeared in such small quantities in these places that fishing for them has been given up.

On the north shore of the River and Gulf of St. Lawrence and on the coast of Labrador, the fish abounds almost all along the coast from Point des Monts to the boundary of Canada, in Blanc Sablon Bay. But it is chiefly in the last-mentioned bay, in Bradore Bay, in Salmon Bay, at Dog Island, in Mutton Bay, at Matashguhan, at the River St. John, in Magpie Bay, and at Sheldrake River, that it is most abundant.

In many of these places the cod approaches so near the coast that at times from 4,000 to 5,000 may be taken at a single haul of the seine; but they are generally fished for with hempen lines and hooks baited with pieces of fresh fish, or even with small fishes whole, as caplin and launce.

It is chiefly the fishermen from Nova Scotia and the United States who carry on the cod fishery in vessels along the coasts. The Canadian fishermen use boats, most of them near the coasts and on the banks in the neighbourhood of the coves and bays where they reside.

A great number of the fishermen from the Magdalen Islands, Bonaventure, Paspebiac, Malbaie, and Douglastown, go and follow their calling on the coast of Labrador; they find good harbours there, in which their vessels are safe, and sometimes such an abundance of fish, that it is
often in their power to make the voyage in four or five weeks, returning with a full cargo.

The settlers on the coast of Labrador all have boats, of about sixteen feet keel, which they buy from the American fishermen. The fishermen always set out for the fishing grounds about two or three o'clock in the morning. On arriving at the place where they expect to find fish they cast anchor, take down the masts and sails, and place them with the oars across the boat ; then they bait their hooks with fresh fish and drop the lines into the water, each with a leaden sinker attached to it weighing from one pound to four pounds, according to the supposed depth of the water and the force of the current. The hooks are allowed to sink to about a fathom from the bottom.

In many places on the coast of Labrador, where the fishing is in ten fathoms or less, they use four lines each ; and sometimes the master of the boat, who is always in the stern, has six to manage ; but the sinkers to these lines must be very light, and the depth of water not more than five fathoms. If there are plenty of fish, the fisherman has not a moment's rest when once he has begun, for while he is hauling up one line the other is going down, and before he has unhooked the fish from the former another fish is fast to the latter. The lines are always furnished with two hooks, and sometimes they come up with a fish on each hook. When fish are plentiful the boats take from three to five drafts of cod each (a draft being 252 lbs. weight). On the north shore of the gulf boats manned by two men only have been known to take from 1,500 to $2,000 \operatorname{cod}$ fish in a single day during the time they most abound near the beach.

The fishermen generally remain on the fishing grounds until four or five o'clock in the afternoon, after which they hasten ashore, in order that the cod they bring may be split and salted immediately, before they have time to heat or soften.

The months of June, July, and August, are the most favourable for the cod fishery; it is then that the cod resorts to the coasts, either to spawn or in pursuit of caplin and the launce, on which it feeds, and because these fish, which serve as baits for it, are abundant and easy to take ; for it must be borne in mind that there is no fishing without fresh bait, the cod not being at all partial to salt fish. It is only on the great banks, where the cod feeds chiefly on crustacea and mollusca, that it bites at all freely at a hook baited with salt herring or salt caplin. It is therefore most essential for the fishermen to be always well provided with fresh fish for bait, and they accordingly have herring, caplin, and launce seines, which they make use of every evening and every morning, to provide themselves with a sufficient quantity of little fish for the day. The fishing from the beginning of the season to August 15 is called the summer fishing; what is carried on after that date is called the autumn fishing. All the cod taken until September is salted and dried for the purpose of being exported to foreign countries ; what is taken from September to the close of the fishing season is merely salted and packed in barrels, and in that state it comes to the Quebec and Montreal markets.

Great care and attention as well as labour are required in the preparation of cod fish for foreign countries. And besides these, stores and other buildings for salting them
down, and proper grounds for drying them in, are essential. A fishing establishment on the coast of Gaspé or the coast of Labrador, consists of a collection of large and small wooden buildings, looking from a distance like a village, some of which serve to lodge the fishermen and other employés of the establishment, and others to receive the fish, either in its fresh or salted state, and to contain goods, the rigging of fishing vessels and boats, provisions, salt, \&c.

There is, first, the house of the chief of the establishment or of the agent in charge, generally placed in the centre of the group of buildings for the storage of goods and provisions. Near these are the sheds in which the fishing tackle is kept, the workshops of the carpenter and sail-maker, the blacksmith's forge, and lastly the stage, placed as near as possible to the beach, on which are performed the first operations in the process of curing the fish.

The stage is the most important building in a codfishing establishment. It is a large wooden building, covered with bark or turf on the coast of Labrador, and with boards and shingles on the coast of Gaspé, at one end of which is a wharf, called the stage head, extending far enough into the sea for boats loaded with fish to come alongside of it at low water. The flooring of the wharf, formed of poles of fir, or more frequently still of spruce, is divided into compartments, into which the fishermen, on their arrival with boat-loads of fish, toss them one by one with an implement called a pew.

At the end of the stage nearest to the wharf are the tables on which the cod is dressed ; in the middle is a
passage with a level floor of strong planks, on which the shore-hands can wheel with ease their barrow-loads of salt or fish; and on each side are places for piles of fish, for salt, for troughs to wash the fish in, \&c.

The first operations in the process of curing cod are performed on the splitting table. In the Canadian establishments three men are generally employed in the operation of dressing cod, called respectively the cut-throat, the header, and the splitter. The French employ only headers and splitters, the duties of the cut-throat being performed by cabin-boys.

As soon as the cod has been landed on the stage and counted, the men go to work.

The cut-throat, armed with a two-edged knife, seizes the fish by the eyes, cuts his throat, and, having opened it down to the vent with a single stroke of his knife, passes it to the header. The header detaches the liver, which he throws into a barrel placed near him, and with the same hand tears out the entrails; after which, with his left hand, he cuts off the fish's head. The splitter now seizes the fish by the left side of the neck, and opens it from the neck to the tail, cutting from left to right, after which he places it against a batten nailed on the table, and with a single stroke of his knife, if he can, he removes the back-bone from the vent upwards.

The head, entrails, and other offal of the fish are thrown into the sea, through a hole under the table, and are carried away by the ebb-tide, if not sooner devoured by the anglers and plaice, which are always in great numbers near the stages.

From the hands of the splitter the cod passes into those
of the salter, who places it on a pile, spreading it carefully, with the flesh up and the napes out, and with a wooden shovel scatters a layer of salt over each row. The salter's art lies in sprinkling on each fish just salt enough to keep it well, but not enough to burn it. The cod is left piled in this way for three days, or sometimes four, according to the quality of the salt, after which the operation of washing commences. On the coast of Labrador it often happens that cod is left in piles for several weeks, or even for whole months ; but it is never so white as when it has been subjected to the action of salt only as long as it is necessary.

When cod is to be washed, it is conveyed in wheelbarrows or hand-barrows to a large trough made of deals, ten or twelve feet long by four feet wide, and three feet deep, filled with water, which is continually being changed. In this trough it is turned over and over by men with poles, and rubbed on both sides with the swabs on the end of the poles until all the salt is washed off, when it is put in piles again, in order that the moisture may drain off from it. After some days the piles are taken down and the fish are spread, one by one, on hurdles, three feet wide, covered with fir or spruce boughs, and supported upon posts about three feet from the ground, in order that, by exposure to the action of the sun and air, they may be deprived of all the water they contain, and be reduced to that dry state in which they may be preserved for several years in hot countries.
If the process of dressing cod has to be performed with care, so must that of drying it not be neglected for a single moment ; for cod is merchantable, or of inferior quality,
or even sometimes entirely spoiled, according as the process is well or ill managed.

The hurdles on which cod are stretched to dry are called flakes ; they are placed parallel to each other, with spaces of four feet between to enable the men in charge of the fish to move round them.

At night the fish are gathered into piles of fifteen or twenty each, with the flesh side down, the largest on top by way of cover to the rest. In the morning they are spread out with the flesh up. If the sun gets too hot about the middle of the day, they are turned with the flesh down to prevent their being burned, but as soon as the great heat is over the flesh is again exposed to the drying influence of the sun. For the faster cod is dried the whiter and more transparent it is, and the dearer it sells in foreign markets.

The master-voyager, or whoever in the establishment is specially charged with the superintendence of the final operations of curing the fish, is incessantly on the lookout when he has a large quantity of fish on the flakes. He ought to be always watching the sky and looking to every part of the horizon to see if clouds that threaten rain are gathering. But above all he should consult his barometer, and if he finds it indicates rainy or moist weather, he must give orders immediately to gather up the fish as quickly as possible.

Then, if the rain seems very near and there is much fish out, all go to work, from the chief to the smallest cabin-boy. When they have done, each goes back to his own business, for the cod, once placed with its skin up, cannot suffer from rain, unless the wet weather lasts very
long, and there are no intervals of a few hours of sunshine to admit of its being spread out again.

When the cod is sufficiently dry, large round piles are made containing as much as a ton and a half of fish each, and covered with birch bark and heavy stones. By the pressure of these it is deprived of the little moisture retained in it, and after remaining in this state for some weeks it is put into dry stores, where it is left until the time comes for sending it to the best markets. But before it is shipped, it is spread out on ground covered with fine gravel during the warm hours of the day, to give it its ' last sunning' or 'parting sun,' and extract from it any damp it may have contracted in the store.

In fine weather and during the dry season, when westerly winds predominate, cod is easily cured, and made of the first quality. It is not so when the easterly and south-easterly winds prevail, and bring upon the coasts mists and rains that last for a week. This is an anxious time for the fishermen, for in spite of every possible care and precaution, they frequently see the fish spoiled before their eyes, without its being in their power by any means whatever to obviate the destructive effects of the dampness ; for when the fish has been washed and is exposed on the flakes, it cannot be taken into the stores until it is perfectly dry; it can only be turned so as to expose the skin to the moisture.

In ordinary seasons from five to six per cent. of the dried cod fish is of second quality ; in rainy seasons from fifteen to twenty per cent. is thus deteriorated.

