COMPRISING THE PROVINCES OF PRINCE EDWARD ISLAND.

NOVA SCOTIA.

NEW BRUNSWICK.

QUEBEC, ONTARIO,

MANITOBA,

BRITISH COLUMBIA.

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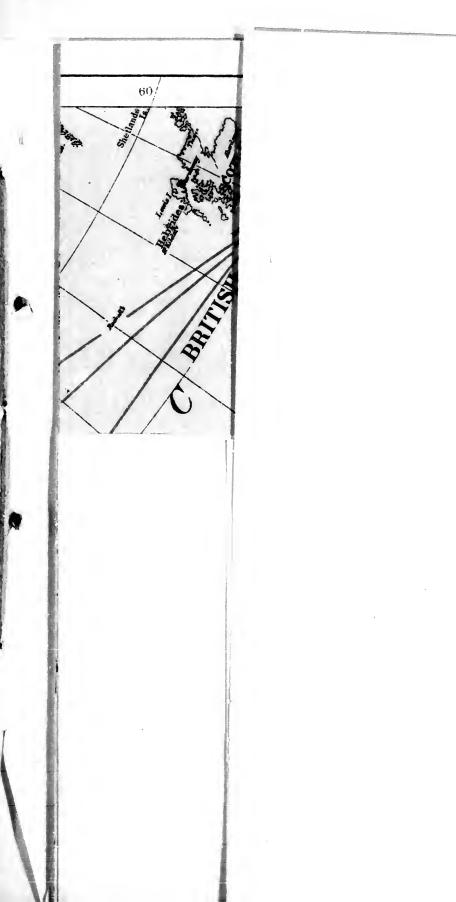
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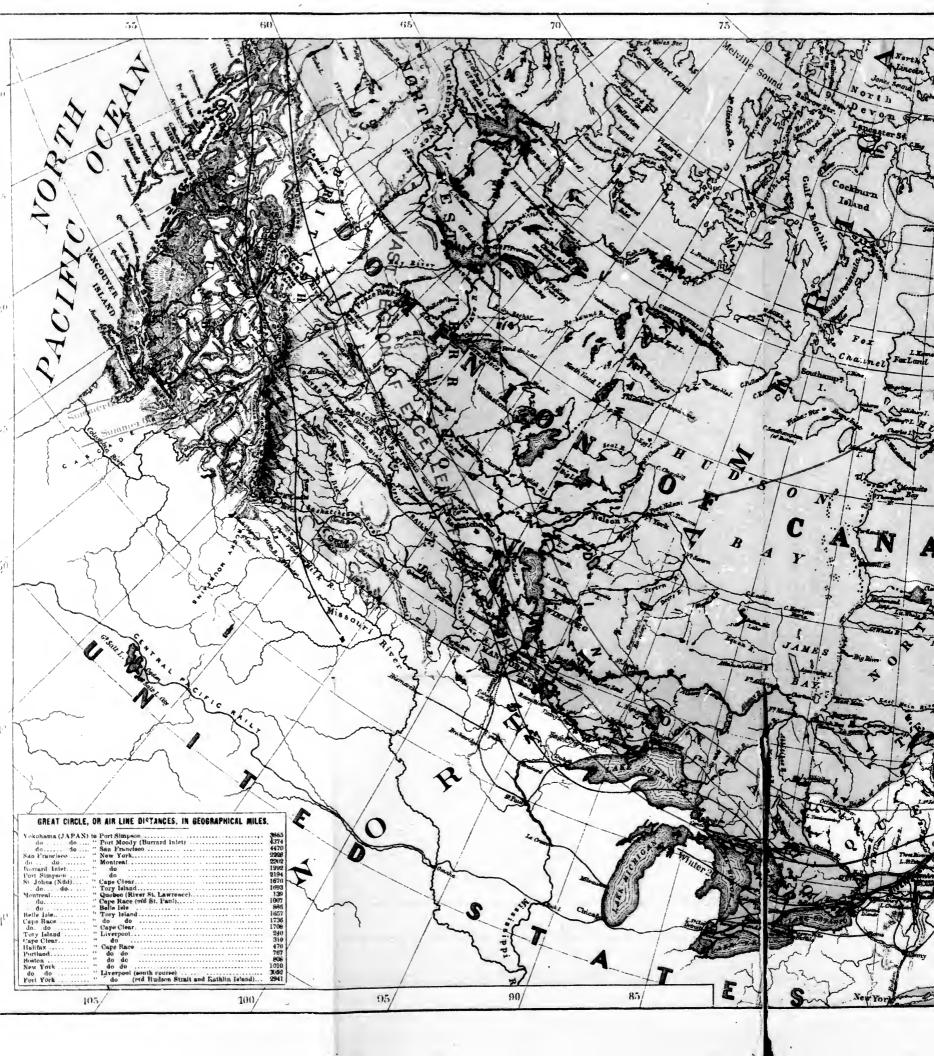
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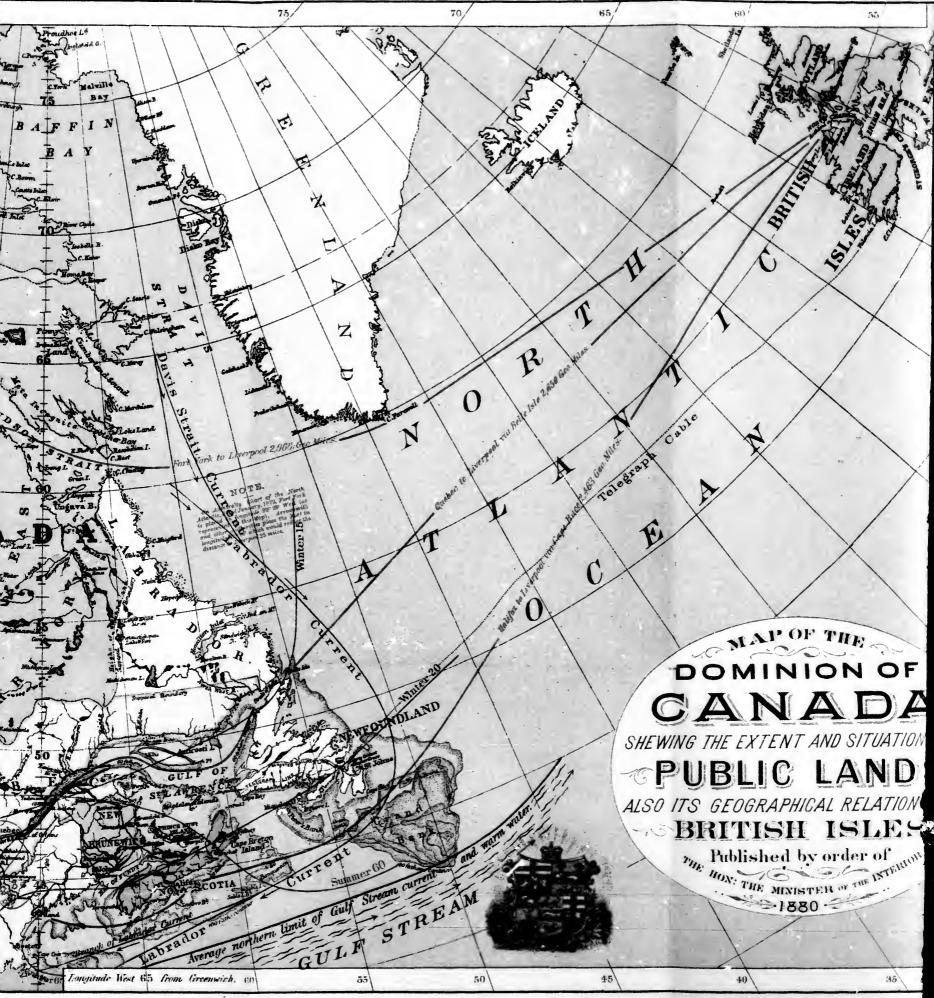
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OTTAWA: THE DEPARTMENT OF AGRICULTUBE. PUBLISHED BY 1880

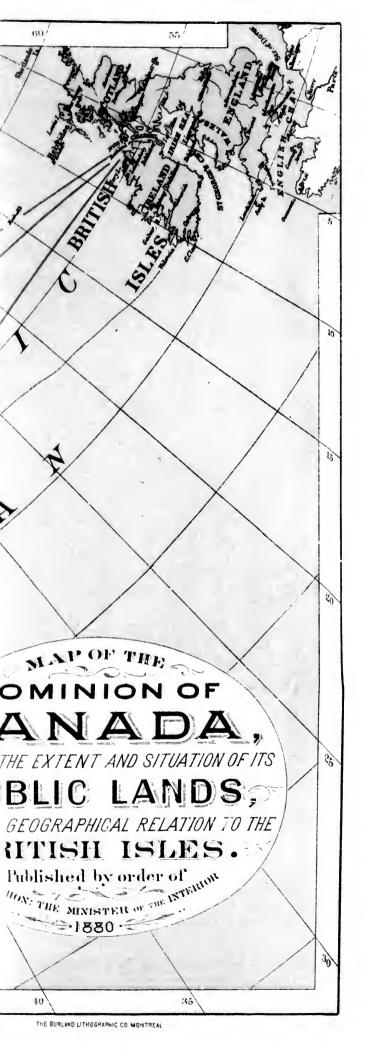








THE BURLAND LITHOGRAPHIC-CO MONTREAL





DOMINION OF CANADA:

COMPRISING THE PROVINCES

OF

PRINCE EDWARD ISLAND,QUEBEC, ONTARIO,NOVA SCOTIA,MANITOBA,NEW BRUNSWICK,BRITISH COLUMBIA,NORTH-WEST TERRITORIES.

A HANDY BOOK FOR EMIGRANTS.



OTTAWA: (') PUBLISHED BY THE DEPARTMENT OF AGRICULTURE.

1880.

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DOMINION OF CANADA.

INFORMATION

FOR

INTENDING EMIGRANTS.

CHAPTER I. INTRODUCTORY.

EMIGRATION FROM EUROPE.

THE continuous emigration from the old settled countries of Europe, principally from the United Kingdom and Germany, to new countries in different parts of the world, within the last half century, is one of the most remarkable facts of modern history. Over two millions of souls emigrated from Great Britain alone in a little over ten years; and yet it appears from the statistics, published by the Registrar General, that the natural increase of the population in England is very nearly a quarter of a million a year over the outflow from emigration. Even with this outflow, there is crowding in the labour markets, and a large amount of pauperism. Emigration relieves both, while it builds up prosperous communities in hitherto waste places of the world.

The figures published by the Imperial Board of Trade show that £21,438,218 stg. were remitted by emigrants from Great Britain to the friends left behind them from the year 1848 to 1878, and this principally in the form of prepaid passages. There is in this proof of a very striking kind of the prosperity of the emigrants and their desire that their friends should join them. The large sum above

stated was the amount of remittances only so far as ascertained. There were other large amounts not ascertained.

These pages are intended to show reasons why a large portion of this emigrating movement should be directed to Canada; to indicate the classes of persons who may advantageously emigrate; and to furnish them with useful practical directions.

CHAPTER II.

MOTIVES TO EMIGRATE.

THE first question which a man who thinks of emigrating should ask himself, is "Why should I do so?" And it is probably the most important practical question of his life. It involves the breaking up of all the old ties and associations of his childhood, and beginning life afresh in a new country, where everything which surrounds him will seem new and strange to him at first, but with which he will in one year become familiar; and the general experience in Canada is that when an immigrant has lived a few years in the country he could not be induced to leave it.

It is, however, true that emigration has led to many cases of individual hardship; but these are the exception; and they always come from the unfitness of the persons who suffer it to emigrate at all.

Generally speaking, where a man is doing well at home, and sees his way to continue to do so, great caution should be used in advising him to emigrate; and it is a safe rule to 1^{-1} well alone. But a man who is doing well himself, and has a family, may generally find a better chance for educating and advantageously placing his family in life in Canada than in the crowded population at home.

Above all things, an emigrant should have good health, and be stout-hearted, prepared to do anything that comes to his hand, and to adapt himself to the circumstances of the new country in which his lot is placed. He may have many things to learn, and many to unlearn, and especially should he learn to follow the practices which the experience of the country to which he goes has proved to be wise, rather than attempt those of the old country which he has left.

The condition of success in Canada is hard work; and none should come who have not made up their minds to work. The idle and dissipated had better stay at home.

The Hon. J. H. Pope, the Minister of Agriculture in the Dominion Cabinet, stated, in a recent memorandum to the Secretary of State for the Colonies, in reply to questions on the subject of emigration, that —

"There are very many thousands of persons throughout the Dominion who came to this country as labourers, without any means, in fact almost in a state of pauperism, and tenant farmers with very little means, who have attained a state of comparative independence, being proprietors of their own farms, and having laid by sufficient means for their declining years, while they have educated their children and settled them in conditions of ease and plenty.

"In fact, the inducements to emigrate to Canada are not simply good wages and good living among kindred people, under the same flag, in a naturally rich country, possessing a pleasant and healthy climate, but the confident prospect which the poorest may have of becoming a proprietor of the soil, earning competence for himself, and comfortably settling his children."

The statements in the preceding extracts can be testified to by thousands in Canada; but it is a fact to be borne in mind that the commercial and industrial depression, shared in common with the rest of the world, greatly checked the labour market. This, however, has apparently passed away. A great work commenced by Canada, which will before long greatly affect the labour market, is the building of the Canadian Pacific Railway. The question of this work is, beyond doubt, not only Canadian, but it is Imperial, and the solution of it may settle important labour difficulties in Great Britain, and enable her to plant a large portion of her surplus population in conditions of prosperity under her own flag, and ,so strengthen the empire by the peopling of half a continent largely with her own children. Men who are now a burden will, when thus transplanted, become producers of cereals and live stock to feed the still crowded populations of cities they will have left behind.

CHAPTER III.

CLASSES WHO SHOULD EMIGRATE.

On this point the following concise and authoritative statement may be quoted from the memorandum of the Minister of Agriculture before referred to :---

"The labour market has been greatly affected for the last four years by the commercial and industrial depression which has prevailed over the whole of this continent. "The genuine agricultural labourers, however, who have come to Canada, have all found employment, and considerable numbers can vearly be absorbed.

"Mechanics, labourers in towns, and miners have felt with more severity than labourers in the country the depression referred to, and from these classes have come the unemployed persons living in towns. But, even as respects these, the distress has not been of a nature to call for any general or regularly-organized system of relief.

"Very large numbers of persons have crossed the frontier from the United States to escape the very severe distress which has prevailed there, and from these the class of persons known as "tramps" has chiefly arisen.

"Mechanics, labourers in towns, and miners should not be advised to come, especially in large numbers, while the present industrial depression lasts, unless upon definite information.

"Professional and literary men and clerks should not be advised to come, unless in pursuance of previous engagements.

"Considerable numbers of good domestic female servants may be vearly absorbed.

"The immigrants at present chiefly required in Canada are agriculturists, or the class of tenant farmers in the United Kingdom who have sufficient capital to enable them to settle on farms. They may be advised to come with safety, and with the certainty of doing well. The same remark may apply to any persons, who, although not agriculturists, would be able to adapt themselves to agricultural pursuits, and who have sufficient means to enable them to take up farms."

CHAPTER IV.

POSITION AND EXTENT OF CANADA.

THE intending emigrant to Canada should have a clear conception of the general extent and position on the globe of the country which is to be his future home. It may therefore be stated that the Dominion of Canada comprises a vast territory of about 3,528,705square miles. It occupies half of the continent of North America.

From East to West it stretches from the Atlantic to the Pacific oceans; and its extreme southern point reaches a little below the forty-second parallel of latitude. It occupies a greater area than the United States of America. Very large portions of this vast territory are cultivable; and the other portions are rich in mineral and other kinds of wealth. The proportion of cultivable land suited to the productions of the temperate zone to the uncultivable is greater in the Dominion than in the United States.

Its rivers and lakes form one of the chief physical features of the continent. Its rivers are among the largest and most remarkable in the world; and its fresh-water lakes are altogether the largest and most remarkable in the world.

It possesses many thousands of square miles of the finest and richest forests of the continent; and many thousands of square miles of the most fertile prairie land.

It possesses the largest extent of land yet open for settlement, adapted to the growth of grasses and cereals, and other productions of the temperate climates, not only on this Continent, but in the world.

It has fisheries of boundless extent, unequalled on the Continent if not in the world, both on its Atlantic and Pacific coasts.

It has also coal fields of immense extent in the Provinces on both of its coasts; and it is believed that altogether the largest coal deposits of the world he under the surface of its rich and immense tracts of prairie land east of the Rocky Mountains.

It has gold, silver, copper, iron, lead and other mines of great richness; and almost every description of the most valuable building materials; also petroleum, salt, peat, &c.

The immense rivers and lakes of the Dominion furnish the grandest facilities for water communication. The sailing circle, from the mouth of the St. Lawrence to Europe, gives much the shortest distance across the Atlantic. The line across the continent to the Pacific is much the shortest for a railway; the conditions for its construction are the most favourable; and the passes through the Rocky Mountains are the easiest.

On the Pacific coast it has the same favourable commercial conditions, with the finest harbours.

The water system of the St. Lawrence and the great lakes constitutes one of the most marked features in the geographical formation of North America, and leads directly from the Atlantic to the North West of the Dominion. And from the head of Lake Superior, with the exception of a few interruptions, which can be easily overcome by canals, another system of lakes and rivers extends navigation across the continent to the foot of the Rocky Mountains, by means of which the products, in the future, of this immense territory, will be borne to the sea-board.

More than 5,000 miles of railway are already in operation within

the Dominion, 1,100 more miles are in process of construction, and many more are projected, besides the Pacific Railway, which is to be built immediately, and the length of which will be 2,500 miles.

It has great variety of climates, from the Arctic to that of almost the most southern of the temperate zone, modified by the influence of the great lakes.

The climates of the settled portions of the Dominion and of the lands open for settlement are among the most pleasant and healthy in the world, and favourable to the highest development of human energy.

The Dominion of Canada must, therefore, from these facts, become, in the not distant future, the home of one of the most populous and powerful peoples of the earth.

As at present constituted, it is divided into seven Provinces, viz :--Nova Scotia, New Brunswick, Prince Edward Island, Quebec, Ontario, Manitoba and British Columbia, together with the vast unorganized North West Territory, out of which, in time, other Provinces will come to be formed.

Every immigrant will have an inheritance in the great future of the Dominion, and help to build it up.