It is on the coasts of Gaspé, where the effects of the
mist generated by the Gulf Stream are least felt, that the finest cod in all America is cured. It is well known in the markets of Spain and Italy, where it is preferred to all other fish.

At Labrador, on the coasts of the Straits of Belleisle, and at Newfoundland, where for whole weeks the fogs brought on by the easterly and north-easterly winds do not allow a single ray of the sun to be seen, cod is cured with great difficulty, especially in the months of June and July; and the fish from those countries is always inferior to that which is despatched from the ports of Gaspé and New Carlisle.

In order to guard against all risks from the weather, attempts have been made to dry cod artificially by means of large ovens, in which it is exposed to moderate and regular heat; but these attempts, which have been made at the Island of St. Pierre and in France, have not succeeded as well as was expected.

Notwithstanding the stringency of the regulations respecting the disposal of fish offal at the mouths of salmon rivers, and the activity of the overseers, an immense quantity of the heads and entrails are thrown into the Moisie Bay by the fishermen, who clean their fish on board their vessels. Those who prepare their fish on the shore bury the offal on the beach, but the stench arising from these deposits, owing to the imperfect manner in which they are covered, is sufficient to create disease in the neighbourhood. No attempt appears to be made to convert fish offal into manure, although the importance of this substitute for guano is well understood. The universal. objection urged by the fishermen with whom I have con-
versed on the subject is the want of capital to enter into that branch of industry, coupled with the doubts which they entertain of finding a market for the manufactured manures. The subject of fish manures has engaged the attention of Dr. Sterry Hunt, the able chemist and mineralogist of the Geological Survey of Canada.

The importance of manures to the agriculturist of Britain will be a sufficient apology for introducing some facts relating to their production in the Gulf of St. Lawrence.*
'The use of fish as a manure has long been known. On the shores of Scotland, Cornwall, Brittany, some parts of the United States, and on our own sea coasts, the offal from fisheries, as well as certain bony fishes of little value for food, are applied to the soil with great benefit. The idea of converting these materials into a portable manure was, however, I believe, first carried into effect in France by M. Démolon, who, seven or eight years since, erected establishments for this object on the coast of Brittany and in Newfoundland. For the details of this manufacture I am indebted to the 'Chimie Industrielle' of Payen. Concarneau, in the department of Finisterre, is a small town whose inhabitants are employed in fishing for sardines, and it is the refuse of this fishery which is employed in the manufacture of manure. The offal is placed in large coppers and heated by steam until thoroughly cooked, after which it is submitted to pressure, which extracts the water and oil. The pressed mass is then rasped, dried in a current of hot air, and ground to powder. One hundred

[^44]parts of the recent offal yield on an average twenty-two parts of the powder, besides from two to two and a half parts of oil. The manufactory of Concarneau employs six men and ten boys, and is able to work up daily eighteen or twenty tons of fish, and produce from four to five tons of the powdered manure.
'This manure contains, according to an average of several analyses, $80 \cdot 0$ per cent. of organic matters, and $14 \cdot 1$ per cent. of phosphates of lime and magnesia, besides some common salt, a little carbonate of lime, small portions of sulphate and carbonate of ammonia, and only 1.0 per cent. of water. The nitrogen of this manure, which is almost wholly in the form of organic matters, corresponds to 14.5 per cent. of ammonia, and we may estimate the phosphoric acid, which is here present in an insoluble form, at $7 \cdot 0$ per cent. If we calculate the value of this manure according to the rules laid down on page 314 , we shall have as follows for 100 pounds : -

| Ammonia- $14 \frac{1}{2}$ pounds, at 14 cents | . $\$ 2.03$ |
| :---: | :---: |
| Phosphoric acid-7 pounds, at $4 \frac{1}{2}$ cents | 0.311 $\frac{1}{2}$ |
|  | \$2.343 |

'This is equal to $\$ 47$ the ton of 2,000 pounds; the manufactured product of Concarneau, however, according to Payen, is sold in the nearest shipping ports at 20 francs the 100 kilogrammes (equal to 220 pounds), which, counting the franc at $\$ 0 \cdot 20$, is equivalent only to $\$ 1 \cdot 81$ the 100 pounds, or a little over $\$ 37$ the ton. This however was in 1854 , since which time the price of manures has probably increased.
' M . Démolon, in company with his brother, has also, according to Payen, erected a large establishment for the
manufacture of this manure on the coast of Newfoundland, at Kerpon, near the eastern entrance of the Strait of Belleisle, in a harbour which is greatly resorted to by the vessels engaged in the cod fishery. This manufactory, now in successful operation, is able to produce 8,000 or 10,000 tons of manure annually. Payen estimates the total yearly produce of the cod fisheries of the North American coast to be equal to about $1,500,000$ tons of fresh fish; of this, one half is refuse, and is thrown into the sea or left to decay on the shore, while if treated by the process of Démolon, it would yield more than 150,000 tons of a manure nearly equal in value to the guano of the Peruvian islands, which now furnish annually from 300,000 to 400,000 tons. If to the manure which might be obtained from the cod fisheries of the Lower Provinces we add that of many other great fisheries, we are surprised at the immense resources for agriculture now neglected, which may be drawn at a little expense from the sea and even from the otherwise worthless refuse of another industry. To this may be added vast quantities of other fish, which at certain seasons and on some coasts are so abundant that they are even taken for the express purpose of spreading upon the adjacent lands, and which would greatly extend the resources of this new manufacture. The oil, whose extraction is made an object of economic importance in the fabrication of manure from sardines in France, exists in but very small quantities in the cod, but in the herring it equals 10 per cent. of the recent fish, and in some other species rises to 3.0 and 4.0 per cent.
' Mr . Duncan Bruce of Gaspé has lately been endeavouring to introduce the manufacture of fish manure into

Canada ; but he has conceived the idea of combining the fish-offal with a large amount of calcined shale, under the impression that the manure thus prepared will have the effect of driving away insects from the plants to which it is applied. He employs a black bituminous shale from Port Daniel, and, distilling this at a red heat, passes the disengaged vapours into a vat containing the fish, which by a gentle and continued heat have been reduced to a pulpy mass. The calcined shale is then ground to powder and mingled with the fish, and the whole dried. Experiments made with this manure appear to have given very satisfactory results, and it is said to have had the effect of driving away insects when applied to growing crops - a result which may be due to the small amount of bituminous matter in the products of the distillation of the shale, rather than to the admixture of the calcined residue. Coal-tar is known to be an efficient agent for the destruction of insects; and in a recent number of the journal "Le Cosmos" it is stated that simply painting the wood-work of the inside of green-houses with coal-tar has the effect of expelling from them all noxious insects. Mr. Bruce caused several analyses of this shale to be made by Mr. Reid of New York, from which it appears that different specimens contain from 2.0 to 26.0 per cent. of carbonate of lime, besides from 1.4 to 2.0 per cent. of gypsum, $2 \cdot 0$ per cent. of iron pyrites, and from $4 \cdot 5$ to $6 \cdot 7$ per cent. of carbon remaining after distillation. The amount of volatile matter, described by Dr. Reid as consisting of water, naphtha, and ammonia, was found by him in two different samples to equal only 3.5 per cent., of which a large proportion is probably water.
'I have examined two specimens of manure prepared by Mr. Bruce from the fish commonly known as the menhadden (Alosa menhadden). No. 1 was made with the Port Daniel shale, as before described ; while for No. 2 this was replaced by a mixture of clay and sawdust, which was distilled like the shale, the volatile products being added to the decomposing fish. The oil which rose to the surface of the liquid mass had been separated from the second preparation but remained mingled with the first. Both of these specimens were in the form of a black granular mass, moist, cohering under pressure, and having a very fishy odour.


ANALYSIS OF THE EARTHY MATTERS.

| Phosphoric acid |  |  | - |  |  | $3 \cdot 40$ | 3.99 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sulphuric acid |  |  | . |  |  | $2 \cdot 16$ | 15 |
| Lime |  | . |  |  |  | 5.90 | $4 \cdot 44$ |
| Magnesia |  |  | . |  |  | $1 \cdot 20$ | $1 \cdot 15$ |
| Ammonia |  |  |  |  |  | $3 \cdot 76$ | $2 \cdot 60$ |

'If we calculate the value of the first specimen according to the rules given below,* we have as follows for 100 pounds :-

[^45]Phosphoric acid, $3 \frac{4}{10}$ pounds at $4 \frac{1}{2}$ cents $\quad . \quad$| $\$ 0 \cdot 153$ |
| :--- |
| Ammonia, $3 \frac{3}{4}$ pounds at 14 cents . . |
| 0.525 |
| $\$ 0.678$ |

' At 68 cents the 100 pounds, this manure would be worth $\$ 13.60$ the ton. The sulphuric acid is of small value, corresponding to 80 pounds of plaster of Paris to the ton, and we do not take it into the calculation. The somewhat larger amount of phosphoric acid in the second specimen, is probably derived in part from the ashes of the sawdust, and in part from the clay. The value of this manure would be $\$ 10.88$ the ton.
calculations made by Professor S. W. Johnson of New Haven, Connecticut, which are based on the prices of manures in the United States in 1857. In order to fix the value of phosphoric acid in its insoluble combinations, he has taken the market prices of Columbian guano, and the refuse bone-ash of the sugar refiners, which contain respectively about 40 and 32 per cent. of phosphoric acid, and from these he deduces as a mean $4 \frac{1}{2}$ cents the pound as the value of phosphorie acid when present in the form of phosphate of lime. This would give $\$ 1 \cdot 44$ as the value of 100 pounds of bone-ash, and $\$ 1 \cdot 60$ for the same amount of the guano, while they are sold for $\$ 30$ and $\$ 35$ the ton.

The value of soluble phosphoric acid has been fixed by Dr. Völcker in England, and by Stöckhardt in Saxony, at $12 \frac{1}{2}$ cents the pound. This valuation is based upon the market price of the commercial super-phosphates of lime. Mr. Way, of the Royal Agricultural Society, however, estimates the value of phosphoric acid in its soluble combination at only $10 \frac{1}{2}$ cents the pound ; and Mr. Johnson, although adopting the higher price, regards it as above the true value.