CHAPTER V.

GOVERNMENT AND SOCIAL POSITION.

THE emigrant to Canada should have an idea of the form of Government and social position he will find in his new home. Practically the former is the freest in the world. There is no hereditary aristocracy in Canada. The source of all power is the people, tempered and guiled by the constitutional forms of the Mother Country, which have taken deep and kindly root in Canada.

As respects society it may be stated that it is less marked by the distinctions of caste than in the Mother Country; while there is at the same time a careful preservation of those traditions which give the general features to English society which are found the world over.

GOVERNMENT.

The Government, formed on the principle of the Responsibility of Ministers to Parliament, the same as the British Government, is one of the freest and best-ordered in the world. It is held in the very highest esteem by the people. The Franchise practically extends to every householder.

The seat of the Federal, or Dominion Government is at Ottawa.

The several Provinces have Lieutenant-Governors and systems of Responsible Local Government, formed on the model of that of the Dominion.

The Counties and Townships have also their Local Governments or Councils which regulate their local taxation for roads, schools and other municipal purposes.

RELIGION.

The utmost religious liberty everywhere prevails in the Dominion.

Immigrants coming to the Dominion from Europe, of every religious persuasion, will find there churches and abundant facilities for the practice of their faith.

EDUCATION.

Means of Education, from the highest to the lowest, everywhere abound in the Dominion. The poor and middle classes can send their children to free schools, where excellent education is given; and the road to the colleges and higher education is open and easy for all. In no country in the world is good education more generally diffused than in Canada. In many thousands of cases the children of immigrants who came to Canada without any means, in a state of poverty, very little removed from absolute pauperism, have received thorough education, and have the highest prizes which the country offers before them. They have thus attained a state of well-being which would have been impossible for them at home; and which affords the most striking possible contrast with the dismal prospect which the workhouse would have afforded for a large number of them.

CHAPTER VI.

THE ADMINISTRATION OF JUSTICE.

THE criminal and civil laws of Canada are such as to afford the emigrant from the United Kingdom the same security as he enjoys at home. The criminal law is copied from the English system, but the arrangement of all details is such as to simplify, as much as possible, the administration of justice.

As in England, judges are chosen from among those who, by their ability, learning and long practice at the Bar have worked their way into the front ranks of the profession. The purity of the Canadian Bench is beyond question. Party politics and party feeling generally run high in the Dominion, but never in any way interfere with the administration of Justice. The moment a barrister accepts the honcur offered him, and becomes one of Her Majesty's judges, he disappears from the political arena, separates himself most completely from his former political associates, and assiduously devotes all his time, ability and attention to the full, fair and impartial discharge of the high and responsible duties he is called upon The result is that the Canadians are justly proud of to perform. their Judiciary. It has their entire and unbounded confidence, and the expenses of litigation in Canada are, as a rule, very much less than in England, on account of the greater simplicity of the system.

In every large town and city there is a regularly-organized police force, managed by a superintendent, and under the control of a Board of Police Commissioners. The cost of maintaining the force forms part of the annual municipal rate. In the country parts there is no regular police, that is, no body corresponding to the county police of England. There are a few peace officers, called " county constables," but they seldom have any criminal matter to attend to, except of the most trivial character, for the simple reason that the rural parts of the Dominion are comparatively free from There is no more peaceful country under the sun; no more crime. law-abiding, steady, industrious people than the agricultural population of Canada. The county gaol is often unoccupied by prisoners for months together, and "maiden assizes" are not at all uncommon. Contrary to the belief entertained by many persons, the Canadians do not carry dirk knives and revolvers any more than they do in England.

To sum up in a few words, Canada is blessed with a pure, honest, fearless judiciary; good, wholesome laws; and impartial administration of justice; every protection for lite and property; and the Canadians, therefore, are a happy, prosperous and contented people.

CHAPTER VII.

THE CLIMATE OF CANADA.

THERE is no more important question for an intending emigrant than the nature of the climate of the country to which he proposes to go. The climate of Canada has been already incidentally spoken of as having great variety—from the Arctic to that of the most southern of the temperate zones. It is more misconceived abroad than any other fact pertaining to the country. Perfectly absurd ideas prevail respecting the rigours of Canadian winters. It is true the winters are decided, and snow, in many parts, covers the ground to the depth of two or three feet; but there are great advantages in this-the snow is perfectly dry and packs under foot, making the best roads, and forming a warm covering for the earth. The dry winter atmosphere is bracing and pleasant. The sun shines brightly by day, and the moon and stars by right, during by far the greatest part of the time. And, besides being pleasant, there is no healthier climate under the sun. There are no endemic diseases in Canada. The sensation of cold is far more unpleasant during the damp days (such as mark the winters in England) than when the winter regularly sets in.

The summers, like the winters, are also of decided character, being, in the main, warm and bright; and fruits and vegetables which cannot be ripened in the open air in England, will here ripen to perfection. And the grand fact is that they are much more favourable for the horticulturist and the agriculturist than those of England, with the single exception of length of time in which outdoor work can be done, but this is fully made up by the greater number of days in which men can be employed out of doors during the season, and the greater rapidity with which hay, grain, &c., can be won and housed.

Canada has the latitudes of France, Prussia, Austria, the British Islands, Ruzsia and Sweden and Norway ; and as many varieties of climates as have these countries.

The intending emigrant in going from the central counties of England, Denmark, northern Prussia or from the south of Swe? to Central Illinois, Missouri or Indiana, in the United States to of fourteen degrees, or nearly one thousand miles due south at the same change in climate as he would were he to migrat. Palestine, Independent Tartary or Persia—that is, must go from a climate of comparatively cool summers with a humid atmosphere to one of intense heat and severe droughts. Those who migrate from the north of England, from Scotland, Norway or Sweden, to Kansas, Central Missouri or Southern Illinois, must undergo a still greater change of agriculture, for they give up, as their staples, the grains, pastures and meadows, with their accompanying herds and flocks.

The summer temperatures of England are from 60° to 62° ; those of Central Illinois, Missouri and Kansas, 75° to 78°. London (the summer months, from July to August) has 61° ; Liverpool 57° 6'; Edinburgh 57° 1'; Dublin 60° ; the Central counties of England 62° ; the Northern Provinces of Prussia 62° ; the Central Provinces of Prussia 63° ; Berlin 64° 5'; Denmark (Central) 62° 7'; but the Central part of Illinois 75°; Kansas and Missouri higher still, 77° to 78°.

These latter temperatures are 15° to 18° higher than those of England and the Northern Provinces of Prussia, and at least 10° to 15° higher than the best climates for the grains and grasses.

But high temperatures and a burning sun are not the only enemies with which the emigrant, going so far south, has to con-The want of rain is another and even more grievous defect tend. in the climate in those parts of the United States; for high summer temperatures with heavy rains are conditions of climate favouring tropical plants; but high temperatures without rain, are destructive of all vegetation ; and high temperatures, with an insufficiency of rain, give only imperfect crops. Those parts of the States just named very much resemble Palestine, Arabia, Persia, Syria and Independent Tartary. Both regions are similarly situated on the continents-both are in the zones of the summer droughts, high temperatures, arid winds and rapid evaporation, but with this important feature in favour of the Asiatic countries-these lie nearer the ocean and Mediterranean Sea, which render the atmosphere more humid, and modify the droughts.

North of these desert and semi-desert areas, both in the old and new worlds, lie the zones of summer rains and moderate summer temperatures, two elements of climate most favourable for the grains and grasses. In Europe, the capacity of the central and higher latitudes for cereals, coarser grains, pastures and meadows, has been fully tested and acknowledged. On this continent similar climates are producing similar effects. Throughout Canada, from the Atlantie to Lake Superior, these great staples of the central and higher portions of the temperate zones produce better, surer and more abundant crops than in any of the States to the southwest of the Lakes. Along the valleys of the Red, Assiniboine, Saskatchewan and Mackenzie Rivers, for more than seven hundred miles north of the United States' boundary, wheat is grown, yielding a far more abundant return than the best portion of the Republic; and where wheat ripens in such positions we have the best climates for the coarser grains, grasses and root crops. Barley, the grasses, and many root crops grow twelve hundred miles north of the boundary. These plants are the fruits of the summer rains and summer temperatures of from $58 \circ$ to $70 \circ$ of Fahrenheit. The significance of the facts here stated—the high latitudes to which these plants go—is the proof they give of the immense agricultural areas in the interior of the continent north of the 49th parallel.

South of these fertile regions and west of the 100th meridian, these plants either fail entirely or succeed but imperfectly, from climatic defects—chiefly from a deficiency or entire absence of rain during the agricultural months, accompanied with high summer temperatures; and over the States lying immediately east of these desert areas the summer heat is too great for the profitable growth of these products, and the rain still deficient, or rendered insufficient through high temperatures and rapid evaporation.

The most southern part of Canada is on the same parallel as Rome in Italy, Corsica in the Mediterranean and the northern part of Spain,—farther south than France, Lombardy, Venice or Genoa. The northern shores of Lake Huron are in the latitude of Central France, and vast territories not yet surveyed, embracing many million acres of land of good quality lie south of the parallel of the northern shores of Lake Huron, where the climates are favourable for all the great staples of the temperate zones.

It may be interesting to look at the climate of Canada in the light of its productions, and, with this view, some quotations will be made from Mr. Marshall's recent (1871) work on Canada, because his opinions are those of a well-informed stranger, and one who tells us that he entered Canada without prepossessions in its favour, meaning, as we infer, that he was prepossessed unfavourably towards the country, having come into it through the States, and, like most Englishmen, received his first impressions of Canada, both before he left England and afterwards, from Americans.

Mr. Marshall visited an agricultural show which represented only the country around London, Ontario. Of this he says :---

"The fine display of produce surprised me. Wheat, barley, oats and other cereals were well represented. Maize shows excellent samples. The roots and vegetables were surprisingly fine. A field pumpkin which I measured was four feet ten inches in circumference; a squash eight feet three inches, weighing 150 lbs., (we have seen them 350 lbs., open air growth. No better illustration could be given of a summer semi-tropical in heat and of great duration, than the maturing of the pumpkins and squash of such great size). The potatoes were the finest I have ever seen. There were a great number of varieties; citrons, melons, marrows and tomatoes, were also exceptionally large and fine.

"It is difficult to speak of the return of grain commonly yielded to the farmer in this country. I have seen some fields that yielded forty bushels to the acre—(the Government pamphlet reports fifty bushels on new lands), others not far distant giving but fifteen. No doubt, in a new country, where many turn farmers not before acquainted with it, the average yield gives a poor idea of the capabilities of the soil. I remarked one morning a particularly poorlooking crop of Indian corn. On the Sunday, in the same county, I walked through a field of forty acres of this splendid plant, growing to a height of eighteen to twenty feet, and yielding thirty-seven tons to the acre as food for cattle. I plucked an ear nearly ripe, eighteen inches long, and counted six hundred grains on it (p. 79), usually there are two ears, sometimes three on one stock or stem—not of course all so large.

"Upwards of a hundred varieties of apples were exhibited. For cooking there were the Cayuga, Red Streak, or twenty-ounce Pippin, an imposing fruit measuring sometimes over fifteen inches; the Alexander, of glorious crimson; the red Astrachan or Snow apples, so named from the whiteness of the pulp; the Gravenstein, Baldwin, and many others. For dessert there were the Fameuse, the streaked St. Lawrence, the Spitzenberg, the Seek-no-further, of gold and red," (p. 76). "The Canadian apple is the standard of excellence," (p. 5).

"Even in California, the orchard of the Union, the superiority of the Canadian apple was, to my surprise, confessed. Vast quantities are exported to England, and sold as American, their nationality being lost" (p. 77.) "Fruit and vegetables grow generously. Melons and tomatoes grow equally with the potatoe, pea, turnip, and the rest of the vegetables known in England. The grape thrives well. Raspberries, strawberries, blackberries, or trambles, cranberries, cherries, and other fruits, currants, plums, grapes, apples, &c., grow wild. Orchards everywhere thrive."

These facts suggest some practical considerations worthy of the consideration of emigrants.

CHAPTER VIII.

FARMING AND STOCK BREEDING IN CANADA.

CANADA seems specially fitted to supply the United Kingdom with the farm produce which it is necessary for her to import. The old provinces can supply her with horses and beef and mutton, and Manitoba and the North West with wheat.

The general healthiness of the climate and the favourable conditions for feeding all kinds of stock which prevail in the Provinces of Ontario, Quebec, New Brunswick, and P. E. Island, together with the immense areas available, leave no room to doubt that Canada is capable of supplying all the needs of the Mother Country as respects supplies of horses, cattle and sheep.

And the vast areas in Manitoba and the North West now being brought into play will furnish her, as well as other importing countries, an almost illimitable supply of cereals.

The great strength as well as the great wealth of the Dominion of Canada rests in her soil; her minerals are of undoubted value; her fisheries are the finest in the world; her manufactures are not insignificant and must continue to increase,—yet, it is not on these she must chiefly rely for future greatness. She has cne attraction greater than all others combined, and that attraction is her broad forest lands and her rich, rolling prairies. Agriculture is her strength.

Fortunately there can be no doubt as to the result. Though a young and new country, as compared with others, she is already known the civilized world over as a great meat and corn-producing country. Her staples have a character and a standing abroad such as her people have no reason to be ashamed of.

There is no more independent man in the world than the Canadian farmer; he may not have so much wealth as some English farmers, he may not be in a position to cultivate his land to such a degree of perfection, and he may not have so many of the social advantages; yet, as a rule, he is a happier, a more contented, and a more independent man. His land is his own absolutely. His taxes are light; his family are well to do; he is the equal in every respect, (not unfrequently the superior) of the most successful persons in the towns near by.

In a new country like Canada it would be absurd generally to look for scientific farming as carried on in England. As land is abundant and labour scarce, a great breadth of land is cultivated, but in what high English farmers would consider a rough sort of way. This is the rule, but there are exceptions. In the Province of Ontario there is a School of Agriculture, connected with a model farm, at which scientific and practical agriculture is taught. There are also model farms in the Province of Quebec. The result is a marked improvement of late years in the style of farming in some parts of the country. But there is much to be done yet in this direction. In too many instances the land is merely scratched over ; and it speaks well for the character of the soil and climate that under such adverse circumstances such excellent yields are obtained.

There is no country in the world that offers more attractions to The climate is, on the whole, the the English farmer than Canada. same as he has been accustomed to, the characteristics of the soil are similar, the crops produced are such as he has been in the habit of With a few exceptions, the style of farmwork varies but growing. little ; and in laws, language and customs he would be at home. He would find very little that was new and strange to him. In addition to all this Canada's nearness to the English market, and her direct connection therewith, constitute important elements in the success of the Canadian farmer. In the far west of the United States, where the chief crop is Indian corn, the cost of transportation to the sea-coast is so great that many farmers have a hard struggle to live, and frequently find it cheaper to use their corn as fuel than to carry it to market. Canada is only nine days' sail from Liverpool. and the means of communication are perfect. Not only do Canadian wheat, flour, butter and cheese find their way to England in large quantities, but even such perishable produce as apples are transported across the sea, and generally pay the shipper a good profit on the venture. Then, again, while the Australian meats find their way to England in tins, Canadian cattle, sheep, and horses are carried over alive, with as much ease and safety as are those of It is also found that dead meat can be carried to the Ireland. United Kingdom in compartments specially fitted on steamships, not cnly without deterioration, but with actual improvement.

As already pointed out, farm work in Canada does not differ widely from that of England. All that is new or strenge may be overcome in a few months. The seasons are similar, though, owing to the snow and frost, no work is done upon the land during the winter. At the same time it is anything but an idle time with the farmer and his men—the live stock have to be looked after, new land cleared, and grain carried to market.

The field crops that are produced are wheat, oats, barley, rye, Indian corn, potatoes, turnips, mangel wurtzel, peas, buckwheat, flax, &c. The garden fruits and vegetables are similar to those of England, except that tomatoes, melons, grapes, etc., will ripen in the open air in Canada. Thus the new-comer will find the crops nearly the same as he has been accustomed to cultivate. In the main, the work is similar. Machinery is largely in use ; in fact, owing to the circumstance that the work is pressed into a shorter time than in England, and, owing also to the scarcity of labour, more machinery is used in proportion to the population.

That farming pays in Canada is clear from the fact that more

persons are engaged in it than in any other branch of industry. In 1871, out of 463,424 persons enumerated in the Province of Ontario, as engaged in industries, 228,708 belonged to the farming class; in Quebec there were 160,041, out of a total of 341,291; in New Brunswick 40,394, out of a total of 86,488; and in Nova Scotia 49,769, out of 118,645. In fact, nearly one-half of the people are engaged in agriculture.

A summer's tour through Canada will convince any reasonable man that farming must pay. The well-cleared fields, the herds of sleek cattle, the great barns and stabling, the substantial farmhouses, and the thrifty appearance of the people, all furnish abundant evidence of contentment and prosperity. Ask the farmer his experience, and, in nine cases out of ten, he will tell you that he came from the "Old Country" fifteen, twenty or thirty years before, with an empty pocket, a strong arm and a willing heart. He will tell you also that, in the early days of his settlement, he had to struggle and toil, and labour hard and long; that he had to face many a difficulty and endure much hardship; but he is hale and hearty now, enjoying, in ease and comfort, the well-earned reward of perseverance and industry. Others will again tell you that they brought out a little money with them, and that, through a proper use of that little, they now find themselves independent of the world. Of course there are those who fail at farming in Canada, but they are few and far between, and an inquiry into such cases would show that, in nearly every instance, the failure was due to the unfitness of the individual himself for the pursuit and not to the country.

As set forth in another place, the very best class to settle in Canada are Old Country tenant farmers, with a small capital. There is many a farmer paying as much each year in rent and taxes in England as would purchase him the freehold of a good farm in Canada. Any man of experience having five hundred pounds sterling, or upwards, in cash, may safely try his fortune in the Dominion.

In addition to grain-growing, pastoral farming is now largely carried on in Canada. In many parts the land is specially suited for grazing purposes. In comparing Canada's present standing as a stock-breeding country with her standing twenty years ago, we find that her progress in this direction has been most remarkable. It is barely twenty years since the first herd of English thorough-bred short horns was brought to Canada. Previous to that time very little attention had been paid to stock raising. In many instances cattle were allowed to look after themselves. They roamed the forests in perfect freedom, and came home to the "clearing" when the cold weather set in. True, the oxen were worked at certain seasons, and did good service in clearing up the land; but

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Yor market purposes cattle added but little to the settler's income. It was the opinion of many persons in those days that stock breeding; as carried on in parts of England, could never be successfully carried on in Canada. The experience of the last few years shows that these persons were entirely in error. Though the number of farmers who have ventured on the experiment of stock-breeding on a large scale is not great, the test has been most thorough and complete in both Ontario and Quebec, and the result satisfactory.

Mr. Cochrane's farm in Quebec, and Bow Park in Ontario, furnish prominent examples of what may be done in this direction. The collection of cattle at the great stock-breeding farms in Canada is among the most valuable in the world. It is made up of the very best blood of the bovine aristocracy of England. Not many years ago there were no pure herds in the country, except the small species of cows in the French parts of Lower Canada, which were brought in chicfly from Bretagne, and possess the milking characteristics of the Alderneys. To-day there are in Canada many herds with a pure and unbroken record extending back many generations.

It is a fact established beyond all doubt that the famous short horns of England not only do well in Canada, but that the character of the stock actually improves in the new country. In not a few instances the offspring of stock taken out from England has been carried over to the Mother Country and sold at high prices. At a recent sale in England a three-year old bull which brought the extraordinary price of three thousand six hundred guineas was of Canadian blood. The herds to be seen at the Provincial and other exhibitions are the wonder and admiration of experienced English stockmasters.

Short horns are generally preferred, yet there are herds of Ayrshires, Devons, Alderneys, Galloways and other breeds.

The best varieties of English sheep and pigs also do well in Canada.

Notwithstanding the high prices paid for aristocratic blood, ordinary cattle are much cheaper than in England. This is owing to the fact that hitherto the Canadian stockmaster had open to him only the local and the United States markets. This is no longer the case. A short time ago the experiment of sending live stock and dead meat to England was entered upon, and the result was so successful that there are now many persons, firms, and several lines of steamships engaged in the trade. The cattle are landed in England none the worse for the voyage, and sell readily at good prices; and the dead meat is rated at the highest standard. The trade is, however, still in its infancy. The result will be a considerable increase in the price of live stock in Canada before long. This will incline many farmers who have not hitherto done so to enter largely into stock raising. Where the land is suitable they cannot do better. For English farmers with capital there is an excellent opening. It is as safe an investment as they could possibly make. The foot and mouth disease is unknown in the country. The cattle thrive well, and are made ready for market at a cost trifling as compared with the cost in England.

It may also be mentioned that Canadian horses are now shipped to England in considerable numbers and at a very handsome profit to the dealer. The ordinary Canadian horse is a hardy, tractable, strong, healthy animal, and answers excellently for cabs, omnibuses, tram cars, and other such work. There are also horses of high blood in Canada.

CHAPTER IX.

FRUIT GROWING.

A VERY important branch of farming in certain parts of Canada is fruit growing. It is very generally thought by persons not familiar with the country that, owing to the severity of the winter, fruits cannot be successfully cultivated except to a very limited extent, and at a great cost. There is no foundation in fact for such an impression. On the contrary, in the production of such kinds of fruit as belong to the temperate zone, Canada cannot well be surpassed. The character of the soil in many districts is suitable for the apple, plum, pear, etc., while in the hot summer sun the peach and grape reach maturity and develop fruit having many points of excellence. A hardy kind of grape, which has been successfully crossed into the European varieties, grows wild in the woods; the strawberry, raspberry, and gooseberry and other small fruits grow in profusion in all the older provinces. The red plum is also indigenous to the soil.

In specially-favoured regions, such as the Niagara district, peach orchards many acres in extent are to be seen. The peach crop is not always a successful one; generally speaking, there is a good yield every second year. Though it is anything but probable that Canada will ever rival European countries in the character of her wine, nevertheless her vineyards are increasing in number year by year, and good, wholesome wines are being made. Experience is all that is necessary to develop this into an important industry. The best evidence we could have of Canada's character as a fruitgrowing country is furnished in her success in this direction at the Centennial Exhibition. The display made by the Province of Ontario was the finest at the show, surpassing all competition, which included nearly every State in the American Union, and astonishing persons who had looked upon Canada as a country of perpetual snow. The Americans honestly admitted themselves fairly beaten by their northern neighbours. The following extract from an article in the New York *Graphic* shows the prominence Canada gained in this respect. Coming from an American source, it carries with it special weight :--

"Probably the finest show of various fruits is made by the Fruit Growers' Association of Ontario, Canada, a society which has done much to promote and encourage the cultivation of fruits in North America. It was formed a number of years ago with this object in view, and has been extremely successful in all its undertakings. The membership includes more than 3,000 persons. Three meetings are held every year, at which the members interchange their views upon the various subjects connected with fruit-growing. These meetings are held in different parts of the Province of Ontario, in order to be more convenient for members to attend, and once a year new and promising hybrids, trees, and plants are given to members, who are expected to cultivate them carefully, and report the results of their trial. A number of the members of this Society have achieved a reputation as careful hybridists, and the names of Arnold, Dempsey, Mills and Saunders are held in deserved estimation throughout the pomological world. The best result: of their labours are generously placed at the disposal of the Association, and new and promising varieties of fruits are soon widely and inexpensively scattered abroad and thoroughly tested.

"The Society also publishes an annual report, embodying its transactions, and preserving such useful information with regard to fruit culture as they may be able to gather, and gives a copy of it to each of its members. In this manner many choice fruits and much useful information are disseminated among the members, hence it is that the fruits produced by them are generally noted for superiority and excellence.

"At the quarter-centennial of the American Pomological Society in Boston, the Ontario Fruit Growers' Association carried away not only silver medals for the best collections of plums, but also prizes for the peaches, grapes, and pears displayed in competition with the most noted fruit growers of the United States. Many people suppose that the climate of Canada is a perpetual winter, but nothing could be further from the truth. The climate is generally the same as New England or Northern and Central New York; and Ontario, from whence these fruits come, is the most fertile part of the whole Dominion.

"The present display occupies the entire north side of the Pomological Building, and is composed of 1,000 plates of apples, 200 plates of plums, 200 plates of pears, 90 plates of crab-apples, and 25 varieties of peaches, 153 plates of grapes, and a variety of nuts, including walnuts, butternuts, hickory nuts, hazelnuts, and peanuts. The same Association, in July last, made a display of gooseberries, currants, raspberries and cherries, some of the first-named articles being an inch in length. They were highly commended by the judges, as no prize was competed for.

"One of the finest specimens of fruit exhibited is the Alexander, a beautiful clear red and white apple of large size. Another is the Kent Fillbasket, a large obtuse pyramid, beautifully mottled with red on a yellow ground. The Virginia Sweet is a showy red apple, rather oblong in shape, and of large size. The Irish Peach Apple is a great beauty, as well as of fine quality, while the Duchess of Edinburgh is a very hardy apple, mottle red in colour, and of hand-It is good either for the kitchen or table, and is some appearance. highly esteemed by connoisseurs. Sherwood's Favourite is a fine yellow and red, and Swayzie Pomme Grise is a hardy cinnamon russet of beautiful colour. There are remarkably fine specimens of the Snow Apple, which is a bright red outside and a pure white inside, and takes its name from the latter characteristic. Spur's Sweeting is a fine showy apple of rosy waxen colour, and the Chenange Strawberry is a beautiful red apple of conical shape. Many other specimens are shown, among which are thirty-one varieties of new French apples exhibited by James Dougall, of Windsor. All the foregoing specimens named are raised in large quantities in Canada, and thousands of barrels are annually exported to Great Britain and the United States. As a sample of the manner in which they will keep, a ' te is shown of the growth of 1875, in which the apples are well preserved an 1 of good appearance.

"One of the finest specimens of pears exhibited is the Flemish Beauty, which grows without a blemish, and is hardy as an oak; Sickles, Bartletts, Negleys, and the Belle Lucrative are also displayed in great quantities, of a quality that compares favourably with any others on exhibition.

"The plums displayed are remarkably fine, the most noticeable ones being the Columbia, Pond's Seedlings, Damsons, Gages, and the Lombard. The latter is a beautiful dark crimson, and is very prolific. Hundreds of bushels of these plums are sent every year to the United States, where they find a ready sale and are greatly esteemed. "In peaches the Lord Palmerston is doubtless the largest shown. One of these was displayed which was over eleven inches in circumference, the qualities being a firm, white flesh with free stone. The **Barly** Crawfords and other varieties are also very fine.

"In grapes, the Tokalon and many varieties of Rogers' hybrids are the most noticeable. The Autuchon, a beautiful white grape, and the Lindley, light-coloured, and resembling the Catawba, attract much attention. Miller's Burgundy, a grape which grows very close and thick, and the Delaware, a delicious variety, are also favourably known to fruit cultivators.

"These are but few of the many specimens displayed. It would be impossible, in a notice like this, to do justice to the entire collection. As a representative collection intended to exhibit the fruit from that section of the country between the Niagara river and Lake Huron, and from the Ottawa to the Detroit rivers it could not be surpassed. The arrangement and classification reflect much credit upon the officers of the Association, and especially upon the gentlemen who are in charge. It must be doubly gratifying to them that this very beautiful display of the fruits of the Province attracts such universal attention. Their exhibit has contributed much to the beauty and attractiveness of the pomological department, and they are to be congratulated upon the fruit-producing capabilities of their soil and climate, and the taste and enterprise of their fruit-growers."

With such facts as are contained in the above extract, let it not hereafter be said that Canada is a wilderness of ice and snow.

CHAPTER X.

DAIRY FARMING, ETC.

WITHIN the last few years great progress has been made in Canada in the way of dairy farming. Not long since the cheese manufactured in the country was not sufficient to supply the local demand; whereas there are now cheese factories by the score in the Provinces of Ontario and Quebec.

"American" cheese, as it is all called, is well known in England; but very few people are aware of the fact that the best "American" cheese is made in Canada. In the window of a cheesemonger's shop in Ludgate Hill, London, Canadian Stilton and Canadian Cheddar are constantly exhibited, and so well do they suit the palates of Englishmen, that many persons prefer them to the English articles after which they are named. The Canadian cheese is, in fact, the very best made on the American continent. The cattle are of the very best breeds, the pasture is excellent, and the work is cleanly and carefully done.

Great benefits have flowed to the farming classes through the opening of the cheese factorics. Formerly the milk was in many instances given to the pigs, but now there is a market at the cheese factory for every quart of it. Though great strides have been made during the last ten or fifteen years in cheese making, the industry is still in its infancy. Judging the future by the past this will shortly assume immense proportions and become one of Canada's great sources of wealth. It may be mentioned that, at the International Dairy Fair recently held at New York (December, 1879), the first sweepstake prize of \$100, for the best cheese made anywhere and at any time, was awarded to Canada, the superior excellence of Canadian cheese, which was well known, having now been fairly and clearly established on the most indisputable evidence.

Butter-making is also largely carried on in the Dominion. Millions of pounds are exported each year. The quality is excellent.

Near the large towns, market gardening is profitably carried on. A comparatively small capital is necessary, and with industry and perseverance, backed up by experience, a good income is assured. Like everything else, however, none but those who have had experience in Canada should attempt it.

Poultry-raising is only beginning to be much looked after in Canada, probably because poultry is so cheap. In course of time, however, as the market extends, and as means are found of exporting fowls, geese and turkeys to England, henneries on a large scale will be established. The exportation has already begun.

Bee-keeping is profitably carried on in many parts of the Dominion. These few points shew that what may be termed the smaller branches of farming are not neglected by the Canadian husbandman. Still much remains to be done in this respect.

CHAPTER XI.

FARMS FOR SALE.

IMPROVED farms may be purchased in almost all parts of the Dominion. By the term "improved farms" is meant farms either partially or entirely cleared of woods and under cultivation. As farming is the main industry of the country it may naturally be asked why it is that farms are to be purchased? It is customary with many Canadian farmers to bring their sons up to professions or to put them in trade. The result is that, when old age comes upon the father of the family, the land is either sold or leased. Or it may be that the old man dies on the homestead, and, in order that the property may be divided among the heirs, it must be sold. Then again, during the last few years, that is since the "Manitoba fever" set in, many farmers in the older parts of the Dominion have sold off, or are desirous of selling off in order to settle in Manitoba.

It may be further stated that a reason why improved farms in Canada can be obtained on such moderate terms, is owing to the fact that there is a constant tendency along the whole of the north eastern face of the American continent, on the part of a class of settlers, to undertake pioneer life, or to commence anew, in order as well to obtain a larger field than the old homestead, for the sake of the settlement of their sons, as for the love of adventure and of the life with which they started for its own sake, on which they can enter with greater advantage from the capital obtained by the sale of their cleared farms. It thus happens that conditions are afforded especially favourable for the tenant farmer from the United Kingdom, with a little capital, to acquire a farm, on which his previous habits of life have adapted him to work ; while the older settler of the country has more special adaptation for the pioneer life than the newly-But newly-arrived immigrants of intelligence arrived immigrant. very soon become acquainted with what may be called the specialties of the country.

CHAPTER XII.

MINES AND MINERALS.

THOUGH the main sources of the wealth of Canada lie in her fertile fields and grand forests, her mines and minerals must, in course of time, attract more attention than they have hitherto done, and yield a good return for the capital and labour expended on them. As the Canadians devote their attention chiefly to the more common pursuits of farming and ordinary trade, comparatively little has been done towards developing the mineral resources of the country; yet the results abundantly prove that there are vast and valuable deposits of minerals in various parts of the Dominion. A mere enumeration of the minerals that have been discovered up to this time will enable the reader to form something like a correct idea of the position of Canada in this respect. There have been found gold, silver, copper, iron, galena, plumbago, antimony, manganese, gypsum, granites, marbles, lithographic stone, slates, burrstones, hones, limestones, sandstones, and brick-clays, various kinds of precious stones, vast deposits of phosphate of lime, of salt, and immense quantities of petroleum and peat. These minerals are not confined to any one province. In almost every part of the country from the Atlantic to the Pacific some of them are to be found.

Gold mines are worked, though only in a small way, in Nova Scotia, Ontario and Quebec. It is principally quartz mining. The gold fields of British Columbia are famous the world over for their size and their extraordinary yields. They extend over an area of 105,000 square miles; that is, twice the area of England, and yield annually about £400,000 worth of the precious metal. In the early days of gold mining in British Columbia fortunes were sometimes made in a few weeks. In 1863 Dillion's claim yielded in one day 102 pounds weight of gold. Other claims frequently yielded from ten to fifty pounds of gold in twenty-four hours. But, while those times have passed, as regards the discoveries so far made, the average earnings of miners is about seven hundred dollars a year, which is a high figure. Explorations connected with the Geological Survey in 1876, showed the whole country to be auriferous. Gold mining is now one of the chief industries of the Pacific province; and the probability is that great wealth will yet be developed.

Silver has been discovered in several parts of the Dominion. The richest deposits, however, appear to be on the north shore of Lake Superior. In 1874, one mine—Silver Islet—yielded nearly 500 tons of ore, worth about £100,000 sterling. As it is only a few years since the silver was discovered, the industry is still in its infancy. Want of capital has delayed the work of development. Still several shafts have been sunk, and it is confidently expected that the Thunder Eay district will shortly be sending out great wealth of rich ore annually.

Iron has been discovered in several provinces, and in many cases the deposits are of great value. The iron mines of Nova Scotia have been successfully worked for several years. In Ontario and Quebec the quantity raised is increasing annually. The difficulty in the latter provinces is that there is no coal for smelting purposes; but as wood is abundant this difficulty is likely to be overcome—in fact, has already been overcome—by smelting the ore with charcoal. One or two companies are now engaged in this industry, and the iron and steel turned out by them are of the very best quality. There is a great abundance of iron ore in British Columbia, but it is not yet being worked except in a very small way.

Copper has been found in many parts of Canada. The amount exported in 1874 from Ontario and Quebec alone was 3,142 tons; in addition to which a considerable quantity must have entered into home consumption. As with other branches of mining in Canada more capital is required to properly carry on the work. The ore is noted for its purity.

Although in the region of the great lakes there is no coal, in other parts of Canada there are immense deposits of this most valuable mineral. In Nova Scotia there are some thirty mines in active operation, and the aggregate output averages about one million tons per annum. The yield might be increased to any extent; but the output must, of course, be regulated by the demand. With a wider market, which will come in time, the yield might be increased an hundred fold. Many of the transatlantic steamers take in coal at Halifax and other Nova Scotian ports.

In the heart of the continent, in that vast region known as "the Great North-West Territories," there are immense deposits of coal, supposed to be the most extensive in the world. It crops out on the surface in many places over an area of country hundreds of square miles in extent. This coal deposit is one of the most important peculiarities of that great district. The prairies of Canada, in fact, contain coal enough to supply the whole world for ages to come. The Canadian Pacific Railway, now in course of construction, will run across this coal country. Then again, on the other side of the Rocky Mountains, the coal fields of British Columbia are practically inexhaustible. The Comox field alone is estimated at about 300 square miles in extent. The output in 1874 was over \$0,000 tons: this can be increased a thousand-fold if necessary. British Columbia seems destined to become the greatest coal-producing country on the Pacific side of the American continent. In some places the seams are so favourably situated that the coal can be loaded on shipboard direct from the mine. The mineral wealth of this growing province is beyond estimate, and coal forms no unimportant part of the whole.

Petroleum is found in several parts of the Dominion, but chiefly in the Province of Ontaric. The total quantity manufactured; that is to say, purified after being taken from the earth, varies according to the state of the market. In 1873 it amounted to 14,602,087 gallons. In several instances flowing wells have been "struck," but, as a rule; the oil is pumped from the wells by machinery. The Canadian oil, when properly rectified, is of excellent quality, and mands well in foreign markets. While boring for cil near the town of Goderich, in the Province of Ontario, a few years ago, salt springs were "struck" at a depth of about twelve hundred feet. This important discovery induced others to sink wells in the neighbourhood, and the ultimate result was that the salt springs were found to extend into some of the adjoining counties. The work was pushed forward, and grew rapidly, so that at present there are several hundred wells in active operation, yielding thousands of tons of salt each year. In Nova Scotia, also, salt has been discovered.

The marble found on the Upper Ottawa is of a most superior quality. It is beautifully veined, and takes a brilliant polish. The quarries are vast in extent, but only a comparatively small quantity has been taken out up to this time.

In nearly every Province there are immense deposits of peat.

Cwing, however, to the abundance of wood in country places, very little use has been made of the peat so far. When wood beomes scarce and dear an excellent substitute will be found in the peat. It has been tested on the Grand Trunk Railway, and has been found to answer well in place of coal.