In order to fix the real value of ammonia, Professor Johnson deducts from the price of Peruvian guano, at $\$ 65$ the ton, the value of the phosphoric acid which it contains, and thus arrives at 14 cents the pound for the price of the arailable ammonia present. This kind of guano, however, commands a price considerably above that which serves for the basis of the above calculation; and both Völcker and Stöckhardt fix the value of ammonia at 20 cents the pound. The price of potash as a manure is estimated by Mr. Johnson at 4 cents the pound; but this alkali rarely enters to any considerable extent into any concentrated manures, and may therefore be neglected in estimates of their value.
'In order to arrive at the real value of the animal portion of this manure after the removal of the oil, we may suppose, since Dr. Reid obtained from the shales from $4 \cdot 5$ to 7.6 per cent. of fixed carbon, that with the 56.2 parts of calcined residue, there were originally 3.7 parts of carbon derived from the shales. This deducted from $23 \cdot 7$ parts leaves 20.0 of nitrogenised animal matter in 100 parts of the manure, yielding 3.76 parts, or 18.8 per cent. of ammonia. This matter consists chiefly of muscular and gelatinous tissues, and Payjen obtained from the dried muscle of the cod fish 16.8 per cent. of nitrogen, equal to $20 \cdot 4$, of ammonia. The 3.4 parts of phosphoric acid in the manure will correspond to $7 \cdot 4$ of bone phosphate, and if to this we add for moisture, impurities, \&c., $2 \cdot 6$ parts, $=30.0$ in all, we should have for 100 pounds of the fish when freed from oil and dried, the following quantities of ammonia and phosphoric acid :-
Ammonia- $12 \frac{1}{2}$ pounds at 14 cents $. \quad . \quad . \$ 1 \cdot 75$
Phosphoric acid $-11 \frac{1}{3}$ pounds at $4 \frac{1}{2}$ cents
$\quad . \quad \frac{0.51}{\$ 2 \cdot 26}$
'The matter thus prepared would have a value of $\$ 45 \cdot 20$ the ton, agreeing closely with that which we have calculated for the manure manufactured from sardines in France, in which the quantity of ammonia is somewhat greater, and the phosphoric acid less, giving it a value of $\$ 47$ the ton.

- Professor George H. Cook of New Jersey in an analysis of the manhadden, obtained from 100 parts of the dried fish 16.7 parts of oil, besides 61.6 of azotised matters yielding $9 \cdot 28$ parts of ammonia, and $21 \cdot 7$ of inorganic matters,
\&c., containing 7.78 of phosphoric acid. * If we deduct the oil, we shall have for 100 parts of the fish, according to this analysis, $11 \cdot 2$ of ammonia, and $9 \cdot 3$ of phosphoric acid.
'By comparing these figures with the results calculated for the animal portion of Mr. Bruce's manures, we find-

|  |  | Ammonia | Phosphoric Acid |
| :---: | :---: | :---: | :---: |
| Manure from sardines (Payen) | . | . $14 \cdot 5$ | $7 \cdot 0$ |
| Dried menhadden (Cooke) | . | . | $11 \cdot 2$ |
| Manure by Mr. Bruce (excluding shale) | . | $12 \cdot 5$ | $9 \cdot 3$ |
| " " |  |  | $3 \cdot 4$ |

The proportion of phosphates is of course greater in the more bony fishes. In the manure of Mr . Bruce there are doubtless small amounts of phosphoric acid and ammonia, derived from the shale and the products of its distillation : but these do not however warrant the introduction of an inert material which reduces more than two-thirds the commercial value of the manure. The results which we have given clearly show, that by the application of a process similar to that now applied in France and in Newfoundland, which consists in cooking the fish, pressing it to extract the oil and water, drying by artificial heat, and grinding it to powder, it is easy to prepare a concentrated portable manure, whose value, as a source of phosphoric acid and ammonia, will be in round numbers about $\$ 40$ the ton.
'We can scarcely doubt that by the application of this process a new source of profit may be found in the

[^46]fisheries of the gulf, which will not only render us independent of foreign guano, now brought into the province to some extent, but will enable us to export large quantities of a most valuable concentrated manure at prices which will be found remunerative.'

## CHAPTER XIX.

## the moisie bay to seven islands.


#### Abstract

Animal Life on the Coast - Seven Islands - Beauty of the Coast - The Montagnais of Seven Islands in 1660 - Their Fear of the Iroquois-The Nasquapees Otelne and Arkaske -Fate of a Party of Fifteen Nasquapees who had visited Seven Islands-Domenique -Otelne's Lodge - Appearance of the Nasquapees -Differences between the Western and Eastern Indians ; between Montagnais, Ojibways, and Crees - Handsome Montagnais Women - Habits of the Nasquapees - Their Fish-hooks - A Visit to Otelne's LodgeCuriosity of the Indians - Interior of his Lodge - Sea Oil - A Brush Fishery - The Herring Fishery in the Gulf-Habits and prodigious Numbers of the Herring - Mode of Catching this Fish - Importance of the Herring - Killing a Loon - Squaws preparing for Sunday - Père Arnaud's Night Journey to the Moisie -Reflections.


0N Thursday, July 11, I left the Moisie fishing station, with Gaudet, and walked along the coast to the Bay of Seven Islands. The day was most delightful, and the sea like a mirror. Porpoises in great numbers were sporting near the shore; gulls were hovering over shoals of launce, and every now and then darting down among the finny crowd; crabs were burrowing in the sand after the receding tide, and an eagle soared majestically above our heads towards the east. Whether it was that magnificent bird the golden eagle, I cannot say with certainty ; I thought it was at the time,
but since I have read Dr. Bryant's account of the birds that breed in the Gulf of St. Lawrence, I am almost inclined to doubt the correctness of my observation. ' Before leaving home,' says Dr. Bryant, 'I had flattered myself that I should have an opportunity of seeing some of the rarer rapacious birds, or the Iceland or Greenland falcon, duck, hawk, \&c. Strange as it may seem, during the whole of my visit to the north shore I saw only a single bird of this class - a fine golden eagle, at Bras D'Or. I mention this, not as a proof that those birds are unknown-for I frequently found on the shores unmistakable evidence of their visits - but to show with how much caution the results of any individual's experience should be received as positive evidence in natural history.'*

The forest on the gulf consisted of small spruce, but the trees were beautifully and symmetrically formed; the path ran for several miles through open glades bordered by this graceful tree, offering the most delightful camp-grounds, with the sea rolling on a splendid beach, 100 to 200 yards in breadth. Beautiful as this coast is in summer, yet during the long winter months it is indescribably dreary, desolate, and exposed. All the inhabitants of the Moisie and Seven Islands, with very few exceptions, fly to more genial climes, to return again when the fishing season commences.

We passed Seven Islands, which looked fair and beautiful at a distance ; but truly with them distance lends enchant-

[^47]ment to the view, for they are nothing more than dreary rocks on which stunted trees grow, although limestone is found on the shore of one of them, and forms a reef in the inside of the harbour. On the beach opposite the Islands we saw two shipwrecked schooners, which had lain there for several years, although one of them had been partly burned for the sake of the iron.

Seven Islands, and more particularly the beautiful bay of the same name, has for centuries been a favourite hunting ground of the Montagnais. In the spring and fall of the year it swarms with wild fowl, who congregate here in vast numbers previously to taking their flight to the south shore.

It is also celebrated for its fisheries, especially of herring and mackerel. In 1660 the Montagnais of Seven Islands requested the Jesuits at Tadousac to send a robe noire to teach them, according to the account of the Recollet Père Hierosme Lallemant, who, writing in that year, states that the reason why the Montagnais of Seven Islands would not come to Tadousac at the mouth of the Saugenay was because they feared the Iroquois, with whom they were at war.

This fact alone shows how widespread was the dread which that warlike nation had infused into the tribes far to the east, north, and west of their own country, on the borders of Lake Ontario and the Upper St. Lawrence, at least 700 miles from Seven Islands.

We reached the Missionary Station near the head of the bay after a five hours' walk, which we thoroughly enjoyed. Encamped round about a neat little wooden chapel were about 150 Indians; among them were a dozen Nasquapees,
some of whom had been there for two years, and some had just arrived from the far interior, and cast their eyes upon the ocean for the first time. Here we saw Otelne the Tongue, Arkaske the Arrow, also Domenique and Bartelmi, who had traversed the country from Hamilton Inlet, and drawn a map of the Ashwanipi and the Moisie. We also made the acquaintance of a score of other Montagnais, who were glad to come into our tents and receive a small present of tea and tobacco.

Some of the Nasquapees formerly belonged to a party of fifteen who had descended the Moisie from their hunting grounds two years ago at the solicitations of Domenique, to see the robe noire and the wonders of the coast. Seven of the fifteen had died, four had gone back to their own wilds, and four remained at Seven Islands, chiefly on account of sickness and debility. On the day of our arrival one of the four that remained died and was buried by Père Arnaud. The remaining three talked of going back with those of their race who had just come down the Moisie, after the priest left Seven Islands. We pitched our tents at some distance from the Indian lodges, where a supply of dry wood might be obtained without much trouble, and where we should also be tolerably free from their importunities.

When we met Domenique at Seven Islands we hardly knew him again. He had thrown off his caribou-skin coat and leggings, and was dressed out in a second-hand suit of European clothes. His face had lost that worn and halfstarved aspect it possessed when we met him at the first gorge of the Moisie ; he looked sleek and contented, and was well pleased to see Michel again. His squaw and VOL. I.
the little children had also new suits of clothes, which, with their hair close-cropped, quite changed their appearance, and gave them a dirty half-civilised look, much less agreeable than the wild air of forest children which they possessed when we saw them on the Moisie.

On the 12th my brother and I went to visit Otelne in his lodge. Several Indians, seeing us enter, came in soon afterwards, and squatted round the fire. I counted twenty-five persons in all, squaws and children included; the motley assemblage consisted of five Nasquapees, seventeen Montagnais, one half-bred interpreter, and ourselves.

They placed seal skins for us to sit upon, and we squatted round the fire with the rest and endeavoured to make ourselves as little uncomfortable as possible ; but the heat was terrific, and induced a general turn-out in shirt-sleeves. Otelne's lodge was constructed of birch bark, the pieces being stitched together with caribou sinews ; it was both broader and lower than the Ojibways lodges I had seen on Rainy River. Otelne is a very handsome Indian, with delicately chiselled features, a deep copper-coloured skin, long and intensely black hair, small and delicately formed hands and feet, handsome and expressive eyes, and a thoroughly Indian manner in everything he does. Arkaske resembles him in most particulars; and indeed there is such a marked difference between the appearance of Nasquapees and Montagnais, that, judging from their exterior, one would suppose them to belong to different families of the human race. But the language they speak is Cree, or rather dialects of that tongue, and differing only in minor par-

ticulars. In the Montagnais children a much closer resemblance to the Nasquapees can be traced than in adults. The inclination of the eyes of the children is very marked; they are long, narrow, and directed downwards towards the nose-a peculiarity which is much modified as they grow older.

When we entered, Otelne was smoking a stone pipe, which I was fortunate enough to procure in exchange for some tobacco, tea, and flour. The Montagnais women are decidedly handsomer than the Ojibways or the plain Crees. Louis' wife was not the only handsome squaw we saw at Seven Islands or other places on the coast.

My brother showed the company some sketches he had made of Michel, Domenique, and different scenes on the Moisie. They recognised the portraits instantly, and also, without hesitation, named the places on the great river.

Both Otelne and Arkaske promised to come to our tent on the following day and have their portraits taken. They also, after some consultation with the Montagnais, agreed to draw us a map of all the rivers they knew flowing into the gulf west of Seven Islands. With the slight difference named above, I could detect no dissimilarity between the lodge in which we were seated and those of the Ojibways, Swampys, or thick-wood Crees.

From the Saskatchewan, the swift river of the northwestern prairies, to the Misti-shipu, the grand river of the Labrador Peninsula, the same kind of habitation prevails, constructed in the same manner, and occupied by people who speak dialects of the same tongue, and differ from one another in no material points. Some of the Montagnais lodges were dome-shaped, to keep out the
mosquitoes, but the same form of lodge is found among the Ojibways of the Lake of the Woods. The only articles of daily use in which I observed any difference were the snowshoes; these were very broad and much shorter than those used by the western Indians. I measured one pair in Otelne's tent, which were nineteen inches broad and thirty-three inches long; while a pair I brought with me from Red River in 1858 were forty-six inches long and only ten inches broad.

The Nasquapee who was buried yesterday left two wives-sisters. I was informed the poor fellow died a lingering death; he had not hunted for an entire year, and during the whole of that time was supported by his wives. When these people arrive on the coast they have some difficulty in procuring food, except in the spring and the fall, when wild fowl are abundant. They have to learn how to hunt the seal, and many of them are not familiar with fire-arms, so that they find it very difficult to kill birds on the wing. Their fish-hooks are of two descriptions - one as described in Chapter XIII., the other formed of two pieces of bone, which lie parallel to one another when baited, but as soon as the fish bites and a sharp pull is given by the fisherman, the pieces of bone separate, assume a position at right angles to one another, and stretch across the jaws of the fish. They have a disgusting habit of preserving a small portion of the tobacco which remains in the bottom of their pipes after a smoke, and chewing it, enjoy the strong flavour of the oil it contains, which Europeans are generally glad to reject. Caribou fat is one of their chief delights; they preserve it in a piece of the skin of the animal made into
a bag, and produce it on the occasion of a feast. They make robes of rabbit skin where that animal is found, but generally the clothing is made exclusively of caribou leather. The stem of the council pipe is about sixteen inches long and ornamented with eagles' feathers, five or six in number, sloping towards the bowl, and, like the western tribes, they mix the roasted inner bark of the red willow with the tobacco. After half an hour's conversation in Otelne's lodge, I invited a good many of them to come to my tent on the following morning, and made my escape into the open air, almost ill with the close atmosphere of a birch-bark lodge containing twenty-five persons, twenty-three of them smelling very unpleasantly of seal oil, which the aroma of thebest Virginiainhaled without intermission by the other two was incapable of concealing.

The ventilation of the lodge would have been tolerable, if a number of men and girls who could not get in had not stopped up the doorway, and closed with their fat and greasy faces every crevice in the bark.

The heat would have been less insupportable if Otelne's wife had not been so anxious to cook a horribly fishy duck that was stuck on a stick, before the fire, and if the thermometer had not been seventy-five degrees in the shade in the-open air. Weighing these matters and feeling their weight, I rushed out into the air without ceremony, but not without tumbling over a dozen curs which had been drawn together by the unusual concourse of visitors.

My brother remained for an hour in the lodge, making a water-colour sketch of the interior, taking advantage of an opportunity which might not occur again. When he
came out he smelt very like a loon or a seal, and I had strong suspicions that he partook of both those delicacies, which however did not seem to lessen his appetite for some very fine beaver tail, which we enjoyed at one of the fishing stores.

In the afternoon of this day, after having visited Père Arnaud, I went to examine an extensive herring fishery made of branches of trees, and called a brush fishery. It is constructed of stakes about eight feet in length, which are driven into the sand, commencing at high-water mark and extending about one hundred yards into the sea. The stakes are interwoven with branches of spruce, so closely that even a fish as small as a caplin cannot pass through the interstices.

At the extremity of this barrier is the pound, seventy yards in diameter, and in the form of a circle, with two openings, called doors, about four feet broad at the extremity of the barrier. From each side of the pound two wings extend to direct the fish towards the door of the pound, when the shoals of herring pass along the shores of the bay. When a shoal finds its way into the pound, the doors are closed with a hurdle and the fish scooped out or caught in small nets.

The herring (Clupea harengus) is found in infinite numbers along the coasts of North America, from the latitude of New York to Hudson's Bay.

The herring inhabiting the seas on the coasts of England, Ireland, and Scotland, differs from the American species; it is shorter and smaller than that which is taken off the coast of Labrador, and it is said to taste better.

The herring, like the cod, is fond of cold and temperate climates. In winter it resorts to deep water ; but no sooner has spring returned, and the ice disappeared, than the herring arrives in immense shoals on all the coasts in the Gulf of St. Lawrence, especially on the southern coast of Newfoundland, in the Gut of Canso, at the Magdalen Islands, and in the Bay of Chaleurs.

Owing to some cause, which no one has been able to explain satisfactorily, the herring does not visit the coast of Labrador in the spring, or, if it does, it is only in small numbers.

At Pleasant Bay, in the Magdalen Islands, herrings make their appearance at the beginning of May, and almost always in large shoals. They come very near the shore, entering even into the lagunes of House Harbour, and sometimes in such dense masses that the pressure upon each other, often increased by the force of the tide, kills them by tens of thousands.

The female herrings come very near the shore in calm weather, and generally at night, to deposit their ova, in from one fathom to three fathoms' depth of water. The males follow, and, swimming above the ova, shed over them their milt.

It is impossible without seeing it to form a correct idea of the prodigious abundance of the ova of the herring deposited at the Magdalen Islands, and generally on all the coasts where the herring spawns.* Captain Fortin states in his report on Canadian Fisheries in the Gulf that he has seen the shore at Pleasant Bay covered two or three

[^48]feet deep with them for several miles; and oftentimes, on returning to his vessel of a calm evening, has seen the sea white with milt for several acres round, though when he passed the same spot two hours before the water was of the usual colour. Each female herring has from six to eight millions of ova in her ovaries, and each male is furnished with a proportionate quantity of milt.

Notwithstanding the immense numbers that have been taken in the Gulf of St. Lawrence and along the coast of Newfoundland, the herring has not perceptibly diminished in abundance there. It may indeed, for several years at a time, have presented itself in smaller numbers at certain places, or even have disappeared from certain coasts, but these phenomena were probably owing to peculiar circumstances, arising from the weather and the action of the winds. They reappeared afterwards in the same places, and more abundantly than ever. The same thing has happened on the coast of Norway. For thirty years the summer shoals of herrings (called there sommersild) had entirely disappeared from the coast to the north of Christiansund, which they had frequented during twenty consecutive years ; but for the last twenty-five years or thereabouts they have returned thither regularly again.

At the latter end of August, and during the months of September and October, the coast of Labrador from Cape Mecatinna to Cape Charles, and thence to Hudson's Bay, is visited by shoals of very large fat herrings, well known throughout Canada by the name of Labrador herrings.

Neither ova nor milt are found in them, so that they do not come to spawn. They are probably herrings that
made their appearance in the spring on the coasts of Newfoundland, of the Magdalen Islands, and in the Bay of Chaleurs, returning to the main ocean or making their way to the arctic seas.

During the summer season large numbers of herrings are to be met with along the coast of Gaspé, and even along the north shore of the St. Lawrence and throughout the gulf, but they are not in shoals.

No sooner in the spring has the first shoal of herrings been observed at any place along the coast, than all the fishermen in the neighbourhood repair to the beach with their nets, seines, and other fishing tackle. They spread the nets so as to intercept the shoals of herring when seeking to approach the shore at night for the purpose of spawning.

At the Magdalen Islands and in the Bay of Chaleurs, as well as along a portion of the coast of Gaspé, immense numbers of herrings are taken in the spring. At Pleasant Bay more than 50,000 barrels are taken with nets and seines every year in the space of fifteen days at the most. The same thing happens on the coast of Gaspé, although there the seine is used less.

The nets, which are generally thirty fathoms long by five or six wide, are set in the afternoon, and in the morning the fishermen visit them and take out the fish, generally to the extent of from five to ten barrels out of each net when the fishing is good. The nets remain set as long as the fishing lasts, although they are sometimes taken up to be cleaned.