From what we have said above it will be seen that Canada is not badly off in the way of minerals. She is in possession of everything of this nature that any people can desire, or that is necessary' to the progress of any nation. Comparatively little, however, has been done hitherto towards developing the mineral resources of the country. The people have devoted—and properly so, too—their time and money to agriculture, trade and commerce, and have not entered largely into the more speculative business of mining. Sufficient, however, has been done to show that Canada possesses incalculable wealth in her minerals ; and this wealth will, we doubt not, be turned to good account in course of time. Capital and enterprise are all that are required.

CHAPTER XIII.

THE LAND SYSTEM—FREE GRANTS AND HOMESTEAD EXEMPTIONS.

THOUGH free grants of land are practically to be procured in every part of the Dominion, the system is not the same in all the provinces. For the information of the reader we subjoin an outline of the system in each province. It is advisable, notwithstanding the great advantage of settling upon land, that the immigrant should have some experience before doing so, or obtain accurate information about the step he is contemplating.

Nova Scotta.—In this province there are about 10,000,000 acres, nearly one-fifth part of which consists of lakes and rivers. Of the whole extent, about 5,000,000 acres are fit for cultivation. Wild lands may be obtained from the Government for about 1s. 9d. sterling per acre. Here, as in all the other provinces, the purchase of land carries with it the ownership of all minerals found therein.

NEW BRUNSWICK.—This province contains 17,347,360 acres, of which 13,000,000 are fit for cultivation, with only some 730,000 under actual improvement. The Lieutenant Governor in Council may cause eligible portions of Crown lands to be selected for settlement. One hundred acres of land so surveyed may be located to immigrants or other male settlers, of the age of eighteen years and upwards, who do not own other land in the province, upon the following terms and conditions, viz. :—

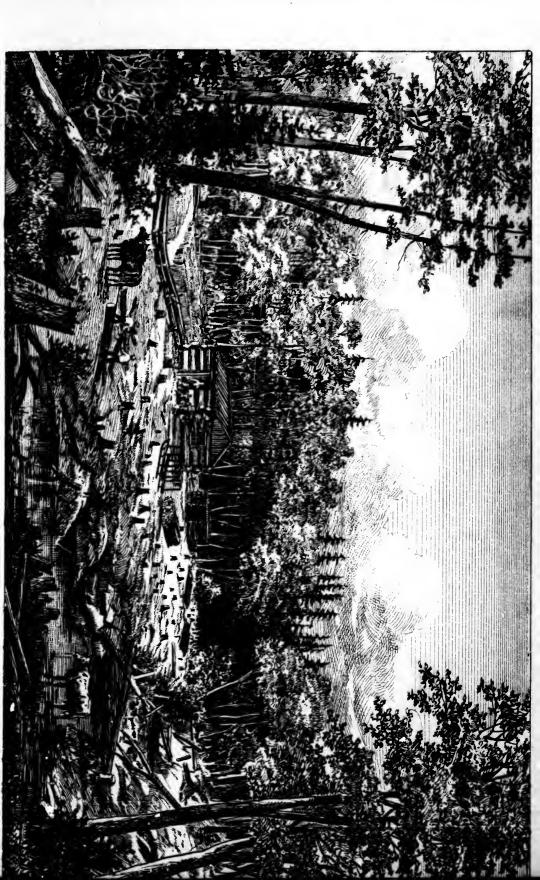
"On payment of twenty dollars cash in advance, to aid in the construction of roads and bridges in the vicinity of his location, or upon his performing labour on such roads and bridges to the extent of ten dollars per year for three years, as may be directed by the Governor in Council or officer appointed to superintend the same.

"He shall commence improving his location immediately after obtaining permission to occupy the same, and shall, within two years thereafter, satisfy the Governor in Council that he has built a house thereon of not less dimensions than sixteen by twenty feet, and is residing thereon, and that he has cleared at least two acres of said land.

"He shall continue to reside upon said land for three consecutive years, at the expiration of which time, provided he shall have cleared and cultivated at least ten acres of said land, and performed the labour in the manner hereinbefore prescribed, or paid twenty dollars in advance, a grant shall issue to him of the one hundred acres se located as aforesaid; provided always that, should the means of such person locating as aforesaid be limited, he may from time to time, and for reasonable periods, absent himself from said land in order to procure the means of support for himself and family without forfeiting his claim to constant residence."

Under this system several colonies of English and Scotch emigrants have been settled in New Brunswick within the past few years.

PRINCE EDWARD ISLAND.—The land in this rich and prosperous Province is nearly all taken up and under cultivation.





QUEBEC.—This Province covers a territory of 210,000 square miles in round numbers, or about 120,000,000 acres, 10,678 931 acres of which have been conceded in fiefs and seigniories, 8,950,-953 acres are held in the townships in free and common soccage, and 6,400,359 acres are divided into farm lots. There remain about one hundred millions of acres of land still to be surveyed.

The Government of Quebec are in a position to offer for colonization 6,400,000 acres of land, divided into farm lots, nearly half of which are accessible by means of good roads, and more than twothirds are fit for settlement. The price of these farms varies from iwenty to sixty cents per acre (10d. to 2s. 6d. stg.). Upon eight of the great colonization roads, every male colonist and emigrant, being at least eighteen years of age, may obtain a free grant of 100 acres. The number of acres of land at present set aside to be disposed of in free grants is 84,050; but the Lieutenant Governor in Council may increase the quantity if found necessary.

By the end of the fourth year, the grantee must build a habitable dwelling on his lot and have 12 acres under cultivation; he can then take out letters patent which make him absolute proprietor.

The Lieutenant Governor in Council may at any time lay aside a district of country for the purpose of establishing a colony or settlement of persons who come to the Province as one party.

There is in the Province of Quebec a homestead law, under which the immigrant's property, on certain conditions, is exempt from seizure.

ONTARIO — This Province has a territory of 105,000 square miles,* or 69,000,000 acres, and Crown lands may be purchased at one shil ling an acre and upwards, according to situation. The free grant system is as follows :— " Every head of a family can obtain gratis two hundred acres of land, and any person eighteen years of age may obtain one hundred acres in the free grant districts. This offer is made by the Government to all persons, without distinction of sex, so that a large family, having several children at or past 18 years of age, may take up a large tract, and become in a few years, when the land shall have been cleared and improved, joint possessors of a valuable and beautiful estate. The settlement duties are : to have 15 acres on each grant of 100 acres cleared and under crop in five years, to build a habitable house, at least 16 by 20 feet in size, and to reside on the land at least six months in each year."

The patent is not issued till the end of five years.

There is a homestead law in force in Ontario whereby the land of the settler is protected from seizure for a certain number of years,

*Now 200,000 ; see page 50.

and thus preserved for his family, no matter what financial difficulties he may get into.

MANITOBA.—The scheme for building the Canadian Pacific Railway by the proceeds of sales of lands has altered the old system of obtaining lands. But free grants in alternate sections are still given for homesteads. The Government regulations, to be found in Appendix B, should be consulted by the intending emigrant.

BRITISH COLUMBIA.—In this province any male person, being a British subject, of the age of eighteen years, may acquire the right to pre-empt any unoccupied, unsurveyed and unreserved Crown lands (not being an Indian Settlement) not exceeding 320 acres, to the north and east of the Cascades, and 160 acres in the rest of the Colony. A fee of \$2 is to be paid for recording such pre-emption. The occupation shall be a continuous *bona fide* personal residence for four years, and when the lands are surveyed, the price shall not exceed one dollar per acre, and the pre-emptor shall have the right to buy his claim.

If, during the first four years, the pre-emptor shall cease to occupy his pre-emption claim, the Commissioners of Lands may cancel his claim, and cause all improvements and deposits to be forfeited.

The upset price of surveyed lands is one dollar per acre. Leases to any extent of unpre-empted and unsurveyed lands, for pastures or cutting timber, spars, etc., and of 500 acres for cutting hay, may be granted by the Governor in Council, subject to such rent, terms, etc., as the Governor in Council may order.

CHAPTER XIV.

EDUCATION.

Long before school boards were established in England, Canada was in the enjoyment of a well-organized educational system. More than a quarter of a century ago commissioners appointed by the Government were sent to the United States and several European countries, for the purpose of enquiring into and reporting upon the systems of public education then in practice in the places visited. The result was the foundation of a public school system, which has been improved from time to time, until it may now safely be said that, in this respect, Canada is second to no other country in the world.

English farmers and others who think of removing to the colonies are sometimes deterred by the thought that, in the new land,

they may not find institutions and opportunities for the proper education of their children. It is fancied that, because a country is young. it must, of necessity, be wanting in many of the surroundings and characteristics of civilization. A more mistaken idea could not be possibly entertained; the fact being that in many respects the new countries—especially those under the rule of the Anglo-Saxon race are in advance of the old countries, for the simple reason that, in framing their institutions, while they copy all that is good and suitable in the Old World systems, they avoid all that is bad or defec-The educational system of Canada affords a striking example. tive. Not only are there public schools found in every part of the Dominion penetrated by civilization, but the system is less complicated than in England, a higher standard of education is maintained, while the cost is not nearly so great. The result is that education is universal. School-houses dot the land over. In the Province of Ontario alone, with a population of about two millions, there are about five thousand public schools, while the private schools number close upon six hundred. The teacher invariably follows close upon the heels of the backwoodsman, and no new settlement remains long without its school-house. There are many men in Canada today, occupying positions of prominence, socially and politicallymen able to speak and write forcibly, intelligently and well on many subjects-whose entire schooling was received within the four walls of the rustic school-house.

The system is as perfect as it is simple. Every township is divided into school-sections of a suitable extent for one school, and in each section trustees are elected to manage its school affairs. In towns and cities a Board of School Trustees is chosen by the people. The Trustees regulate the expenditure of money, order the erection of new school-houses when necessary, engage teachers, and have general charge of everything connected with the public schools. The necessary funds are raised, partly by tax upon the ratepayers, and partly by a grant from the Provincial treasury. Teachers are prepared and trained at normal schools, supported and maintained at the public expense. Instruction is not by any means confined to the mere rudiments of English. In many cases the higher branches are taught, and the children are turned out with a good, sound, practical education that fits them for any ordinary position in life. As a rule, no fees are charged, the schools are absolutely free, and thus the children of the poor have the same opportunities as the children of the rich. Such, in a few words, is the public school system of Canada.

Education, however, does not rest at this point. For those who can afford it—and nearly all can, for the cost is comparatively small—there are schools of a higher grade. In all parts of the country there are grammar schools, managed like the common schools, by a Board of Trustees. At these institutions, as well as at many excellent private schools, the pupils receive a classical education, and are trained and prepared for the legal and other professions. Above these again there are colleges, possessing university powers, endowed with scholarships of considerable value, open to youths prepared in the lower schools. There are also schools of medicine at Toronto, Montreal and other places ; while the various leading religious denominations have schools or colleges at which young men are prepared for the ministry. For the higher education of young ladies there are numerous excellent schools, many of which are denominational in character. Nor are the afflicted forgotten, there being schools for deaf mutes and for the blind, supported and maintained at the public expense.

The public and grammar schools are under the supervision of duly qualified inspectors appointed by the Government. The text-books in use are excellent in every respect; and all the larger schools are well provided with apparatus for the purpose of giving practical instruction in chemistry, astronomy and other branches. In connection with many schools there are free libraries containing a judiciously-chosen collection of books for the use of the pupils.

From all this it will be seen that Canada has made abundant provision for the education of her children. No country in the world is better off in this respect; and the Englishman may make his home there with the utmost confidence of being able to give his sons and daughters as good an education as he can desire.

CHAPTER XV.

POSTAL SYSTEM, MONEY, TELEGRAPHS, ETC.

THE postal system of Canada extends to every village and hamlet in the land, no matter how remote from the centres of business and population. The rate of postage is 3 cents per half ounce prepaid. The number of letters carried in a year between Canada and the United Kingdom is over two millions; newspapers and books number about the same. The ocean postage is 5 cents (two pence halfpenny sterling) per half ounce prepaid. The average passage of the mail steamers is about nine days. Postal cards can be sent betweer. Great Britain and Canada for 2 cents (1d. sterling). The money order system in operation is similar to that of England. All money order offices are authorized to draw on each other for any sum up to one hundred dollars; and any applicant may receive as many one hundred dollar orders as he may require. The rates are as follow :—

On or	rders	not exceeding	\$ \$ 4	2	cents.
On or	rders	up to	10	5	"
					66
66	20	۶۶ ۰۰۰۰۰۰۰	40	20	66
	40	"			"
66	60	"	80	40	66
"	80	"	100		"

The money order offices in Canada issue orders payable at money order offices in the United Kingdom, and *vice versa*, for any amount up to ten pounds sterling, and grant as many orders under and up to that sum as the applicant may require. The rates are :---

	On Orders	not exceeding	£ 2.10.0	sterling, 20	0 ce:	nts.
Exceeding	g £2.10.0, an	d not exceeding	5. 0.0	4	0 (56
66	5. 0.0,	"	7.10.0	6	0 •	56
66	7.10.0,	66	10. 0.0	8	0 4	6

It may be well here to give the relative values of English and Canadian money. A sovereign is worth four dollars and eighty-six cents ; half a sovereign, two dollars and forty-three cents ; a crown, one dollar and twenty cents ; half a crown, sixty cents ; a shilling, twenty-four cents; a four penny piece, eight cents; and a penny, two cents. A cent and a half-penny are therefore practically of the same value. The sign for a dollar is thus written, \$. The money in use in Canada is bronze, silver, gold and bank notes. The one and two dollar notes are of government issue. The banks are prohibited from issuing notes under four dollars. The chartered banks of the Dominion are well managed, and backed up by large capital. All bank notes, being convertible to gold on demand, are equivalent to gold, and are universally so regarded. They are, in fact, preferred to gold for common use, as being more portable. Gold, therefore, is practically pressed out of circulation. But any persons who desire to have it can instantly exchange notes for it.

In connection with the Post Office Department there is a Savings' Bank system. The offices at which deposits may be made number 294. The amount starding to the credit of depositors, on December 31st, 1879, was \$3,671,310.23. This represents part of the savings of the working classes, belonging, as it does, chiefly to mechanics and working servants. While on deposit the money, of course,

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draws interest; and it may at any time be withdrawn from the savings bank in accordance with the rules established.

The Telegraph System of Canada is in the hands of companies chartered by Act of Parliament. The number of miles of wire in operation is over 30,000. The number of private messages sent is between two and three million per annum. The lines are in connection with the Atlantic cable. The newspapers receive about ten million words each year. Private messages are sent at the rate of twenty cents for ten words within the old provinces of the Dominion, no matter what the distance may be. There is, however, a smaller rate for messages between offices not more than twelve miles apart ; and a half rate for messages sent in the night and delivered the next day.

The Canadians are a newspaper-reading people. Every village of any pretensions has its weekly press; while towns of seven or eight thousand inhabitants have their local dailies. Some of the city dailies have very extensive circulations. They are to be purchased on the day of issue hundreds of miles distant from the place of publication. Being the leading organs of their respective political parties they are eagerly read by the people. And it may be said that almost every Canadian is a politician. The Canadian newspapers are conducted with vigour and spirit. The enterprise they display in the collection of news is surprising. When Parliament is in session at Ottawa, the Toronto and Montreal papers commonly publish from eight to twelve columns of the previous day's parliamentary proceedings; each report being a special one and transmitted by telegraph. And even editorial articles, commenting on the day's debate, are sometimes telegraphed from Ottawa.

The country weeklies are chiefly local in character; still they enter largely into politics.

There are published in Canada several excellent magazines, two illustrated weekly papers, and illustrated and other periodicals.

There are class papers, these being agricultural, commercial and financial weeklies; while each of the leading religious denominations has its special organ. There are two Masonic monthlies and several other society publications. In fact the Canadians are unusually well supplied with newspapers and periodical literature. It follows that no man in the land need remain in ignorance of what is going on in the world around him; and the people generally are well up in the events of the day, both home and foreign, and in a position to talk intelligently of their own public affairs and those of other countries.

CHAPTER XVI.

A HOLIDAY TRIP.

WHEN so many thousands of the better classes of the English people seek health or recreation on the Continent-especially during the summer and autumn of each year-it is a matter of surprise that so few ever think of visiting the New Britain on the other side of the Though all who have taken a run through Canada in the sea. holiday season give a glowing account of the magnificence of the scenery, the perfection of the means of travel, and the comparative cheapness of living, tourists from the Mother Country are not nearly so numerous as the attractions of the journey would lead one to expect. The Americans, who are always in search of pleasant resorts, are wiser in their generation than their English cousins. Hundreds . of them visit Canada every summer. They come even from the States in the far south; and are to be met with at the watering places, in the towns and cities and on the railways and steamboats in every part of the Dominion. The Englishman will run off to the Continent, see Paris and Rome, "do" Switzerland, or swelter in a little German watering-place; and return little better in health and much poorer in pocket, entirely oblivious of the fact that he might have crossed the Atlantic and spent a few weeks very profitably and pleasantly, and certainly more cheaply among people of his own race and nationality. Still, we are glad to know that the number of English pleasure-seekers who visit Canada is increasing year by year, and it only requires that the attractions of the journey should become more widely known to make this one of the chief holiday trips for Englishmen and their families. Let us, in imagination, make the trip with the reader.

On a pleasant summer's afternoon, say about the middle of July, we find ourselves on the deck of one of those moving villages, a trans-Atlantic steamer, in the Mersey. All is bustle and noise; everything seems topsy-turvey, for the last of the passengers, with mountains of luggage, has just come aboard, and we are on the point of sailing. In a few moments the last good-byes are said, the tender casts off, the machinery moves, and our great ship glides slowly down the broad stream, bound for the far west. Presently we are in the channel; if it be rough those with delicate stomachs disappear, while the old sailors pace the deck, talk wisely of the weather, or begin the business of acquaintance-making. All night we plough the Channel northward, and next morning come to anchor off Greencastle, in beautiful Loch Foyle, there to await the English mail and the Irish passengers. Early in the evening these are on board; once more "the anchor's weighed," and now we are off in earnest for the Western World.