Seines for the purpose of taking herring must be of large dimensions - say from 100 to 130 fathoms long by from eight to eleven fathoms wide, with braces 200
fathoms long. Large seines are generally used by Americans and Nova Scotians ; but they often take at a single haul of the seine herrings enough to fill $500,1,000$, 2,000 , or even 3,000 barrels. We need not be surprised at such great results when we reflect that herrings in a shoal are so crowded together as to form a compact mass from the surface of the water to the bottom. When the seine is so much loaded with fish, it cannot be hauled on shore without risk of breaking it and losing all the riches it contains.*
In that case the braces are made fast on shore, and the fishermen seine with small seines inside the large one; or, if the fish are very abundant, they are taken out with scoop nets, or landing nets. On the coast of Labrador the herring fishery is carried on in September and October, sometimes beginning as early as the latter end of August. The first herrings taken are generally not very fat, but after them come those fine fish that are so well known. The Labrador herring is almost always taken with the seine.

Herrings do not frequent all parts of the coast in equal numbers. There are places where hardly any are to be seen, while they make their appearance in great multitudes in other places, such as Belles Amours Harbour, Bradore Bay, Blanc Sablon Bay, and many other smaller bays on the coast.

Owing to the thick coating of fat which covers the flesh of these Labrador herrings, they must be salted immediately, and with great care, to prevent their turning

[^49]yellow and spoiling. The spring herrings require less care. They are almost always salted whole; that is to say, without opening them and taking out their entrails. The produce of the spring fishing goes to Nova Scotia and the United States, and from thence to the West Indies. The Labrador herring comes to Canada, and is consumed chiefly by the Irish and Scotch.

Very early in the morning of the 12th I was awakened by the cry of a loon quite near to my tent; I seized a gun and crept out. It was full daylight, although the sun had not yet risen. The loons I saw floating on the bay about half a mile away, but paddling close in shore were two Nasquapees in a birch-bark canoe with a branch of a tree in the bow. They were cautiously approaching the loons, and every now and then imitating with wonderful fidelity the cry of that wild bird. As soon as they were within 200 yards, the man in the bow behind the branches prepared his gun, the other paddled on towards the loons, calling to them and answering their cry. The loons came forward towards the canoe, but when within fifty yards one dived; the Indian instantly fired at another and killed it ; after securing their prey they returned to shore, to give the birds time to recover themselves before they again approached them.

During the morning a number of squaws passed our tents with loads of wood on their back, and bundles of fresh sapin (spruce branches) ; they were making preparations for Sunday, collecting a little store of dry wood for cooking purposes, and the sapin for relining their lodges.

Père Arnaud is very particular in making them perform their necessary preparations on Saturday in order to
secure a due observance of the Sunday; but he does not appear to have succeeded in inducing the men to set aside their ancient division of domestic labour, for the women still do all the hard work, such as putting up their lodges, collecting fire-wood and sapin, cleaning and preparing the skins of animals, while the men devote themselves to hunting, and, when in camp, to smoking or indolently lounging. Towards evening a runner arrived from the Moisie with a message to Père Arnaud - a man who was supposed to be dying wished to see the priest. Without a moment's hesitation, although it was raining heavily at the time, Père Arnaud set out on foot to walk eighteen miles, to see the sick man and administer the last consolations of religion. He hoped to find the horse which had so astonished the Nasquapee two days before, but if he did not succeed, he would have to make the journey on foot and return to Seven Islands in time for morning service at eight. Fortunately the horse was seen about two miles from the lodge, near the beach in the direction of the Moisie.

Père Arnaud caught him, and availed himself of the animal's services, much to the astonishment of the Nasquapee, who ran to see the extraordinary spectacle of a man mounting a horse and galloping away on his back. The poor Indian laughed, shouted, and danced with delight, expressing in a loud voice his admiration of both rider and steed. Père Arnaud reached the Moisie settlements at 10 P.m. The night was dark and stormy, yet he crossed the broad Moisie Bay in a bark canoe, during a storm of wind and rain, administered the last sacraments to the dying man, recrossed the bay,
remounted his horse, and, following the shore of the gulf, reached Seven Islands at 2 a.m.

Such actions win the esteem of the half-savage Montagnais and wholly savage Nasquapees with whom he comes in contact, and are a most effectual means of securing their lasting attachment. The influence which Père Arnaud exercises over these Indians is extraordinary; and it appears to be well earned by numerous acts of charity, deeds of daring, and much self-denial, as well as by an entire devotion to the object of his mission.

It is, however, a sad subject for reflection to a Protestant that such energy and constancy at all times and seasons, so bright and cheering amidst the dark gloom of Indian selfishness and degradation, should be clouded by the semi-idolatrous superstition which permits such scenes to be enacted as those described in the following chapter, and such impressions to be produced upon heathen minds of the nature of the Christian religion as images, processions, amulets, and beads are capable of creating. It is probably one of the secrets of the remarkable success which has accompanied the efforts of Roman Catholic missionaries among savage tribes, that the forms of their religious ceremonies appeal so forcibly to the eye and the imagination, and tend to awaken sympathies in the hearts of uncultivated natures, naturally prone to the grossest superstition, and ever willing to believe in superior influences visibly represented.

## CHAPTER XX.

## SEVEN ISLANDS.

The Chapel Mass - The Appearance of the Indians - The Dress of the Women - Domenique in Chapel - Otelne and Arkaske in Chapel-A Comparison - Past and Present Condition of the Montagnais and Nasquapees - Heathen Condition - Prevailing Names of Children - Mr. Anderson's Journal - The Procession The Cross - Effect on the Indians - A Dinner Party - Nasquapee Manners - The Nasquapee and the Sugar - Montagnais Mass - The Graveyard at Seven Islands - An Old French Canadian Half-breed - His Description of the Nasquapees - Nasquapee Squaws buying a Winding-sheet - Appe-mus-kis' Wives - Their apparent Insensibility - The Squaw's Grief - Snow-shoes - A Lover's Present - Indian Attempt at Gymnastics - Physical Weakness of the Indians - The Nasquapee and the Compass Louis' Opinion - A Montagnais Marriage - Inconstancy - A Wedding Feast - Seal, Loon, and Porcupine - Explanations - A Montagnais Girl's Reason for not Marrying her Lover - New Arrangements - Bound for Mingan - Père Arnaud's Departure The Departure of the Indians - Seven Islands Deserted - The Gulf of St. Lawrence.

AT half-past seven on Sunday morning the bell of the Mission chapel tolled for mass. By twos and threes the Indians left their lodges and repaired to the sacred edifice. A little before eight I entered the chapel and found it already full; the Indians, however, made room for me, and I took my place among them. The appearance of the congregation was very impressive: on one side were kneeling about eighty squaws and young Indian girls, on the other side nearly the same number


ROMAN CATHOLIC PROCESSION OF MONTAGNAIS \& NASQUAPEES,AT THE MISSION OF SEVEN ISLANDS
of men. The congregation consisted of Montagnais from the interior and from the coast, Nasquapees from Ashwanipi and Petichikapau, a lake beyond Ashwanipi on the table-land, a few French Canadians from Seven Islands and the Moisie, and a few Montagnais halfbreeds.

The Indian women wore the picturesque Montagnais cap of scarlet, and black or green cloth in alternate stripes, with, in some instances, a gold lace tassel attached to the drooping extremity. Most of them were enveloped in gaudy coloured shawls; their petticoats were of blue cloth or calico, with bright patterns, their mistassins or leggings of blue cloth, and their mocassins of seal skin, neatly ornamented with silk or porcupine quills, worked into patterns of flowers. The men had all discarded their Indian dress of caribou skin, and wore cloth coats and trousers ; the only article of Indian manufacture which formed part of their clothing was the seal-skin mocassin.

They were chanting at the time I entered, but their voices are far inferior to the low, soft and sweet tones of the Ojibway women. The men's voices are harsh and discordant, and they apparently endeavour to make up for want of harmony by noise. I was very much struck with the general aspect of the Montagnais women : their eyes are inclined, their noses aquiline, and their jaws square ; the last feature is also the distinguishing character of the men, but is still more developed in the Nasquapee than in the Montagnais race.

Both men and women have thick lips ; and among the latter some were seen to whom a singular developement of this feature gave an expression the reverse of pleasing.

Domenique came to me late on Saturday evening to ask for a 'bit of silver' to put in the plate. I could not then supply his want, but I told him to come again in the morning; he either forgot my invitation or found another friend. At the offertory a china bowl, neatly covered with red calico, was held before him by an officiating French Canadian. Domenique presented his offering with


A MONTAGNAIS SQUAW.
the air of a man whose duty it was to set a good example. He occupied the seat in front of the altar-railing, and the bowl was presented to him first. He put his hand in his waistcoat pocket and drew out a penny, holding it full twelve inches above the bowl; he let it fall after a moment's pause with a noise which made me think the bowl would scarcely stand many repetitions of such demonstrative
almsgiving. When the Indians went one by one to the altar-railing to receive the sacrament, the native habits of Otelne and Arkaske were well displayed. They were squatted on the floor near me in the background, but when their turn came they rose and wound their way through the other kneeling Indians with a silent and quick step, which reminded one irresistibly of their motions when stealing swiftly through a thick forest of young trees. They seemed scarcely to touch any of the worshippers kneeling close together, and when passing noiselessly through the crowd, they did not appear to cause the slightest inconvenience or attract any perceptible attention. I could not refrain from drawing a mental comparison between Domenique at the extremity of the first gorge of the Moisie, and Domenique kneeling at the altar-railing of the Roman Catholic chapel. What a change had taken place in his appearance! Dressed in caribou skin from head to foot, thin, wild-looking, and emaciated, he looked the type of a forest Indian. Kneeling at the altar-railing, clothed in a black coat with an epaulette, light blue cloth trousers, a gaudy checked waistcoat, a white shirt with a high collar, a black tie, and a flaming yellow handkerchief loosely folded over his 'tie,' he was like a half-civilised dandy, and completely shorn of his natural grace and dignity. His new clothes were part of the produce of his winter hunt, for which he had paid dearly to the traders ; but they became him infinitely less than his old caribou suit. His children and squaw were similarly metamorphosed, and to my eyes had lost more than half of the interest which properly belonged to them.