When we come to look around us we find that, on the whole, we are with agreeable people, with some of whom we soon get up a speaking acquaintanceship, which becomes more intimate the longer we are out. Lawyers, doctors, clergymen, farmers, sportsmen, comfortable-looking farmers going out to Canada to remain there, and Canadian merchants and buyers. Some of these latter we find have crossed the Atlantic scores of times, and are genial, sociable men, having a firm and an abiding faith in the future of their young country. The time goes by in a pleasant, dreamy sort of way, for there is rarely bad weather at this season of the year. In the way of amusements and recreation, there are books, cards, chess, music, a concert, with readings and acting charades, eating, drinking, and flirtation; and, very likely, a little sea-sickness, though probably the victims of the latter would hardly call it an amusement.

On Sunday there is service in the saloon, to which the steerage passengers are invited. The service is very simple; the ordinary morning prayers are read, a couple of hymns are sung, the benediction is pronounced, and the proceedings are over.

On the fifth or sixth day out from Ireland we come in sight of the rugged coast of Newfoundland, and another day's run takes us through the straights of Belle Isle, into the gulf of St. Lawrence. A few hours later we sight the island of Anticosti on the right, and here we see the first signs of civilization, in the shape of a fishing hamlet or two at the water's edge. Further on we enter the mighty St. Lawrence itself, and thence to Quebec we have the land on either side, though at certain points, so great is the width of this majesticriver, you cannot see the land except in very clear weather. As we advance up the stream we pass village after village of the French inhabitants, their white houses nestling in pleasant gardens, with a glorious background of deep green, stretching away in the distance as far as the eye can reach, and forming a picture only to be seen here. And so we move on, the towns increasing in number and size, till, on the eighth or ninth day out, the grand old fortress of Quebeclooms up as we round Point Levis; a little later our noble ship is tied up at the landing stage, and we step ashore on Canadian soil.

Quebec is the most Old-World city, and one of the most interesting on the American continent. Here we spend a day or two most agreeably. We run out to the Falls of Montmorency, wander over the Plains of Abraham, go through the citadel, and see the sights inside and outside the walls of this venerable city; which, because of its strength, as a fortress, is called "the Gibraltar of America." Thence we go westward, either by train or river steamer ; if by the former we pass through some very fine agricultural districts ; if by the latter we have a sail of 180 miles up the St. Lawrence—a charming trip and made under the most favourable circumstances in one of those "floating palaces" for which the lakes and rivers of the New World are famous.

Two or three days may be profitably spent at Montreal, the commercial metropolis of Canada, and one of the finest cities on the American continent. The drives around the town are delightful, the churches are massive and grand, while the Victoria Bridge which crosses the St. Lawrence here, at a point where the river is two miles wide, is one of the most wonderful structures in the From Montr al to Ottawa by rail or river is our next world. The capital of the Dominion is well worth visiting, for its stretch. artificial as well as for its natural beauties. The Houses of Parliament and Departmental buildings are justly ranked amongst the best in America. A well-known writer has described them as being among the "architectural glories of the world." The Rideau and Chaudière Falls are wonderfully beautiful. The saw mills which are here by the score, turning out their millions of feet of boards each day, never fail to prove full of interest to the . European tourist. This is the centre of the timber trade-one of the leading industries of Canada-and at any time one may see hundreds of acres of "lumber," as the boards are called, piled over the islands and on the river barks. By rail from Ottawa to Prescott, thence westward by the Grand Trunk through a fine agricultural country and past many flourishing towns, any of which would be well worth visiting if we had time. We run through, however, to Toronto, 333 miles west of Montreal. This is the second city in Canada in wealth and population, and one of the most attractive. Its public buildings and institutions are numerous; and, in visiting these, as well as driving through the wide and beautiful streets, we pleasantly pass a few days. From this point many routes are open to us, but we choose the Northern Railway and go by steamboat and waggon as far as possible into the Muskoka country ; in other words, into the backwoods of Canada. It was only a few years ago that these townships were thrown open for settlement, and now they contain a very considerable population, with several flourishing towns and all necessary branches of industry. This is known as the "Free Grant District," as the land, which belongs to the Outario Government, is given absolutely free of all charge to actual settlers. The scenery along the numerous lakes and rivers is unsurpassed in rugged beauty. But we shall find this

district attractive chiefly for the reason that it will afford us oppor-. tunities for getting an insight into what is called "roughing it in the bush ;" in other words, we shall see the sort of life the first settlers in the backwoods of Canada lead, with all its hardships and its drawbacks, as well as its pleasures and its freedom. We shall be compelled to rough it ourselves, but this will only make our experience the more enjoyable. A week or so here, then out into civilization again, up the Northern Railway to the Town of Collingwood, at which port we take steamer to the head of Lake Superior. This trip through the upper lakes is surrounded with many attractions. We pass through the largest body of fresh water in the world, wend our way through groups of charming islands of every size and shape, enjoy the grandly massive scenery of Lake Superior, visit the copper and silver mines for which this region is famous, go to the very limit of civilization in this direction, and at the various stopping-places see many families and villages of the Canadian Indian little removed from his original condition of barbarism. The head of Lake Superior reached, we may return by another fine line of steamers to Sarnia, and back to Toronto by the Grand Trunk Railway, through one of the finest farming districts of Ca-This trip will occupy about ten days from Toronto. nada.

A two hours' sail across Lake Ontario brings us to the old town. of Niagara, formerly the capital of Upper Canada, now a summer resort. Thence we run by rail up the west bank of the majestic river, a distance of about twelve miles, passing through scenes of historic interest, and alight at Clifton, within sight and sound of Niagara's mighty cataract. Two or three days will be sufficient here, though we should be glad to spend as many weeks, did time permit. Taking the Great Western train at Clifton we run westward through one of the finest fruit-growing districts in the world. On every side we see orchards of apples, peaches, plums, and berries, vineyards with their wealth of clustering grapes, and gardens bright with a profusion of flowers. A day at the beautiful city of St. Catharines; thence on to Hamilton, where another day may be most pleasantly spent. Here, if we have no more time to spare, we may take either train or steamboat for Montreal, about four hundred miles distant. It will be better, however, to run on to London by the Great Western and thence by the Grand Trunk to Guelph. This will again take as through the very best farming district in Ontario, and enable us to form some idea of the agricultural wealth of the Provinco. At Guelph we might visit the Model Farm, which is carried on under the Provincial Government, and go over a few of the splendid farms. for which the County of Wellington is remarkable. A few hours' run by the Grand Trunk again brings us once, more to Toronto.

Should time permit, we may make a trip over one of the narrow gauge railways into the beautiful country north-west and northeast of Toronto, and returning take a lake steamer at that port for Montreal. We steam down through Lake Ontario, past many beautiful and flourishing towns, at several of which we call, and enter the St. Lawrence at Kingston. Between this point and Montreal we make one of the most charming trips imaginable, through the ever-varying but always beautiful Thousand Islands, and over the boiling, surging rapids. Nothing can be conceived more enchanting and more exciting than "running the rapids;" and, when the pleasure and danger are past, and our steamer is moored to the wharf at Montreal, our only regret is that we have not time to repeat the trip.

If we can at all do so, we must run out from Montreal to Lake Memphremagog, which is remarkable for the beauty of its surroundings. Then on to Quebec by rail, as we came up by water from Quebec. We find the ship in the stream awaiting us; we go aboard by tender, and an hour later we are ploughing our way down the mighty river. We pass once more the pleasant villages and charming watering-places of the Lower St. Lawrence; take the mails on board about two hundred miles below Quebec; then start in earnest on our homeward voyage; and in eight days more are home again in "merrie England."

This is a holiday trip that any Englishman of moderate means may safely undertake. It can easily be done within eight weeks; the cost is not so great as if the same time were spent on the Continent, or even at a fashionable English watering-place; while the attractions which the trip presents are so varied, so novel and so numerous, as to far surpass those of any ordinary European tour.

CHAPTER XVII.

FOR THE SPORTSMAN, THE ANGLER AND THE ARTIST.

CANADA offers a splendid field for the sportsman and the angler. Game and fish are abundant. The game laws are simple, having reference only to the "close" or breeding seasons; the climate is invigorating and healthy; and experienced guides and assistants can be engaged in any part of the country. The sportsman need experience no difficulty in suiting his taste. He can have any form of sport he likes, from bagging squirrels and partridges and pigeons in the old settlements to tussling with grizzly bears in the wild canyons of the Rocky Mountains. The royal tiger and the lordly lion he will not find; but if he be sufficiently venturesome he may gather together a collection of hunting trophies of which he will have no reason to be ashamed, and at the same time undergo excitement and danger sufficient to satisfy any reasonable mortal.

In the way of wild animals there are in the old Provinces, bears, foxes, wolves, moose, cariboo, red deer, otter, mink, pine marten, sable, hares, raccoons, squirrels, etc., while in the Far West there are immense herds of buffaloes on the plains, and grizzly bears and other animals in the Rocky Mountain region. Of feathered game there are woodcock, snipe, pigeons, plover, partridges, quail, geese, ducks, brant, curlew, and prairie fowl; while of eagles, hawks, owls and other such birds there are many varieties. All game is common property; the sportsman is at liberty to shoot where he likes, what he likes, and when he likes, with this exception that during a certain time of the year it is illegal to take game. This is necessary in order to preserve it from total destruction. However, no true sportsman—law or no law—would kill game out of season.

The English sportsman should take a good outfit with him, though it would of course be folly to burden himself with an unnecessary lot of "traps." A good-sized portmanteau will carry all he wants in the way of clothing. Tents and all necessary camp furniture, cooking utensils, etc., can be procured in any Canadian town. Rifles, guns, ammunition, knives, steel traps and all other such articles can also be purchased in Canada, if necessary.

For the sake of companionship, as well as for mutual protection and aid, in case of trouble or difficulty, there should be three or four in the party. English servants are only in the way, unless they happen to have had experience.

On arriving in Canada, the party, if they have no friends in the country with whom to consult, should at once call on the nearest Government agent, who, even though he may not know much about sporting matters himself (though most of them do), will place them in communication with persons who will afford them every assistance.

In the forests of New Brunswick and Quebec, moose, to say nothing of other game, large and small, are abundant; but it would not be safe to enter on the chase without experienced guides. These can be had without difficulty and at a small cost. Most of them are Frenchmen, or a cross between the French and the Indian. They are active, hardy, enduring, shrewd fellows; thoroughly trustworthy; handy in camp, and cunning on the trail. They will find the game if it is to be found at all, and when brought down they know how best to treat such parts as are to be preserved as trophies, and how to cure the choice cuts of the meat. The French and halfbreeds are to be preferred to the full-blooded Indian, because they are more cleanly as a rule, and much better cooks than the latter. It is not well, however, to allow any of them, especially the Indians, too much liberty with the brandy flasks. After a hard day's work on the trail, they are deserving of a drop of whiskey and water, but let it be one and no more. Moose and cariboo hunting is a hard, tiresome and occasionally a very exciting amusement. There are several parties of men in England, most of them ex-officers in the army, who visit Canada every two or three years for the moose hunting. They find that quite frequent enough. Some of them have very fine collections of heads and hides.

As has already been said, while on the moose trail the hunter comes across a variety of other game, beasts as well as birds, and thus he is enabled to form an interesting and sometimes valuable collection.

Duck shooting is to be had in every part of Canada. The birds come north in the spring of the year, and make their homes for the summer in the numerous small lakes to be found in the interior of every Province. They hatch their young on the shores, bringing them up on the wild rice and other food with which the lakes abound. In the autumn they are to be seen in countless thousands. Two men well up in the sport may easily bring down three hundred brace in a day. Such shooting does not compel one to go beyond the confines of civilization. Many of the best lakes for the purpose can be reached from the large towns in a few hours by rail or coach. At or pear the lakes there are clean, comfortable, well-kept hotels, where one may be accommodated for four, six, or eight shillings per day, everything included. Wild geese are frequently killed in these lakes, though as a rule they spend the summer further north, while in the woods near the lakes a day's shooting is almost certain to bring the sportsman a well-filled bag of miscellaneous game.

The best and most exciting sport to be had on the American continent is buffalo hunting, and the best fields are the grand prairies of the North West. The party should be provided with good breech-loading rifles, a revolver each, and an abundant supply of ammunition; although the hunt for these by the native Indian and half-breeds is by the use of the common flint-lock smooth bore, which is loaded and discharged at the gallop, with great rapidity, the powder being simply put into the mouth of the barrel, and the bullet dropped on that without any paper or ramming whatever. The firing is, of course, at point blank range, while galloping with a herd of buffaloes. The hunting grounds may be reached by way of Sarnia and Collingwood and the Great Lakes to Duluth; thence by the Northern Pacific to Glyndon; and thence by the St. Paul and Pacific Railway to Winnipeg. There is also the choice of an all-rail route via Chicago and St. Paul, in the United States. The Lake route will be found particularly pleasant, and the time taken is very little longer.

There is a class of men in Manitoba known as "plain hunters," from the fact that they live chiefly by buffalo hunting. They are nearly all half-breeds, a cross between French or English and Indians, and are undoubtedly the most expert and succesful buffalo killers on the American continent. The services of a few of these men can be secured without difficulty and at a moderate cost. Their horses, an active, wiry breed, are trained to the sport, and appear to take as much pleasure in it as do their masters. At Wianipeg men, horses, tents, camp furniture and everything else necessary for a hunt over the prairies can be either hired or purchased. Before engaging guides, however, the sportsman should consult the local agent of the Government, who will readily give him every advice and assistance. The half-breeds are, as a rule, trustworthy, honest and respectful; still it is always the best policy to have the advice of one in authority in making your arrangements.

It is not intended here to describe a buffalo hunt, with all its excitement, danger and novelty. The sportsman, however, may be advised to go and experience it for himself. It is the perfection of hunting, and as horse, rifle and revolver are brought into service, it will at once be seen that it has special and peculiar attractions for Englishmen, accustomed as they are to both hunting and shooting. To the genuine sportsman nothing can be more enjoyable; and he returns after his two months on the plains, feeling that he has at last, for a time, been in reality a dweller in "the happy hunting grounds."

Those who have time and who have made the necessary preparations may extend their trip westward to the Rocky Mountains in search of bears and other large game. They may even pass onward into British Columbia, the forests of which afford splendid sport.

Prairie fowl may be killed in any number on the plains, while the lakes swarm with ducks and geese.

"In some seasons our bays and harbours team with fish of various kinds-mackerel, herring, cod, haddock, halibut, hake, pollock, shad,

smelt, perch, eels, etc. Lobsters are abundant, and are usually sold in the Halifax market at about one shilling per dozen. Good sport is afforded in spearing lobsters at night by torch-light. We have a plentiful supply of shell-fish, viz., oysters, scallops, clams, quahaugs, mussels, etc. Indeed, no country in the world can produce a greater variety of sea fish, or in greater abundance. Our rivers and lakes. afford salmon, trout, and grayling; and we have no lack of the disciples of Isaac Walton. Any boy with a bean-pole, a half-dozen yards of twine, with a hook on the end of it, and a few angle worms or grasshoppers, may go out in the morning and kill as many trout as will do a large family for breakfast. In some lakes they are quite large, and are taken as heavy as four or five pounds. In other lakes they are small, seldom weighing more than one pound. The little brook trout is an excellent pan fish; the prince of all the trout tribe is the sea trout. This fish is taken in large numbers at the mouths of rivers emptying into the Atlantic."

All the rivers in Canada connecting with sea, on the Atlantic as well as the Pacific coast, contains splendid salmon. The fish were taken indiscriminately and at all seasons up to a few years ago, when the Government stepped in and put a stop to the slaughter. The fish are now closed during the breeding season, and there are breeding establishments, carried on under government, at which millions of young fry are turned out every year. The best salmon streams are in Nova Scotia, New Brunswick, Qaebec and British Colambia. In the upper lakes there are numerous other varieties of fish which make capital sport. Some of the salmon rivers on the lower St. Lawrence are leased from the Government by private parties; but permission for a week's fishing can be readily obtained. The lakes and rivers up the country are all free.

Brook trout may be taken in all parts of Canada, but the troutfisher's paradise is to be found in the rivers on the north shore of Lake Superior, especially the Neepigon. This is a large, clear, cold and rapid stream affording splendid fishing from its mouth to its source. The fish run from one to seven pounds in weight; they are firm and hard, beautifully marked, and always "die game."

To reach the Neepigon the fishermen go to Collingwood or Sarnia from Toronto, by rail, thence by steamer to Red Rock at the mouth of the river. At Sault Ste. Marie, on the way up, it is well to engage a couple of half-breeds and a canoe, having previously laid in the necessary camp furniture and provisions at Toronto. From Red Rock the party proceeds up the river about eight miles and there camps out. As the country is in a state of nature one must rough i⁺ and live under canvas. Three weeks on the Neepigon will make glad the heart of any disciple of old Isaac Walton. It is glorious sport, and, as the surrounding scenery is grand in the extreme, the student of nature will find much to admire and think of in after days. The fish that are taken need not be wasted. The half-breeds know how to cure them so that they will keep for months. The writer has eaten Neepigon trout in England, and delicious they were.

Trout fishing is to be had in other parts of the country less remote from civilization, and good trout fishing, too; while bass, pike, pickerel, and numerous other varieties, some of them very "gamey" and full of play, may be caught in any quantity in the lakes and rivers.

As in all new countries, the fine arts did not make much headway in Canada, until within the last few years. Men are too much taken up with trade and commerce; too eagerly struggling for wealth, to give any portion of their time to art studies. Yet as wealth accumulates, and as education elevates the mind, the public taste becomes refined, and a desire for such things manifests itself. Canada is a country calculated by nature to make its people love the grand, the beautiful, the sublime. Her beautiful rivers, her mighty waterfalls, her lovely lakes, her grand forests, her beautiful valleys, her towering mountains, and her charming pastoral scenes present a variety of scenery that cannot be surpassed. Such surroundings as these must tell in time on the tastes of any people. And so we are glad to say it is in Canada.

Not many years ago, before the present degree of refinement and culture had been reached, a painter could hardly make a living in Canada. Now there are scores. In the Province of Ontario there is a society for the promotion of native talent; and there is annually a very pleasant re-union, at which the works exhibited are drawn for as in the London Art Unions. The subjects are generally Canadian water colours, though a few artists confine themselves to oil paintings. It would be unreasonable to expect them to rival the works of European painters, yet there are several very promising artists in the Dominion, some of whom may yet be heard of on the other side of the Atlantic.

The English painter in search of new subjects cannot do better than go to Canada. There he will find every variety of scenery imaginable, while at the same time he will enjoy an "outing" that cannot fail to invigorate and strengthen both body and mind.

CHAPTER XVIII.

WHEN AND HOW TO GO TO CANADA.

THE spring or summer is the best time of year to go to the old Provinces of Canada. Strangers should not go there in the winter with the intention of becoming permanent residents, unless under the advice of friends already in the country, whom they are going to join. The earlier in the spring one gets to the old Provinces the better. By leaving home about the middle of April, when the steamships commence running to Quebec for the season, the emigrants will arrive at a time when labour is in general demand.

Farmers who go to Canada with means, and who intend to purchase farms on their own account, should not close a bargain till they have had a good look around. Each one should deposit his money in a Government Savirgs' Bank or in one of the Chartered Banks, where it will be perfectly safe and drawing interest. He should spend a year in the country parts; and it would be all the better for him in the end if he were to engage himself for the summer to an experienced farmer. The knowledge thus attained would stand him in good stead when on land of his own. Though land is often transferred without much formality, it is always the safest course to procure the services of a lawyer before concluding a deed.

So far as the labourer is concerned, his first object should be toprocure work. He should keep clear of the large towns where he is liable to be led into temptation or to waste his money in idleness. Let him in all cases be guided by the advice of the government agents with whom he is brought into contact, and he will not be likely to go wrong.

Though the highest wages are paid during harvest, he should not wait for that busy season; his great object should be to get engaged by the year, so as to be sure of a comfortable home and steady wages during the dull as well as during the busy season. He should bear in mind that, until he gets into the ways of the country, he is worth much less to the farmer than he will be afterwards, and should therefore be careful not to make the common mistake of refusing reasonable wages when offered him on his first arrival in the country. These remarks apply to the tradesman and mechanicas well as to the farm labourer.

All routes by United States ports (Portland excepted) should be avoided, and steamships should be chosen in preference to sailing vessels. There are several lines of steamers running direct to-

Canadian ports, to which we shall refer more fully presently. These steam-lines have agents in all parts of England, Ireland and Scotland, and also in most of the large continental cities. In all cases it is best to consult the nearest local agent, who will readily give every information in his power respecting rates, times of sailing, etc., and will also furnish the applicant with pamphlets on Canada free of If there be no local agent, application should be made to charge. the Canadian Emigration Agent, Canada Government Building, 31 Queen Victoria Street, London, E.C. Under any circumstances it is always best to procure one's ticket before leaving home, as a place in the ship is thus secured, and much trouble, annoyance and confusion at Liverpool are avoided. Though passengers may book through to any inland town on any of the main lines of railway, it is preferable to book only to Quebec, at which port all necessary information will be given by the government agent or the railway officials.

Emigrants going to Ontario or the Western part of Canada, should always, in the summer time, take a steamer going to the port of Quebec, and never to Halifax and St. John, as they save a long railway route.

STEAMSHIP LINES-ADVICE ABOUT SAILING.

There are several lines of steamships running from ports in England, Ireland and Scotland directly to ports in Canada, of which full information can be obtained from the hand bills and advertisements of the several companies.

There are lines which go to Quebec, which, we repeat, the emigrant for the west should always take in the summer time; and there are lines which go to Halifax and St. John, which emigrants for Nova Scotia and New Brunswick should always take, instead of going round by Quebec.

In the winter time, or when the St. Lawrence is closed, emigrants for the West can go by either Halifax or Portland.

Passengers of every grade on all of these vessels are provided with an abundance of cooked provisions; but steerage passengers must provide their own beds and bedding, and eating and drinking utensils, which can be procured in Liverpool before sailing for a few shillings. First-class passengers are allowed 20 cubic feet; intermediate passengers, 15 cubic feet; and steerage passengers, 10 cubic feet of luggage free. All excess will be charged for.

As we have already said, the passenger should procure his ticket before leaving home either from an authorized agent of the line he intends sailing by or through the Canadian Emigration Agent in London. It is of the utmost importance also that every member of his family should be in good health, as they will be examined by a medical officer before embarking, and should any infectious disease be discovered the family will not be allowed to sail. Each ship has a medical officer on board, and in case of illness during the voyage he attends to the patients and prescribes for them free of all charge.

The following instructions are taken from a recently issued emigration pamphlet:

As soon as the passenger gets on board he should read the rules he is expected to obey whilst at sea. He will find them hung up in the steerage; and should do his best to carry them out, and to be well behaved and keep himself clean, as this will add much to his own comfort and good health, as also to the comfort and health of others.

If he have any grievance or real cause of complaint during the passage, he should go and make it known at once to the captain. The arrangements are, however, now so perfect for securing comfort and speed on the great ocean steam-lines, that complaints are seldom or never heard.

All boxes and luggage should be plainly marked with the passenger's name, and the place he is going to. They will be stowed away in the hold of the vessel, so whatever is wanted on the voyage should be put into a trunk, carpet bag or small box, which the passenger will take with him into his berth.

Emigrants are often induced to make a clean sweep and part with everything they have before leaving the old country, because it is said the charges for excess of luggage are so large that they would come to more than the things are worth. Now there are many little household necessaries which when sold would not fetch much, but these same things if kept would be exceedingly valuable in the new country or the bush, and prove a great comfort to the family as well. It is not, therefore, always advisable to leave them behind; they may not take up much room, and the cost of freight would be little compared to the comfort they will bring. The personal effects of emigrants are not liable to customs duty in Canada. Excess of luggage (unless very bulky) is seldom charged for on the Canadian Railways.

Lay in as good a stock of clothes before leaving home as you possibly can. Woollen clothing and other kinds of wearing apparel, blankets, house-linen, etc., are cheaper in the United Kingdom than in Canada. The emigrant's bedding, if it is good, should be brought; and if he has an old pea jacket or great coat he should keep it by him, for he will find it most useful on board ship.

Agricultural labourers need not bring their tools with them, as these can be easily got in Canada, of the best description, and suited to the needs of the country. Mechanics are advised to bring such tools as they have, particularly if specially adapted to their trades.

Both classes must, however, bear in mind that there is no difficulty in buying any ordinary tools in the principal towns at reasonable prices; and that it is better to have the means of purchasing what they want, after reaching their destination, than to be hampered with a heavy lot of luggage on their journey through the country. It must also be borne in mind that the tools bought in Canada will likely be specially adapted to the use of the country.

Farmers and others with means, going out as saloon passengers, sometimes take with them the greater portion of their household furniture, bedsteads, tables, piancs and other heavy and cumbersome articles. Nothing could be more absurd than this. The cost is very great, the articles are liable to be damaged on the voyage; and, even should they reach Canada uninjured, many of them will be found to be out of place and the next thing to useless. All heavy household furniture should be sold off; it is much better to make a clean sweep of it and to go out, so to speak, "in light marching order." Furniture of all kinds can be bought in Canada as cheaply as in England. The pianos made in Canada are second to none. Everything in the way of house furnishings is to be had at reasonable prices, and much better suited to the country than the English made articles.

By following out the advice given above one may go to Canada with ease and comfort. The voyage is a short one, from eight to ten days; the steamships are of the very best class, and the wants and welfare of the passengers are carefully and constantly looked after. In fact, it is little else than a pleasure trip on a large scale.

CHAPTER XIX.

RATES OF WAGES, COST OF LIVING, RENTS, CLOTHING, ETC.

THE commercial and industrial crisis which has affected so large a portion of the world set in, with severity, in Canada, in 1874, and naturally very much deranged the rate of wages, which is still very much unsettled. But the depression is now passing away, to be followed by the accustomed state of prosperity in the country. It is, however, yet very difficult to quote a rate of wages applicable to all parts of the country. In the old parts of Canada labourers' wages may be stated to be from eighty cents to a dollar a day, without board, but less in winter. Agricultural labourers get from ten to twenty dollars per month with board, and more for special work during the harvest, but in winter less. Labourers' wages on the Railway works in Manitcha and the North West are from one dollar and a quarter to two dollars a day. But emigrants should bear in mind that Manitoba is a new country, and the labour market limited. They should therefore be well advised before going thither in search of employment.

Female domestic servants get on an average five or six dollars a month with board. Higher wages are sometimes paid for very superior servants. Inferior ones get less than the average stated.

The wages of artisans and mechanics differ with their trades, and are in many cases fixed by the trades union. As compared with the cost of living they are good; and they are relatively good as compared with other countries.

It may be generally remarked that, since the depression began, the class of mechanics and artisans and labourers in towns have been cautioned to use great care before emigrating, as considerable numbers, not only in Canada, but over the whole continent of North America, have been thrown out of employment, from the stoppage or reduction of accustomed industries.

These remarks have not applied in Canada to genuine agricultural labourers. These, and farmers with small capital, have had the very best prospects open to them, even during the crisis. In fact, men, to make the land give its increase and develop the mineral resources of the country, are a standing need in Canada.

As respects the cost of living, it has gone down with the depression of wages. All kinds of meat, potatoes, bread, butter, milk, cheese, and in fact all kinds of provisions are very cheap in Canada, very much cheaper than they are in England; and the people as a rule live well.

Generally speaking, the cost of clothing is cheaper in the Old Country than in the New, and provisions cheaper in the New than the Old; but the difference in the cost of clothing at the present time is not much; and the emigrant is not advised to burden himself by the purchase of articles of which he is not in immediate need.

The cost of board for immigrants may be stated to average from $2\frac{1}{2}$ to 3 (10s. to 12s. stg.) per week; and the rent of houses for working men from 5, (£1 stg.) to 8 (£1 12 stg.) per month, according to size and locality. There are, of course, higher and lower prices than these quotations. Living is very cheap in Canada.

As regards employment, the newly arrived immigrant, without means, is generally advised to take the first offer made to him until he becomes acquainted with the ways of the country. And the

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inducement, as before explained, to come to Canada, is not simply higher wages and good living among kindred people under the same flag, in a naturally rich country, possessing a pleasant and healthy climate; but the confident hope which the poorest may have of becoming a landowner, and, while securing a competence for himself, comfortably settling and educating his children in a manner he could not hope to do among the crowded population of the Old World.

CHAPTER XX.

PROVINCES OF THE DOMINION.

ONTARIO.

THE old Province of Ontario had an area of about seventy-eight million acres, of which about a third was surveyed, and for the most part granted and sold. But of the surveyed portion upwards of three millions of acres yet remain to be disposed of, either as free grants to settlers or by purchase.

The recent award, however, of the arbitration on the boundaries of Ontario, gave to that Province an immense extension of territory,—an extension as great as the whole of the rest of Ontario exclusive of the Lakes Ontario, Superior, Huron and Erie. The Province of Ontario will in the future possess an area of fully 200,-000 square miles. This is 80,000 square miles greater than the area of the United Kingdom ; only 12,000 square miles less than the whole German Empire ; only 2,000 square miles less than France; and equal to the combined areas of Holland, Portugal, United Italy, Switzerland and Belgium. The new territory alone possesses an area greater by 20,000 square miles than the group of countries just named, excepting Italy.

Ontario is the most populous and wealthy Province of the Confederation. It had, according to the census of 1871, a population of 1,620,851. Its south-western portions have a milder climate than Quebec or the Maritime Provinces. Its growth in wealth, principally from the products of agriculture, has been very rapid.

Occupations and Cities.

Agriculture forms the principal occupation of the inhabitants, although lumbering in the rich forests, mining in the bountiful deposits, and seafaring occupations, on the great lakes, attract a portion of the labour of the inhabitants.

Toronto, the seat of the Provincial Government, has a population of 56,092. There are also other cities of considerable extent. Ottawa, with a population of 21,545, is the seat of the Dominion Government, in which are erected the Houses of Parliament and Departmental Buildings. These constitute three of the finest edifices on the Continent of America. The city of Hamilton has a population of 26,716; London, 15,826; and Kingston, 12,407.

Resources.

The soil of the country varies in different localities, but a large proportion is of the very best description for agricultural purposes; its water communication, by means of the great lakes, is unsurpassed; in mineral wealth (excluding the one article, coal) it has resources of the very greatest extent, abcunding, as it does, in iron, copper, lead, silver, marble, petroleum, salt, etc. Its immense forests of pine timber are too well known to need any description. The great lakes abound with fish, and the forests with game.

Ontario is essentially an agricultural country. The producing class, then, is that which the country needs—men to clear the forest lands, to cultivate the soil, to build houses, to make the ordinary household goods, and to open up communication from one part of the country to another, by the construction of roads and railways; but it cannot be too strongly impressed upon intending emigrants that, of professional men and of book-keepers and clerks, Cntario has already enough and to spare.

Demand for Females.

Of the female sex the class most in demand are household servants; these are always sure of immediate employment, at good wages. There is also a considerable demand for dressmakers, milliners, and seamstresses, all of whom can obtain good wages.

Farms and Lands.

Uncleared land varies in price from 2s. to 40s. an acre, according to situation and soil. Cleared and improved farms can be bought at prices ranging from £4 to £10 an acre. The money oan nearly always be paid in instalments, covering several years. The leasing of farms is an exception to the general rule, as most men desire to own the land they cultivate. Emigrants possessing means would do well not to be in haste to purchase, but to get some experience before taking so important a step. Agricultural labourers would study their own interests by accepting employment as it may be offered on arrival, and they will soon learn how to improve permanently their condition. Persons accustomed to the use of mechanical tools, who intend turning their hands to farming, will often find such an acquisition of great convenience and value.

Prosperity of Immigrants in Ontario.

Men commencing as labourers, without any capital but strong arms and willing minds, seldom keep in that condition very long, but after a period of more or less duration they generally become employers of labour themselves. It is this moral certainty of rising in the social scale, when the proper means are employed, that brightens the hopes and stimulates the exertions of the needy settler.

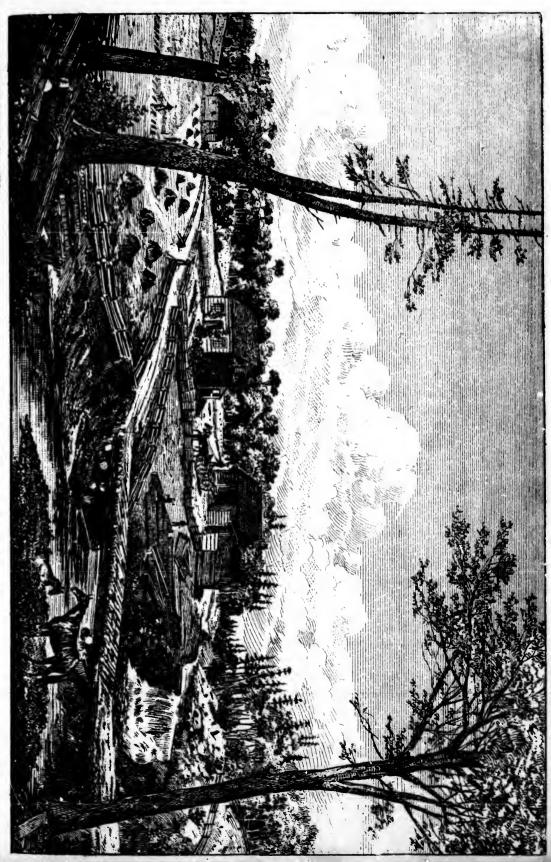
In coming to Ontario, old country people will find themselves surrounded by appliances of comfort and civilization similar to those which they left in the old land; the means of educating their children universally diffused; religious privileges almost identically the same; the old national feeling for the land of their fathers loyally cherished; and an easy means of intercourse, both by steam and telegraph, with every part of the great British Empire, of which Canadians are proud to boast that their country forms an integral and no inconsiderable part.

Climate and Productions.

The climate of Ontario is warmer in summer and colder in winter than that of England; but the air being dry the heat of summer is not found to be oppressive; while the clear sky and bracing air of winter render that season, in the opinion of many, the most pleasant in the year. The frosts of winter have a powerful effect in opening the soil, and the snow protects the ground from the winds and sun of the early spring; then the melting snow fills the soil with moisture, and replenishes the wells with an abundant supply of water.

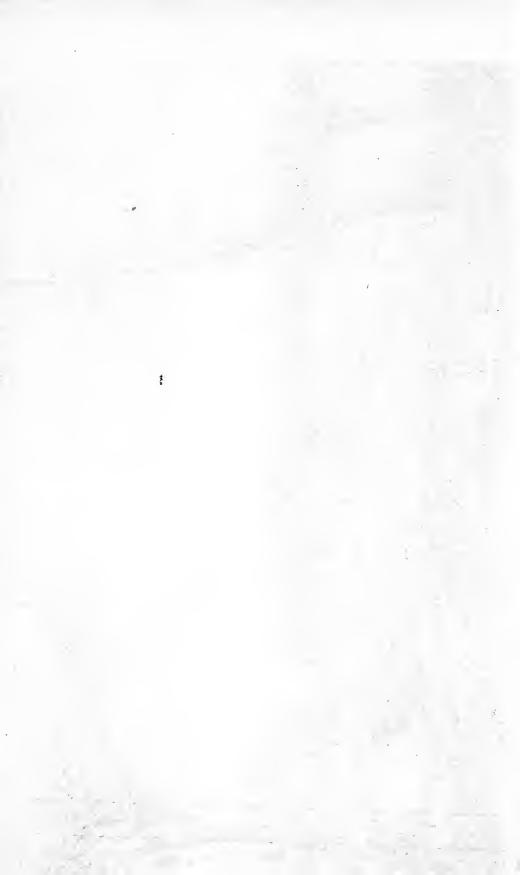
The productions of Ontario are similar to those of Western Europe. Cereals, grasses and root crops find here their appropriate climate, while fruit is produced in great abundance.

Hemp, tobacco and sugar-beet are also profitable crops. If Maize and tomatoes ripen well, and in the southern parts of the Province peaches and grapes come to perfection in the open air. The growth of such products as these forms an unerring index to the character of the climate.



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Free Grant Lands.

On the first of January, 1874, there were sixty-nine townships open for location, under the "Free Grant and Homestead Act of 1868," and the following have been opened since that time, viz., Bangor, Faraday, McClure, Carling, Ryde, Oakley, Ridout, Mattawan, and Plumer, making in all seventy-cight townships, each containing from 50,000 to 60,000 acres. Besides the above, there are twelve more townships appropriated, making in all ninety. Other townships will be opened as railways and colonization roads are constructed; and the Georgian Bay branch of the Canadian Pacific Railway will, in its construction, pass through townships in Ontario that will be open to settlers as free grants.

Two hundred acres of land can be obtained, on condition of settlement, by every head of a family having children under eighteen years of age; and any person over eighteen years of age can obtain a free grant of 100 acres on condition of settlement. These lands are protected from seizure for any debt incurred before the issue of the patent, and for twenty years after its issue by a "Homestead Exemption Act."