Another comparison forced itself upon my mind as I was surveying these Indians eating the 'pain béni,' which was handed round in the form of a pyramid prettily decorated with ribbons, more in keeping with the solemn service in which they had just been engaged.

I thought of the condition of their wild brethren wandering through the dreary forests or over the mosscovered rocks of the Labrador Peninsula, who had never heard of the name of Christ, who had no real knowledge of sin, none of redemption, and none of the life to come - who were steeped to the lips in superstition, holding imaginary communion with evil spirits, and endeavouring to appease their malice with miserable offerings of food, blood, and sometimes of human life.

I thought, too, of the years of incessant labour and patient endurance which the missionary had undergone in order to bring these Indians together at stated periods and teach them morality, honesty, and truth, the responsibilities of the present and the hopes of a future world. However distorted to my mind appeared the lessons which were taught them of the Christian religion, it was infinitely better than their own foolish and vain imaginings, full of corruption and sensuality.

The character of the conversation which takes place in a heathen Indian lodge is degrading and revolting in the extreme. The early Jesuit missionaries have not exaggerated the scenes of domestic licentiousness which characterised the Montagnais when first they were known to Europeans. The daily routine of savage life among Nomadic tribes on the north shore of Lake Superior at the present day is sufficient evidence of the impure
thoughts and words which are the offspring of heathen degradation among many tribes of wood Indians of North America. The names given to children by their parents are often such as could not be mentioned to civilised ears. Mr. Anderson, in charge of the post at Mingan, permitted me to see the journal he kept in 1840 and 1841 at Nepigon, north of Lake Superior, and on the north shore of Lake Huron. He has recorded there the Indian names of many of those who were attached to the Hudson Bay Company's post as hunters, and supplied the English translation. It is sufficient to say that they are of such a nature that, together with many other characteristics of common life among the Indians, they will probably remain for ever unknown to the English reader.

At six in the evening we assembled at the chapel to take part in a procession which was to march to a large cross 400 yards distant. After a short preliminary service, the priest, in his robes, walked out of the chapel, and was followed by the women, dressed as at morning service.

Some Indian lads bearing a small platform, on which was placed a half-veiled gilt image of the Virgin and Child three feet high, next took up their position. The men brought up the rear. As soon as the whole body of Indians were assembled in the open air, two children carrying a red cross headed the procession; the women followed two and two ; then came the lads with the image ; then the priest with his two assistants clothed in surplices, and holding lighted candles; and finally the men. As soon as the procession started the women began a chant, in which the men soon joined. The singing continued
until the priest arrived at the cross, when he entered a little temporary chapel constructed of branches of trees, and chanted a short service, all the congregation kneeling on the wet grass. A hymn was then sung, and the procession returned to the chapel in the same order as before.

The cross is about fifteen feet high, and bears the following inscription:-

> Jesus niran Kaots nipikium.
> (Jesus who died on the cross.)

And in smaller characters below-

## Kanaskamnest mak kakuskuertak Oblat-Marie Immaculate.

The cross was placed in a small enclosure, and the path to it was ornamented with spruce trees stuck in the ground and forming an avenue. The singing of the women sounded very well in the open air, and the responses of the men were much less harsh than in a small and crowded chapel.

It was dusk before the procession had returned and reentered the chapel; a few candles were lit, a hymn sung, and the ceremony was closed with the customary priestly blessing. The effect of this display upon the Indians was very marked, and no one present, who was familiar with Indian heathen customs, could fail to rejoice at the contrast it presented to a Medicine dance, or Scalp dance, or a Dog feast, which were once common in the same camping ground before the Roman Catholic missionaries succeeded in winning the Montagnais from their earlier customs and superstitions, and instilling into their minds the germs of a better hope, however much it may be
clouded in the form in which it is presented to them, with other superstitions of a more refined and exalted character.

We had a dinner party on the following day. I invited Otelne, Arkaske, the Nasquapees who had arrived a few days before, Domenique, Bartelmi, Michel, and Louis. I gave them fried pork and potatoes, fresh cod fish, pancakes, and molasses, also tea and sugar. Without thinking that our wild visitors were not accustomed to the ways of the polite world, I handed to one of the Nasquapees a canister containing about three pounds of lump sugar, in order that he might sweeten his tea. He looked at the sugar, asked Otelne a question, put a piece in his mouth, nodded his head, saying Ho! ho! ho! With lump after lump he charged his capacious mouth, holding firmly on to the canister. He had got through about half a pound when the cook, a French Canadian, said to me 'that Nasquapee's eating all the sugar.' I touched Domenique and called his attention to the Nasquapee. Domenique himself was so deeply engaged with the molasses that he had not observed his neighbour's partiality for the sugar, but as soon as he observed him putting three or four lumps in his mouth and grinding them between his magnificent teeth, he snatched the canister and upbraided him for his greediness. The Nasquapee laughed ; Louis laughed so heartily he could scarcely interpret what the Indian said. It was to the effect that he thought the sugar was his share of the dinner, but he had no objection to try the pancake and molasses. Domenique, with wise caution, helped him, but he found taking the sweet stuff up with
his fingers rather slow work, and nodded his thanks to me with Ho! ho! ho! when I handed him a spoon. After the molasses and pancake, he tried the pork and potatoes, and then the cod fish, finishing off with a handful of sugar which I presented to him.

The other Indians, having been accustomed to the proprieties of at least half-civilised life, behaved very well, and abused the Nasquapee for his want of manners, at which he laughed and said he would do better next time, but was not in the least degree abashed. He told Louis confidentially, after the dinner was over, that the sugar was very fine. I gave him a piece of tobacco by way of dessert ; he thanked me with another Ho! ho! ho! and begged for a pipe. Having filled and lit it he stretched himself before the fire, and looked the picture of contentment. After dinner and pipes they came into my tent to explain the map of the rivers flowing into the gulf below the Moisie, which they had drawn at my request, and with the assistance of Louis I gleaned a fair amount of information from them respecting the country, all of which was confirmed by other descriptions and maps which I obtained a few weeks later at Mingan.

The burying-ground at Seven Islands is close to the chapel. It contains the remains of Nasquapees, who have come from their distant hunting grounds to see the robe noire. To many of these people the visit to the coast is a journey to the grave ; comparatively few return. 'They die,'s said an old French Canadian half-breed to me, 'they die like rotten sheep as soon as they get here; the climate kills them; they cannot stand the damp sea air; they catch cold and go off at once.'
'What brings them here?' I asked.
'Well, sir, it's the priest. He tells Domenique, Bartelmi, and a lot of others, who go to winter in the Nasquapee country, to bring them down, and as soon as they come they die, some in a month, some in a year. Look at those who came here last year : they can't hunt ; they 'll die before next spring.'
' But is not the priest quite right to induce these heathen Indians to come and learn something about the Christian religion? '
'Ah! that's another thing. No doubt it's for the good of their souls, but the poor creatures die off as soon as they come, and to my mind, they might just as well live a few years in their own country. It's no use coming here to die; but then there's the religion ; it's a difficult matter; perhaps it's better to die a Christian than to live a heathen.'

- Wiser and better men than you and I have made the same remark before.'
'Perhaps so, sir. I am an ignorant man-a trapper, and nothing more than a trapper; but I am sorry to see these poor creatures come down to the coast and die. They do n't show their trouble before other people, but when they are alone, how I have seen them heave and cry as if their hearts would burst!'
'Are you speaking of the Nasquapees?'
'Yes; I was thinking of them, but the Montagnais are the same. It's not a year since a fine young Nasquapee with two wives came down the St. Marguerite to Seven Islands. He died of influenza before he had been here six months. The women came to me to buy his winding-
sheet. I said to them, "Is Appe-muskis* dead?" "Not yet," one replied. "Had you not better wait awhile ?" I said to his wives, for I felt sorry for them, and did not want to take the marten skin they brought to pay for it. They shook their heads. "No, no," said one ; "he will die with the setting sun ; give me the winding-sheet." Now to look at these women's faces, you would not think that there was much the matter with them ; but then it's their custom ; both Montagnais and Nasquapees always do it.
'Well, sir, two days after that poor fellow was buried, I was away in the woods on the other side of the bay. I walked to the beach and saw a canoe lying; I knew it was one of Appe-muskis' wives, so I went into the woods and listened, thinking I heard her coming through the bush. I crept near to look. She was sitting crouched up on a fallen tree; her head was bent down on her knees. She was crying out some words in Nasquapee, which, though very like Montagnais, I can't always understand. At last I caught her saying several times, "To die so far, far, far from home!" I knew then what she was sobbing about, and crept back to the beach.
'When I got there I fired off my gun. In two minutes the squaw came from the woods chewing a bit of gum, but to look at her, you would n't have thought she'd a care on her mind. I glanced at her close to make sure, and I saw where she had brushed off her tears ; but she chewed away at her bit of gum as if nothing was the matter with her.'

Hanging on the outside of a Nasquapee lodge were a handsome pair of snow-shoes. I took them down to

[^50]examine, and a young Montagnais, who spoke French well, and with whom I was walking at the time, told me they had been a present of a favourite wife to her husband. The front part of the snow-shoes was made of beaver netting - that is to say, of network made from the skin of the beaver cut into small thongs ; the second compartment was of caribou sinew ; the third of otter skin. The side or framework of the shoes was ornamented with caribou sinew tassels and small bunches of caribou hair. A present of a pair of snow-shoes is not unfrequently made by a mistress to her lover. Near those I had been admiring were two other pair, but much smaller, and evidently intended for rough work, as they were made of caribou sinew. These belonged to two little children between seven and nine years old, who trudge merrily over the snow in winter, when camp is being moved, or when they go to gather wood, or look after the marten traps, which they are early taught to make.