In order to make a successful settlement upon a free grant, the settler should have at least from $\pounds 40$ to $\pounds 50$ after reaching his location.

The old settlers are always willing to help new comers. A house, such as is required by the Act, could be erected by contract for from £5 to £8; but with the assistance which the new settler would cervainly receive from his neighbours, it might be erected for even less. Should it be desired to clear the land by hired labour or by contract, in order to bring it more rapidly into cultivation, the cost would be about £3 sterling per acre. The best season of the year to go on to a free grant is the month of September, after harvest work in the old settlements is over. There is time to put up a house, and get comfortably settled before the winter sets in ; and during the winter the work of chopping and clearing can go on. In this way a crop can be got in during the first spring. The operation of putting in the first crop is a very simple one. Ploughing is at once impracticable and unnecessary. The land is light and rich. All it needs is a little scratching on the surface to cover the seed. This is done with a drag or harrow, which may either be a very rough, primitive implement—a natural crotch with a few teeth in it—or it may be carefully made and well finished.

Mines and Minerals.

The mineral, wealth of Ontario can hardly be surpassed in variety and richness, but may be said to be almost entirely undeveloped. Iron in large quantities is found a short distance back from Lake Ontario, in the country between the Georgian Bay and the Cttawa; also, in the same region, copper, lead, plumbago, antimony, arsenic, manganese, heavy spar, calc spar, gypsum or plaster of Paris, marble pronounced by good judges as fully equal to Carrara, or that obtained in Vermont, and building stone, all of them in large quantities near the surface. Gold has also been found in the same region, but not as yet in quantities sufficient to pay well. Mica is also found in considerable quantities, and is very profitably worked.

On the north shore of Lake Huron are the celebrated Bruce mines of copper, from which ore and metal to the value of about £50,000 are exported annually. Silver is found on the shores of Lake Superior, particularly in the neighbourhood of Thunder Bay. Silver Islet, a small island in this bay, contains one of the richest veins of this metal ever discovered. There are other veins on the mainland, aimost, if not quite, as rich.

Petroleum is got in the westerly part of the Province in immense and apparently inexhaustible quantities.

Salt is obtained at Goderich and the neighbourhood, the brine being taken from wells sunk to a great depth below the surface.

Large peat beds exist in many parts of the Province, and the manufacture of peat for fuel is now being carried on by two companies, the Anglo-American and the Ontario.

Education.

One of the chief attractions of Ontario as a home for immigrants. is its admirable system of Public Education. This has teen brought to its present perfection by much care and study. The systems prevalent in the most advanced countries of Europe have been carefully studied, and their best points appropriated.

The public schools are all free. All resident children between the ages of five and twenty-one years are allowed to attend them, and the children of all classes are educated therein without distinction.

The public schools are non-sectarian. The children of all denominations are admitted without distinction.

The school funds are derived from four different sources. 1. The sale of lands set apart for school purposes, from the proceeds of which sale is paid the legislative grant, which is apportioned among the schools, according to school population, and is used only for the payment of teachers' salaries; 2. Municipal assessment, each city, town or county is to raise by assessment an amount equal at least to the legislative grant; 3. Money received from the Clergy Reserve Fund and other sources; 4. Trustees' school assessment. The schools are governed by trustees elected from and by the ratenayers of the district; and it is imperative on the trustees of each school to levy a tax on the rateable property within their section sufficient to supply any deficiency that may be required after obtaining the legislative and municipal grants.

Manufactures.

The almost unlimited supply of water power throughout Ontario affords facilities for manufactures to which that power is adapted, and in consequence various descriptions of industry are springing up in all directions. Steam power is also used to a large extent. The principal articles manufactured, are cloth, linen, clothing, leather, furniture, sawn timber, flax, iron and hardware, paper, soap, cotton and woollen goods, steam engines and locomotives, wooden ware of all descriptions, agricultural implements, etc.

Special Inducements.

Persons of moderate but independent means, who are living on the interest of their money in England, could double their incomes by settling in Ontario, where from seven to eight per cent. can easily be obtained for investments on first-class security. Add to this that living and education are much cheaper than in the Old Country, and it will be at once obvious how great are the advantages Ontario offers to this class of persons, and especially those with families.

Another class of persons to whom Ontario offers special inducements are tenant farmers who are ambitious of changing their condition as leaseholders to that of freeholders. Improved farms can be bought in Ontario for the amount of capital necessary to carry on a leased farm in Great Britain, thus placing the well to-do farmer in a position of independence.

QUEBEC.

THE Province of Quebec comprises a territory of 210,000 square miles or 129,000,000 acres of land, divided in this way :---

Conceded in fiefs In free and common soccage. Surveyed into farm lots	. 8,950,953
Still to be surveyed	25,029,934 102,970,066

This Province was originally settled by the French. The first English settlers who really fixed their homes in Quebec were the United Empire Loyalists, whom the War of Independence in the United States caused to emigrate to Canada. To recompense their allegiance the British Government granted them magnificent grants of land in the Bastern Townships in Quebec, and in the peninsula formed by the great lakes of Ontario. In this way there exists to-day in the Province a mixed population consisting of French and English speaking people.

Education.

In order to make clear the social features of the Province we shall illustrate first the system of education. The Minister of Public Instruction controls and directs public instruction in this Province. This important public functionary is assisted by a council of twentyone members, fourteen of whom are Catholics and seven Protestants. If at any time ten Catholic or five Protestant members of the council shall be of opinion that their respective educational institutions should be separately managed, in that case the law provides for separation; and it then resolves itself into two, so that the members of the different religious creeds shall have the exclusive management of the schools of their respective denominations. Nothing indicates a desire to put into operation this clause of the law which provides for separation; on the contrary, the most friendly relations exist among the gentlemen of different religious denominations who constitute the council.

Primary education is obligatory, in so far as every taxpayer is bound to contribute to it a moderate sum. The sum levied is equal in amount to the school grant allowed by the Government to every municipality in the Province. Besides this, heads of families have to pay a monthly fee, varying from five to forty cents, for every child between the ages of 7 and 14 capable of attending school. There are annually allowed to poor municipalities \$\$,000 Primary schools are placed under control of commissioners elected by the ratepayers of each municipality.

In municipalities where there exist different religious denominations the school commissioners of the majority govern. If the minority are not satisfied with their management as it concerns them specially, they may signify their dissent to the president of the school commissioners, and select trustees to direct their own schools. Thus the minority, be it Catholic or Protestant, has no fear of being oppressed.

There are special schools, called normal schools, supported by the

state, wherein school teachers are trained. There are three in Quebec, two Catholic and one Protestant. There are to-day in Quebec close upon 4,000 primary schools wherein elementary instruction is given to fully 200,000 pupils; and nearly 300 secondary and model schools attended by at least 40,000 pupils. These schools are maintained at a joint cost of \$1,000,000. Inspectors connected with the educational department visit the schools of the district to which they are appointed to assure themselves of the competency of the teachers and the efficiency of their management. Besides there schools of primary instruction there are special schools, lyceums, commercial schools and schools of agriculture. These number about 150, and are attended by 3,000 pupils.

There are, besides these, wherein the classics are mainly taught, fifteen superior schools in the Province. Twelve are Catholic and three Protestant. The Catholic colleges owe their existence to the generosity of the clergy. In the majority of cases the professors are ecclesiastics, who follow their course of theology while they act as teachers, and are content to receive a remuneration of \$40 per annum, besides board and lodging. This explains the low rate paid by pupils for tuition and board, which does not reach the sum of \$100 per year. Hundreds of young men, devoid of means, have been and are educated gratuitously in these schools. Owing to these facilities, education of a very superior order is very widely extended in this Province.

There are three Universities in Quebec, two of which are Protestant—McGill College, founded in 1827; and Bishops College, Lennoxville, founded in 1843 by his Lordship Bishop Mountain. The Catholic University, Laval, like the English ones, is incorporated, but, beyond this, has nothing in common with them. It was founded in 1854 by the Seminary of Quebec, which spent in the undertaking \$300,000, and now maintains it at its own expense, without State aid.

Religious and Charitable Institutions.

These institutions form one of the chief features of Quebec. With the earlier missionaries came the Sœurs Hospitalières to care for the sick, and the Ursulines and the Sisters of the Congregation followed to attend to the educating of the rising generation, and assist in civilizing the Indians. These institutions, endowed by the State or by private individuals, have gone on multiplying and meeting the requirements of progress.

By the side of the Catholic institutions have grown up and prospered those of other religious communities, between which and the Catholic institutions no rivalry exists, except in doing good. The Government of the Province devotes a considerable portion of its revenues, about \$160,000 a year, to the support of charitable institutions. These short sketches of the system of education and charities in Quebec are amply sufficient to illustrate the spirit of broad humanity and fair play existing in that Province.

Population and Climate.

At the last census, taken in 1871, the population of Quebee amounted to 1,191,516 souls; of these 929,817 were of French origin, 69,822 of English, 49,458 of Scotch, 123,478 of Irish, and the remainder of other origins.

Classified according to religion, the population of the Province is composed of 1,019,850 Catholics and 171,665 Protestants.

The rigour of the winter in Canada is very much exaggerated in Europe, and so often advanced as an objection to the country that we shall allude to it to show that it is not what it has been represented. The climate of Quebec is the most healthy in North America; and, perhaps, its people are the hardiest and most vigorous.

The snow of Quebec is most favourable to agricultural operations. The ground enjoys rest for at least five months of the year, and winter imparts to the soil that vigour which promotes a sudden and full vegetation. In point of quality and quantity the crops will compare favourably with those of other parts of the continent. Quebec is distinguished for the excellent quality of its apples. The melon and tomato grow luxuriantly, and ripen in the open air. Indian corn, hemp, flax and tobacco, when grown, yield a good return. Hemp and flax can be cultivated to any extent in the Province of Quebec. Another instance which will show the climate of Quebec cannot be so severe is that sparrows can be seen during the winter season, no matter what weather, flitting about. The summer of Quebec is equal to that of Toulouse; and fever and ague are unknown in the Province.

The Soil and its Productions.

The soil of the Province is extremely rich, and susceptible of the highest cultivation. It is adapted for the growth of very varied products; cereals, hay and green crops grow everywhere in abundance where the land is at all fairly tilled. Cattle breeding is being carried on on a very large scale, and within three years there has been exported from Quebec to great Britain large quantities of dead meat and cattle, not exceeded by the best English breeds. For pasturage the lands of Quebec are of special excellence, particularly those in the Eastern Townships and north of the Ottawa. The impulse given to agriculture by the active co-operation of the Government is working great benefit and leading to strides little dreamt of five years ago.

Territorial Divisions and Municipal Institutions.

As regards civil matters Quebec is divided into parishes, townships, counties and districts. There are sixty counties in the Province. For judicial purposes the Province is divided into twenty districts. The functions of the municipal institutions are the keeping in repair of roads, bridges, and public works of a purely local character, and the maintaining laws favourable to agriculture.

The affairs of the parish are regulated by five or seven councillors elected by the ratepayers. A mayor presides over their deliberations, and great care is taken that no unnecessary expenses are incurred.

Agriculture.

The great bulk of the rural population live by agriculture. The extent of the farms generally is 100 acres; farms in the older settlements being worth, as a rule, from \$2,000 to \$4,000. The sons of farmers invariably push back into the new settlements, where a partially cleared farm may be purchased for about \$200; or purchase a lot from the Crown Lands at a cost of between 30 or 40 cents (1s. 3d. to 1s. 8d. stg.) per acre; or take a free grant along one of the colonization roads. There are five main centres of colonization :---THE VALLEY OF THE SAGUENAY-The extent of land surveyed and disposable in this district is about 616,600 acres, the price of which is about 20 cents (10d. stg.) per acre; THE VALLEY OF THE ST. MAURICE-There are, in the Townships of this district surveyed, divided into farm lots, 441,200 acres of land, for sale at 30 cents (1s. 3d. stg.) per acre; THE VALLEY OF THE OTTAWA-The number of acres surveyed and divided into farm lots actually to be disposed of in this district is 1,338,500 acres, the price of which is 30 cents per acre ; THE EASTERN TOWNSHIPS-In this rich grazing district there are 922,300 acres of wild land, which the Government is prepared to sell at a moderate rate. The Government lands in this section sell at from 50 to 60 cents (2s. 1d. to 2s. 6d. stg.) per acre. The Eastern Townships present more than ordinary attractions to the agriculturist. and capitalist from Great Britain.

A recent writer on Canada in speaking of this fertile district says :--

"Few sections of Canada, perhaps, offer greater inducements to the immigrant than the EASTERN TOWNSHIPS. The proximity of the townships to the American market, and the great facilities for shipment to these and the markets of the Dominion, afforded by the Grand Trunk Railway,* secure the farmer a certain and ready market.

"The general features of the country being hilly, coupled with the abundance of water in lakes, rivers and springs, afford not only sufficient moisture for the crops, but considerable water power for manufacturing purposes.

"Hardwood is here to be met with everywhere, and, after clearing, a fertile soil is found, in general friable enorghe, but in all cases well adapted for the cultivation of cereals and green crops. One of the chief causes of the rapid success which crowns the settler in the Eastern Townships is that from these highlands during the first year he may reap a crop; frequently even the ashes of the trees burnt to effect a clearing, help to a great extent to defray the expenses attendant upon doing so.

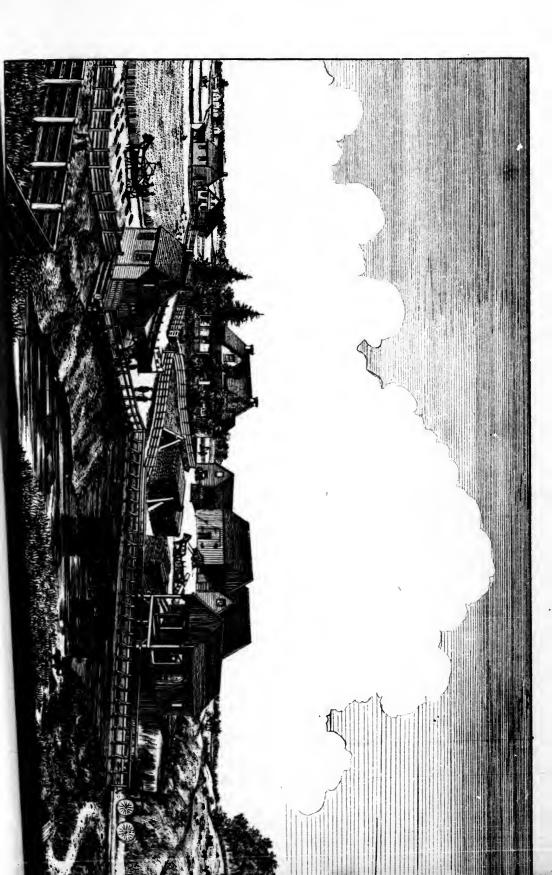
"The rich mineral deposits of the townships have within these few years attracted thither a considerable population.

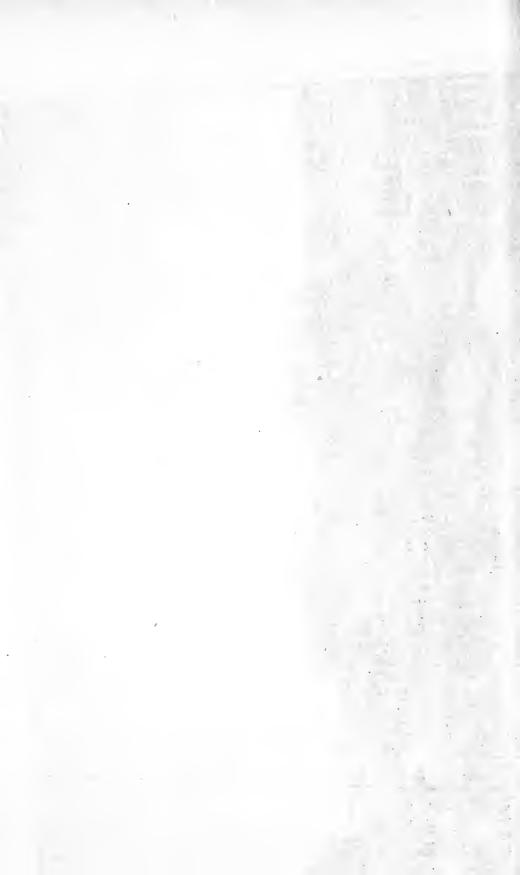
"As a grazing country the townships are unsurpassed, and great attention is now paid to the breeding of cattle and the growing of wool. This branch of agriculture is very much encouraged, owing to the profitable markets of the United Etates, which are almost at the doors of the farmers. Within the last few years the best breeds of sheep have been successfully introduced from England, and not unfrequently at the agricultural exhibitions in the United States, these and the horned cattle from this thriving district have carried off first prizes.

"Possessing the advantages of a double market, in consequence of their proximity to the frontier, many of the farmers in the townships cultivate on a large scale. In some cases the farms comprise from 100 to 600 acres. This extensive mode of farming creates a demand for agricultural labour, and gives employment to large numbers of labourers at good wages.

"The settler from England, Ireland or Scotland will find these nationalities numerously represented in the Eastern Townships. Nowhere in the Provinces will he be more at home than in the south-west part of this region."

^{*}Other lines have been opened since this was written, and are now in active operation.





Already a large trade has sprung up in the Eastern Townships in the exportation of horned cattle to England. This trade is rapidly increasing, and adding largely to the general prosperity of the district.

The manufacturing interests of the Eastern Townships are of considerable magnitude, and are constantly on the increase. The water power is practically unlimited, and the local demand alone, to say nothing of the outside market, is sufficient to support a large number of mills and factories, at which agricultural implements and machinery, cloths and other articles are manufactured. Money can be readily invested at a good rate of interest, with first-class security.

Taking it altogether, this is one of the most favoured, as it is one of the most prosperous districts in the Dominion; and is, therefore, well deserving the attention of the English farmer, capitalist and agricultural labourer.

GASPÉ.—In this district the Government offers for sale 491,900 acres of land, at the rate of 20 and 30 cents (10d. to 1s. 3d. stg.) per acre. Besides this on the south shore of the lower St. Lawrence, the Government offers for sale 1,432,200 acres, at 30 cents (1s. 3d. stg.) per acre.