Otelne and Arkaske and one or two others joined us, and we all went together to the store of a trader to turn over his things. I saw a twenty-eight pound weight lying on the counter, and, being desirous of testing the strength of the Indians, I asked them to hold it out at arm's length. None of them would begin. I therefore set the example myself, and held the weight at arm's length for a few seconds. Otelne then tried, but he could not even bring it up to a level with his eye. Arkaske's turn came next, but he, like Otelne, failed to lift the weight. Two or three Montagnais next tried their strength, but none of them succeeded in raising the weight until the outstretched arm became horizontal. I next caught hold
of a beam about four inches square, and slowly lifted myself so that my chin rested on the beam, then allowed my arms to assume a perpendicular position; this I repeated half a dozen times-a common gymnastic exercise which every schoolboy can do with a little practice. One by one the Indians tried to do the same, but in one instance only did any of them succeed in touching the top of the beam with his chin ; the others could not even touch the bottom. I tested the muscular strength of these Indians in various ways, but I found them to be all comparatively weak. No doubt they were not in good condition, having most of them been at Seven Islands or on the coast for some weeks, and living on seals and fish. A few weeks in the woods would probably make a change; but their physique is certainly inferior to that of the white man.

Towards evening I had another visit from the Nasquapees: they came to exchange bows and arrows and fish-hooks for tea and tobacco. They expressed much delight at receiving a present of a number of large hooks with strong gimp attached. One of them lay on the ground for fully half an hour playing with a compass, drawing the needle round with a key.

He was not a little astonished when I held a small magnet, which I carefully concealed in my hand, to the needle and repelled it; he was resting his head on his hand at the time when I tried the experiment. The moment he saw the needle move away from my finger instead of towards it, he sat up and motioned me to do it again; he then tried with the key, but he found it attracted the needle. I put the magnet near it, he saw it was repelled. He spoke to the other Indians; they
crowded round to see the wonderful instrument, and repeated the same experiment with much curiosity. Some time after my visitors had bade me good night, the Indian who was so minutely observing the compass came back with Louis, and wanted to know what I would take for the compass, key, and magnet. I asked Louis what he wanted them for. Louis replied that he did not know, but he thought it was to show his friends. The Nasquapee said he would give furs for them, but I closed the conversation by saying that I could not part with my compass or with the key.

The Nasquapee came the next morning to see if I would exchange the compass and magnet and key for furs, and expressed great anxiety to become the possessor of the three little mysteries. But I told him if he brought me fifty martens I should not let him have them, as they would be of no use to him whatever. I rather suspect that the Nasquapee, who was only a very young Christian, thought that he might make a good thing out of the magnet, key, and compass, when he went back among his friends in the far interior; his manner was earnest and decided, and no doubt he would have promised to pay a good price for them. When I mentioned my suspicion to Louis, he took the same view of the matter, and said characteristically, 'that Nasquapee make the other Nasquapees far away back think he is a great conjuror, get many furs from them; little compass point out where caribou lie, make other Indian pay for telling; that Nasquapee no fool.'

Early on Tuesday (the 16th) I went to the chapel to witness an Indian marriage. The chapel was crowded
with Indians: one dark bride wore a pretty Montagnais cap of scarlet and black with edging of silver cord. I looked in vain for the other, but consoled myself with the reflection that she was modestly squatting among the other women and wore no distinguishing bridal array. When the priest came to that part of the service which involves the blessing of the ring, one bride and one bridegroom knelt at the altar-railing ; the second bridegroom looked wistfully at the little sea of Montagnais caps; the male portion of the congregation glanced around; an awkward pause ensued, when slowly from among the kneeling squaws a tall young Montagnais girl arose, with a most prominent Roman nose, thick lips, and slanting eyes; she advanced to the railing and knelt beside her lover. Amidst a breathless silence both couples were joined together. Montagnais damsels, like some of their fairer sisters, are fickle and changeable. A melancholy instance of unrequited love on one side, and inconstancy on the other, has occurred at Seven Islands. A girl agreed to be married to a young Indian as soon as the priest came; the day was fixed, the guests were all invited, and a seal was shot for the wedding feast.

Loons were purposely kept for three days, and a porcupine was trapped; preparations on a large scale were made for a great spread. The wished-for hour arrived ; the bridegroom was dressed in his best; the guests were all waiting at the chapel doors, anxious for the ceremony to be over, so that they might begin the feast, as the odour of seal, loon, and porcupine cooked in the lodges close
at hand was pervading the air with a most tantalising aroma. The bridegroom and guest waited long and patiently-

> Till some one asked, 'Where is the bride?' And then
> A bridesmaid went, and ere she came again
> A silence fell upon the guests - a pause
> Of expectation, as when beauty awes
> All hearts with its approach, though unbeheld;
> Then wonder, and then fear that wonder quelled :
> For whispers passed from mouth to ear, which drew
> The colour from the hearers' cheeks, and flew
> Louder and swifter round the company;
> And then Gherardi entered with an eye
> Of ostentatious trouble, and a crowd
> Surrounded him, and some were weeping loud.

But they did not find Genevra dead. They found the maiden picking cranberries close to the forest of stunted balsam spruce which lines the shore. Her anxious friends enquired the reason of such extraordinary conduct. She replied-
' Do you think I am going to marry him ? -he can't call a loon. I heard him yesterday, and he frightened the bird - he may find another wife.'

A short council was held, at which it was unanimously decided not to interfere with the young people, but to eat the feast, just as if the wedding had taken place. The company at once repaired to the lodges and abused the inconstant maiden over the seals, the loons, and the porcupines. My informant told me that the lover and his former mistress joined in the feast as heartily as any of the rest, without any appearance of shyness or restraint.

A fine looking schooner came into the harbour on the afternoon of the 16 th bound for Mingan with a cargo of salt. I hastened on board as soon as she cast anchor, and made arrangements with the captain for a passage for my party, canoes and baggage. We went on board at night-fall in order to take advantage of the rising tide, and a probable change of wind in the early morning ; but we were disappointed ; the wind continued unfavourable, so that we employed the time in fishing for cod. Père Arnaud shortly before noon set sail for Bersamits in an open boat, with a number of Montagnais.

The whole Indian population of Seven Islands were about to disperse as soon as the priest had taken his departure, birch-bark lodges were taken down, canoes were launched, and their little store of worldly goods were all embarked ready for a start the moment the Père left the shore.

A salute was fired by the Indians, which was repeated again and again. They watched the boat until it had reached half way across the bay, when, one by one, they walked slowly to their canoes. The Nasquapees were going to the Moisie-some of them to retrace their steps to Ashwanipi and Petichikapau. Domenique was going to Mingan, Bartelmi to the east branch of the Moisie. Otelne and Arkaske intended to remain at Seven Islands. Most of the other Montagnais were going up the St. Marguerite to hunt. In a few hours Seven Islands would be comparatively deserted-the few people remaining being the custom house officer, his family and servants, a trader or two, and a few fishermen.

At about noon the wind changed; we heaved anchor, set sail, and followed the little fleet of canoes which were keeping close in shore, until we approached the entrance to the beautiful harbour of Seven Islands, and saw the broad gulf of the St. Lawrence beyond.

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end of the first volume.
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[^0]:    Priest
    180

[^1]:    * When Indians wish to be very emphatic in their description, they repeat the adjective twice, and sometimes three times.

[^2]:    * Appendix to the sixteenth vol. of the Journals of the Legislative Assembly of the Province of Canada, Session 1858.

[^3]:    * Notes on Esquimaux Bay and the surrounding Country, by W. H. A. Davies, Esq. (Transactions of the Literary and Historical Society of Quebec,
    1842 .)

[^4]:    * The Brent Goose (Anser Bernicla). Audubon tells us that 'The "Brent Goose" may be considered as a salt-water bird, for it never ascends our rivers beyond the influence of the tides, nor is found on inland lakes or ponds, unless it be wounded, and happens to alight accidentally in such places. To this natural predilection for salt water may be attributed its habit of flying round the projections of capes and headlands. It very seldom passes over a neck of land, unless suddenly surprised and alarmed by the gunner.'

    These remarks probably apply only to the habits of the Brent goose south of New Brunswick. From information derived on the spot, I learned that this bird is not seen much farther eastward than Mingan, on the north shore of the Gulf. They are found on all parts of the coast between Mingan and the Saugenay, where they arrive about April 20, and remain ten or twelve days. They go inland, and breed on the upper lakes, or cross over to Hudson's Bay. They come from the interior, with the other species of geese, about September 15, remain about a month, then strike direct to the south shore of the St. Lawrence, or to the island of Anticosti, where they congregate in large numbers, before their winter flight towards the south. The flesh of the Brent goose is very rich and juicy. Several of these birds were shot in the rear of the Moisie Bay during the first and second weeks of June 1861. Salmon and Brent geese are found in perfection in Moisie Bay.

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[^5]:    * Two or three poles, eight or ten feet long, are laid at the bottom of the canoe to stiffen it, if the load be heavy, and also to prevent the baggage from getting wet if the canoe should leak.

[^6]:    * A Popular Treatise on the Fur-bearing Animals of the Mackenzie River District, by Bernard Rogan Ross, Chief Trader. Presented to the Natural History Society of Montreal. Published in the 'Canadian Naturalist and Geologist,' February 1861.

[^7]:    * The original of this map is in the Canadian Library of Parliament.

[^8]:    * The Wolverine (Gulo Luscus), or Glutton, is styled the Carcajoù by the French Canadians. It is found in the northern parts of the Eastern and Western Continents.
    $\dagger$ Frozen across.

[^9]:    * A Popular Treatise on the Fur-bearing Animals of the Mackenzie River District. By Bernard Rogan Ross, C.T. (Canadian Naturalist and Geologist, 1861.)

[^10]:    * Cat, or lynx.

[^11]:    * Branches of the spruce.

[^12]:    * Relation de la Nouvelle France, en l'année 1634.
    $\dagger$ Legends and Traditions of the Odahwah Indians, by F. Assikinack, a warrior of the Odahwahs. Read before the Canadian Institute, December 1857. 'Francis Assikinack, the author of this paper, is a full-blooded Indian, and a son of one of the chiefs of the Odahwahs, or Ottawas, as they are more generally designated, now settled on the Manitoulin Island, in Lake Huron. In 1840 he was sent, at the age of sixteen, to Upper Canada College, Toronto, by the late Daniel P. Jarvis, then Superintendent-General of Indian Affairs. At that time he was totally ignorant of the English language; and, after being about three months at the above institution, he got one of the boys, (now the Rev. G. A. Anderson, of Tayenduiaga,) to interpret for him, and solicit permission to return home, as he thought he could never learn the English language. Fortunately his desire was not complied with, and he remained long enough at Upper Canada College, not only to acquire such a

[^13]:    command of the English language as is evinced by this communication on the legends and traditions of his tribe, but also to obtain a familiar knowledge of Latin and Greek. F. Assikinack now fills the office of interpreter in the Indian Department at Coburg. So creditable and satisfactory a result of an experiment which at first seemed hopeless, ought surely to encourage its repetition, and that on a much more extended scale.'- Canadian Journal of Industry, Science, and Art.

[^14]:    * Mr. Ruttan, President of the Provincial Agricultural Association, 1849,

[^15]:    * The Savanne Portage is near the dividing ridge between Lakes Superior and Winnipeg. The country abounds in rabbits and partridge, and the lakes teem with fish.

[^16]:    * The following account of the habits of the moose is by Mr. James E. Powell, a hunter in Maine, and was read before the Philadelphia Academy of Natural Sciences in June 1856 :- ' In regard to the moose, I speak of it

[^17]:    * Cervus Alces.

[^18]:    * Pieces of timber squared by the lumberers.

[^19]:    * The Tête de Boule Indians hunt about the headwaters of the St. Maurice, a large tributary of the St. Lawrence, draining a considerable area of country between Montreal and Quebec. They were once a numerous and formidable people, but small-pox, that terrible devastator of the Indian race, and rum, the white man's swift agent of destruction, has so greatly reduced their numbers, that they do not now exceed thirty families. They have the curious custom of placing near the graves of their departed friends, which are generally neatly covered with birch-bark, a small pile of fire-wood, for the use of the spirits of the dead, on their journey to the happy huntinggrounds. The Indians of the interior and the prairies place tobacco and wild rice in or near the graves of their relatives, and thus provide for their comforts on the long journey to the land beyond the setting sun. The superstition is of the same character, but displayed in a different manner.

[^20]:    * Pope's 'Essay on Man.'

[^21]:    * Relations des Jésuites, 1631.

[^22]:    * Alcedo alcyon. - Linn.

[^23]:    * The branches of the white spruce.

[^24]:    * Assikinack, the 'Odahwah Warrior,' to whom reference is made in a preceding chapter, describes the mode of bringing up children among the Odahwahs of Lake Huron in the following words : -
    - With regard to the manner of bringing up Indian children, nothing can be more erroneous than to suppose that the young were allowed to grow up without any sort of discipline. So far from this having been the case, in addition to the ordinary way of correcting children, there were many other restraints imposed upon the young. The Indians knew in their primitive state, apparently as well as civilized communities, that children too much

[^25]:    * Private Journal, Lake Nipigon, 1840, by James Anderson, Chief Factor of Mingan.

[^26]:    * Golden Seal (Hydrastis Canadensis).-The root only is used. It is of a beautiful yellow colour internally, and is used by Indians as a dye. It is a powerful tonic.

    Lobelis (Lobelia inflata).-This remedy was a favourite with the medicine man among the Indians long before the settlement of Canada by the whites. Both the plant and the seeds are used in medicine. They are emetic, and in small doses expectorant and diaphoretic.

    Mandrake (Podophyllum peltatum). -The mandrake was well known to the Indians of Canada, and much used by them as a purgative. The root is

[^27]:    * Amongst all the tribes, especially those in a civilised or semi-civilised state, much harm is done, and the constitution irreparably injured, by repeated bleedings. Even in slight rheumatic pains, or the stiffness arising from fatigue, they almost invariably resort to this mode of cure, which affords temporary relief, but ultimately can scarcely fail to prove injurious. The plants and roots used by them as purgatives and emetics are extremely harsh and violent in their operation, and consequently hurtful in many of their diseases; as there is no better established fact in medicine, that in proportion as the strength is diminished the liability to disease is increased, and this especially holds true in scrofulous subjects. The Indians bear pain with considerable fortitude, and are amenable to the directions of the medical attendant. Generally they require much larger doses of medicine than Europeans. A purgative which does not produce a proper proportion of griping is not regarded as effectual to the evil for which it was taken.

[^28]:    * 'What to Observe in Canadian Lichens.' By G. W. Lauder Lindsay, M.D., F.L.S. (Annals of the Botanical Society of Canada.)

[^29]:    * Rapport sur les Missions du Diocèse de Québec, 1854.
    $\dagger$ Recollections of the Swans and Geese of Hudson's Bay, by George Barnston, Esq., of the Honourable Hudson's Bay Company. Read before

[^30]:    the Montreal Natural History Society. - The Canadian Naturalist and Geologist, October 1861.

    * Ibid.

[^31]:    * A Few Notes on the Dark Days of Canada. By the Honourable Chief Justice Sewell, President of the Literary and Historical Society of Quebec.

[^32]:    * Relation des Jesuits.
    $\dagger$ Remarks on the country lying between the Rivers St. Maurice and Saugenay, on the north shore of the St. Lawrence. By Lieutenant Ingall, 15th Regiment.- Transactıons of the Literary and Philosophical Society of Quebec, 1830. Vol. ii.

[^33]:    * Quoted in Notes on the Earthquake of October 1860. By J. W. Dawson, LL.D., F.G.S.
    $\dagger$ This earthquake was observed by Père François de Crepieul, in the country north of Tadousac, and is recorded by him in a letter dated June 2, 1672. The Père says that it was the continuation of the terrible earthquake of 1662 , ' which has not since ceased in this quarter of the north, although it is felt but little and at intervals.' - Relation de la Nouvelle France en $l$ 'Année 1672.
    $\ddagger$ The greatest fluctuations in the Canadian Lakes, during ten years' observations, are found to be in Lake Ontario, where between the low water of 1857 and the high water of 1858 there was a range of 4.5 feet. The observations of Professor Dewey, of Rochester, extending as far back as 1846, show this to be the maximum range during the whole period. Colonel Whittlesey states the extreme range of Lake Erie, as observed, to be 5.25 feet, and Mr. Lapham's observations at Milwaukee give for the extreme range of Lake Michigan 5.5 feet.

    The survey of these great lakes, conducted by Captain G. G. Meade, United States Topographical Engineer, has produced the following results:-

[^34]:    * Notes on the Earthquake of October 1860.

[^35]:    Length of spoon and hook . . . . $4 \frac{1}{4}$ inches
    Length of bone spoon . . . . . $2 \frac{4}{10}$,
    Hook of copper or iron nearly two-tenths of an inch thick, without barb.

[^36]:    * Paul le Jeune may be regarded as the father of the Jesuit missions in Canada, although he arrived so late as 1632, after the restoration of Quebec to France. He soon made himself familiar with the Montagnais language, in which he wrote a catechism for the Indians. In 1649 he was recalled to France and made Procureur des Missions Etrangères.

[^37]:    * Relation de la Nouvelle France, en l'Anneé 1632 ; Relation des Jesuits.
    † Relation des Jesuits, 1665.

[^38]:    * Exploration of the St. Maurice and Ottawa, by Lieutenant Ingall, 15th Regiment, 1829.

[^39]:    * The 'tabognay' is a little sledge upon which people in winter amuse themselves in descending hills covered with snow.

[^40]:    * 'Relation de la Nouvelle France,' en l'année 1633.

[^41]:    * It is a common belief among some Indian tribes that comets are deities who have been driven from their proper sphere, and are compelled to wander through space.
    $\dagger$ Indians call the 'Aurora' 'the dancing spirit of the dead.'

[^42]:    * A shoal of fish coming in either direction in thirty to forty feet of water, the depth of the net, find their course intercepted; some of the fish pass round the seaward side of the net and escape; the others or some of them, coming landwards, enter the first compartment, swim round its side, and a portion pass into the second compartment, swim round its side, and, always pursuing a straight course, ultimately enter the third compartment, and finally the pound or fourth compartment. The fish, when swimming round the sides of the net, are observed to pass by the narrow doors, keeping always 'straight ahead;' so that, if the doors are always fush with the sides of the net, the fish swim straight on and do not turn out of their course to pass through them, and consequently remain in the pound when once there. It is needless to say that the net is floored with net, and really forms a gigantic bag with square sides and narrow perpendicular inlets. When the fish are taken out, the pound or any single compartment of the net is raised by men in boats, who haul up the net with rope attached to the floats.

[^43]:    * Many of the facts mentioned in this description of the fisheries of the Gulf are from the excellent report for 1859 by Capt. Fortin, commanding. the 'Canadienne,' a Government vessel employed in the protection of the fisheries in the Gulf of St. Lawrence.

[^44]:    * Geological Survey of Canada - Report of Progress for the year 1857.

[^45]:    * Attempts have been made to fix the money value of the ammonia and the phosphates in manures, and thus to enable us, from the results of analysis, to estimate the value of any fertiliser containing these elements. This was I believe first suggested a few years since, by an eminent agricultural chemist of Saxony, Dr. Stöckhardt, and has been adopted by the scientific agriculturists of Great Britain, France, and the United States. These values vary of course very much for different countries; but I shall avail myself of the

[^46]:    * Report of the Geological Survey of New Jersey for 1856, p. 63.

[^47]:    * Remarks on some of the Birds that breed in the Gulf of St. Lawrence. By Henry Bryant, M.D. Proceedings of the Boston Natural History Society, vol. viii.

[^48]:    * Captain Fortin's Report on the Fisheries of the Gulf of St. Lawrence.

[^49]:    * Captain Fortin's Report on the Fisheries of the Gulf of St. Lawrence.

[^50]:    * Appe-muskis signifies a 'spit' or stick on which game is cooked.