In the case of a purchaser of wild lands the conditions of sale are : to pay one-fifth of the purchase-money at the date of sale, and the remainder in four equal annual instalments, with interest at 6 per cent. per year; to take possession of the land sold within six months from the date of sale, and to reside on and occupy the same, either by himself or through others, for at least two years from the date of In the course of the first four years the settler must clear and sale. place under cultivation at least ten acres for every hundred acres held by him, and erect on his farm a habitable house of the dimensions at least of sixteen feet by twenty feet. In the case of free grants the conditions are triffing. Possession must be taken within a month, and twelve acres must be under cultivation at the expiration of four years. The Crown Lands agents are obliged to grant a permit of occupation for 100 acres to any person who claims the same, provided only the person has attained the age of 18. And further to protect the settler a law was passed in 1868, providing that no mortgage should be valid on the land granted to him, nor his farmliable to be sold judicially for any debt contracted by him previous to his entering upon it, and for the ten years following the granting of letters patent. The following among other things are declared exempt from seizure for sale judicially :

"The bed and bedding of the family, the wearing apparel, stoves, knives and forks, spoons, spinning-wheels, weaving looms, etc., etc., the fuel, meat and vegetables for family use, two horses, four cows, six sheep, four pigs, hay and forage necessary for the support of these animals during the winter; vehicles and other implements of agriculture." Certain of these articles may be attached, however, but only when the debt is contracted in the purchase of such articles. This protection is an evidence sufficiently strong of the interest taken by the Government in the settler. Independently of these provisions, societies exist everywhere for the benefit of the agriculturist; and colonization societies, whose duty it is to promote settlement and protect the settler, are largely subsidised by the Government.

Last year a law was passed, which shows the desire of the Government of Quebec to make emigration and colonization go hand-inhand. It provides that \$60,000 shall be set aside as a colonization fund, out of which the Commissioner of Agriculture, under authority, may cause a certain number of lots of 100 acres each to be prepared, in designated townships, to be offered to settlers who appear to be in a position to succeed.

The preparation of such lots to consist in the clearing of four acress ready for sowing and the construction of a dwelling not less than sixteen feet by twenty feet. The cost of the work, including price of land, not to exceed \$200 for each lot. Price of the land to be paid for in the usual manner, according to conditions above stated. The cost of the improvements to be paid in five other consecutive yearly payments to become due after the payment of the land, without interest until maturity of each payment. The settler in one of the districts where these advantages are offered has the option of making himself, on his lot, the four acress of clearance, and of building a home not less than 16 feet by 20. In such case he shall receive, as an advance, the price of these improvements. This advance shall be paid in five yearly instalments, exigible only after the price of the land shall have completely fallen due.

Manufactures, Trade and Commerce.

The advantages offered for manufacturing by the Province of Quebec are very great. The small manufacturers of Europe, who are unable to cope with the large capitalists, would find in Quebee immense advantages. The principal articles manufactured in the Province are cloth, linen, furniture, leather, sawn timber, flax, iron and hardware, paper, chemicals, soap, boots and shoes, cotton and woollen goods, etc., etc., and all descriptions of agricultural implements.

Mines and Fisheries.

The richest and most varied ores are found in quantities in Quebec. Gold is found in the district of Beauce and elsewhere, copper abounds in the Eastern Townships, and iron is found nearly everywhere. Lead, silver, platinum, zinc, etc., etc., are found abundantly also. Mining, however, in this Province is only in its infancy. The exports from the mine amounted in 1876 to \$365,546. The total exports of produce of the mine for that year in the whole Dominion were \$3,731,827.

The fisheries of the Province are a great boon to the settlers along the rich lands girding the coast, and beginning to be a very large source of trade. The total yield of the fisheries in Quebec in 1876, according to the report of the Department of Fisheries, \$2,097,677.

Means of Communication.

The rivers during navigation afford a cheap and easy mode of locomotion. The Province besides is everywhere traversed by large main and side roads, and every year the Government spends large sums of money in the construction of colonization roads leading up to new settlements. A network of railways is being built north and south of the river St. Lawrence, placing the most distant hamlets in proximate relation to the markets of Canada and the United States. Where the distant settlements are remote from railway communication the main roads or large colonization roads come into service, and enable the farmer to bring to or carry from his home what he requires for use, or the surplus he has to dispose of. But he has little trouble in disposing of his surplus, as hawkers during the winter buy in all sections of the country for Canadian and American markets.

General Information.

The most important trade in Quebec is the lumber industry, and this affords nearly everywhere a ready market for the farmer, certainty to the new settler, and in the winter season employment for himself and his horses. The value of exports of the produce of the forest from the Province of Quebec in 1876 was \$11,047,082. It is well to state that aliens have a right to acquire and transmit by gratuitous or onerous title, as well as by succession or by will, all movable and immovable property in the Province of Quebec in the same manner as British-born subjects. It is well also to remark there is no Government tax in Quebec; the Province has a large surplus out of which it undertakes and builds all the public works necessary. Owing to the judicious expenditures of money by the Government the progress made by Quebec has been something wonderful. In conclusion it may be fairly stated that Quebec is a good field for immigration. The Government having 129,000,000 acres of land at its disposal, performed the best service a Government can by making an effective survey. Having divided into farm lots 6,400,000 acres of land, it next caused the greater part of this territory to be traversed by colonization roads, founded agricultural societies, and enacted a law to give aid to intending settlers. has laid the basis of a most important railway communication; spends thousands of dollars, also, yearly, in promoting education. There are no questionable titles in Quebec, so that the purchaser from the crown has nothing to fear. In common with the rest of Canada, Quebec shares in a perfect postal and telegraph system. There are also Government savings banks where a depositor may obtain 4 and 5 per cent. for his money with the most perfect security. Those who settle in Quebec will settle in the central commercial Province of the Dominion of Canada, and among a most orderly and law-abiding people.

NEW BRUNSWICK.

In our sketch of this fine Province we will draw largely from a broad soft, with map attached, issued, with the approval of the Government of New Brunswick, a short time ago. One of the Provinces of the Dominion, New Brunswick is governed in all local matters by a Lieutenant Governor, advised by an Executive Council, with a Legislature, composed of a Legislative Council, and a House of Assembly consisting of 41 members, elected to represent the several counties.

New Brunswick borders the Provinces of Nova Scotia and Quebec and the State of Maine (one of the United States of America), and is, with Nova Scotia, nearer Europe than any of the populated portions of the continent of America. It is larger than Belgium and Holland united, and nearly two-thirds as large as England. It is 210 miles in length and 180 miles in breadth, and has a coast line of about 500 miles indented with spacious bays and inlets, and is intersected in every direction by large navigable rivers. It is generally a flat, undulating country. On its north-west coast from the Bay of Chaleurs to the boundary . Jova Scc...a, 200 miles. there is hardly a hill exceeding 300 feet in height. There are some elevated lands skirting the Bay of Fundy and the River St. John. but the only section of a mountainous character is that bordering on the Province of Quebec, on the north, where the country is beautifully diversified by oval-topped hills ranging from 500 to 800 feet in height, clothed with lofty forest trees almost to their summit, and surrounded by fertile valleys and table-lands.

Counties.

New Brunswick is divided into fourteen counties, classified as follow :

1st. The sea-board counties, or those on the Bay of Chaleurs. Gulf of St. Lawrence and Straits of Northumberland, comprising Restigouche, Gloucester, Northumberland, Kent and Westmoreland. 2nd. The seaboard counties on the southern or Bay of Fundy coast, comprising Albert, St. John and Charlotte. 3rd. The inland counties on the St. John River, comprising King's, Queen's, Sunbury, York, Carleton and Victoria.

Rivers:

An inspection of a map will show that the surface of the Province is everywhere intersected by rivers and streams, adding to the fertility of the soil and furnishing easy access to every locality. The principal river is the St. John, flowing 225 miles through the Province. It is navigable for steamers of large class for 84 miles fromthe sea to Fredericton. The steamers running between St. John and Fredericton almost equal in magnificence the splendid steamers that ply on the great American rivers. Above Fredericton, smaller steamers ply to Woodstock, about 70 miles further, and when the water is high they make oscasional trips to Tobique, a further distance of 50 miles, and sometimes they reach Grard Falls, a distance of 220 miles from the sea.

Into the St. John flow numerous large tributaries navigable to various distances: these are the Kennebeccasis, the Washademoak, the Grand Lake, the Oromocto, the Tobique and the Aroostook.

The Miramichi is a large river navigable for vessels of 1,000 tons for 25 miles from its mouth, and for schooners 20 miles further, above which for 60 miles it is navigable for tow-boats. The Restigouche is a noble river, 3 miles wide at its entrance into the Bay of Chaleurs, and navigable for large vessels for 18 miles. This river and tributaries drain about 4,000 square miles of territory, abounding in timber and other valuable natural resources. Besides these rivers, there are the Richibucto, the Petitcodiac and the St. Croix, all navigable for large vessels.

Climate.

In New Brunswick the summer is warmer and the winter colder

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than in England, the ranges of temperature being in the interior from 92° above zero to 1S° below zero (Fahrenheit); the whole number of days, however, in which the temperature is below zero rarely exceeds twenty. It seldom happens that more than four days occur together when the mercury is below zero at all. In general the winters are pleasant, and a few days of extreme cold are nothing in comparison with the average amount of fine weather. People living in New Brunswick do not suffer more, if as much, from cold as those who live in Great Britain and other countries where the winters are more humid and the temperature less steady. All business is carried on as actively in winter as in summer, and the people do not wear more nor different clothing than that worn in England and the rest of Northern Europe.

The winter is fairly established at Christmas. In January, as in the other North American Colonies, there is the usual thaw; in February there is the deepest snow, which seldom exceeds two feet ; in March the sun acquires great power and the snow begins to melt. The snow disappears early in April, and spring ploughing commences; seed time continues, according to the season, from the last week in April till late in May. In June the apple trees are in full blossom. In July wild strawberries of fine flavour are ripe and abundant. Having then begins. In August early potatoes are brought to market, as also raspberries and other wild fruits. In September oats, wheat and other cereal grains are ready for the sickle; these are generally secured before October. The autumn is long and the weather is then delicious. This is decidedly the most enjoyable part of the year. There are usually heavy rains in November, but when not wet the weather is fine and pleasant. The rivers generally close du .ng the latter part of this month, and by the middle of December winter again fairly sets in.

The operations of the New Brunswick farmer are less impeded by rain than those of the English farmer, and there are more days in which he can profitably work out of doors; while the action of winter upon the soil, by raising up and spreading the particles, is such as materially to lessen the labour necessary to bring it into a proper state of tillage.

The manner in which all root crops thrive is remarkable, and the frost, by opening and pulverizing the soil, is one of the agents by which the large product is brought about. The climate is also well adapted for the rearing of cattle. With proper care they not only winter well but gain size and flesh. Large numbers of cattle are raised yearly for the United States market.

All the fruits generally found in England are grown in New Brunswick, especially apples, pears, plums, cherries, currantz, gooseberries and strawberries. The potatoes, of which the land yields very abundantly, are superior to any in America. Of wheat, the average produce to the acre (of superior farming) is 20 bushels, of barley 29 bushels, of oats 34 bushels, buckwheat 33 bushels, of rye 20 bushels, of Indian corn 41 bushels, potatoes 226 bushels, or $6\frac{1}{2}$ tons, turnips 456 bushels, or $13\frac{1}{2}$ tons. "Of the climate, soil and capabilities of New Brunswick." says Major Robinson, R.E., in his report of survey to the British Government, in 1845, "it is impossible to speak too highly,"—and Professor Johnson, F.R.S., of England, the author of several works on agricultural industry, reporting on the soil and agricultural capabilities of the Province, remarks :—

"That the soil of New Brunswick is capable of producing food for a population of from five to six millions.

"That in the capability of growing all the common crops upon which man and beast mainly depend, it would appear that the whole Province of New Brunswick taken together exceeds even the favoured Genesee Valley and the southern shores of Lake Ontario in the State of New York, and, exceeding New York in productiveness, it will exceed the States of New England; and if, as appears from agricultural returns, it will bear a favourable comparison with 'Ohio' and Upper Canada (Ontario), it becomes doubtful, on the whole, how far the Western States are superior to it.

"That the climate is an exceeding healthy one, and that it does not prevent the soil from producing crops which, other things being equal, are not inferior either in quantity or quality to those of average soils in England."

Large blocks of choice farming land have lately been laid off by order of the Government, from which *free grants* of one hundred acres can be obtained by every head of a family containing children under eighteen years of age, on condition of actual settlement.

New Brunswick occupies a prominent place in the Maritime Provinces of the Dominion as a fish-producing country. The value of the fish caught and cured, and material, in 1876, was, according to an official return, \$1,953,388.49.

Industries of the Province.

Situated on the sea, with forests of superior ship timber, New Brunswick has long been celebrated as a ship-building country, and with furnishing vessels remarkable for their model, strength and durability. With a population in 1871 of 285,594 souls, she had in 1876, on the Registry books of the Dominion, at December 31st, 1,154 vessels having an aggregate of 324,513 tons.

The manufacturing interest of the Province has greatly increased

during the past tew years. E-tablishments of woollen and cotton goods, boots and shoes, leather, lumber, furniture, carriages, doors, sashes, stoves, paper, soap, agricultaral implements, stoves, nails, steam-engines, locomotives, etc., etc., are in successful operation, and yearly multiplying, giving employment, directly and indirectly, to thousands.

General Information.

New Brunswick appropriates a large sum annually from the public revenues to educational objects, ranging from common schools to a Provincial University. The common schools, *free to all*, are supported from the Provincial revenue, and by rate upon the entire property of the country.

Postal arrangements are excellent. Telegraphic communication is found all over the settled portion of the country by connections with the other Provinces and the United States, and by Atlantic cable with Great Britain and the Continent of Europe.

New Brunswick has perhaps the greatest number of miles of railway, in proportion to population, of any country in the world connecting the capital. St. John, with Halifax on the Atlantic. with Picton on the Gulf of St. Lawrence, and all the cities and towns of the United States by lines via Bangor, and with Quebec, Montreal and other places in Canada by the Interco'onial Railway. Besides these, there are the River du Lonp line via Fredericton and Woodstock, to the great river St. Lawrence, and several interprovincial lines of considerable importance.

The best season of the year for emigrants is the early spring, arriving in New Brunswick about the middle of April, when the weather is fine, and farming operations commence.

NOVA SCOTIA.

The first European settlement of Nova Scotia by the British commenced under the auspices of Lord Cornwallis in 1749. The poulation of the Province, according to the census of 1871, was $3\cdot7,800$. The chief city, Halifax, contains about 35,000 souls. Nova Scotia, which is now part of the D minion of Canada, is described, in a little work issued under the authority of the Government of that Province, as "a Peninsula, lying between 43° and 46° north latitude, and 61° and 67° west longitude. It is connected with the Province of New Brunswick by a narrow isthmus about sixteen

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miles wide; its area is about 300 miles in length, by 80 to 100 miles in width. Its length running about north-east and southwest. The Province contains about 13,000,000 acres of land, of which about one-fifth part consists of lakes and small rivers. About 5,000,000 acres of land are fit for tillage; the remainder, which is chiefly a belt on the coast of the sea, is rocky and barren, and presents to a stranger visiting our shores a very rough, rugged and sterile appearance; but the interior of the country is not so. From the appearance of the coast no idea can be formed, could scarcely be imagined, of the beauty and fertility of the interior." The coast, although rugged, is indented with numerous deep-water harbours, most of which are easy of access, safe and commodious.

Climate.

The climate of Nova Scotia, contrary to the general impression in Europe, is more temperate than that of any other part of Canada, or even that of some of the Northern and Eastern States of the American Union. The extreme cold which is experienced in winter in other parts of America is not felt here, owing perhaps to the fact that the Province is almost completely surrounded by the sea, and that the Gulf stream sweeps along a few miles of its southern shore; and, further, that the Province is protected from the chilly north winds by an almost continuous belt of mountains, or very high hills, stretching along its northern side. The Province affords great variety of climate as well as productions, the average temperature of Annapolis county being 8° higher than in the counties of Cape Breton, and 6° warmer than in the State of Massachusetts. In the central part of the Province the mercury seldom rises above 85% in summer in the shade, and in the winter it is rarely down to zero. "The climate is extremely healthy; there is probably none more so The health returns from British military stations in the world. place this Province in the first class."

The Soil and its Productions.

The fertility of the soil in several of the agricultural districts is unsurpassed, the production of the farms, both in quantity and quality, in many cases excelling those of the Mother Country. The western counties of Nova Scotia excel in the growth of fruit, especially in apples, for which the soil and climate are specially adapted. Annapolis, Kings, Hants and Digby counties occupy a prominent place in their production, about 50,000 barrels of apples having been exported from Annapolis in a single year. "All the small fruits, such as currants, gooseberries, strawberries, raspberries, blackberries, blueberries, huckleberries, cranberries, etc., are very abundant, both in a wild state and cultivated. The markets of Halifax and the small towns are well supplied with them in their season. Our wild strawberries, though small, are remarkably rich and high flavoured, indeed they are far more delicious than any of the cultivated sorts. The cultivation of this fruit seems to increase the size at the expense of the flavour. The grain and root crops are also excellent; the average production in the Western counties is, as nearly as can be estimated, as follows :--

Wheat per acre 18	8 bushels
Rye " " 2.	1 "
Barley " "	5 "
Oats " " 31	£ "
Buckwheat " 33	3 "
Indian Corn (Maize) 4:	2
Turnips	
Potatoes	
Mangold Wurzel) "
Beans	
Hay	$2 \operatorname{tons}$

"The above is a general average of the crops in three counties, but there are many farms which, being highly cultivated, produce erops that are much larger. Beets, carrots, parsnips, beans, peas. squash, pumpkins, melons, tomatoes, etc., are grown in large quantities. The crops of hay, timothy and clover, and coarse alt grass' that are raised on the dyke lands and marshes in the counties of Hants, Kings, Annapolis and Cumberland are something almost incredible. Four tons of 2,240 lbs. of timothy and clover have been taken off a single acre, besides a light second crop late in the setsou."

Dairy farming, which is profitably prosecuted in many counties of the Province, is susceptible of great extension. Of late manufactories of butter and cheese, on a pretty large scale, have been established in various localities, in which the farmers in the neighbourbood have an interest and participate in the profits. Much of the profit of the farm arises from the raising of stock for the slaughter house, and praiseworthy efforts have been made to improve, by importations from abroad (chiefly from Great Britain) the breeds of cattle, sheep and swine. Pasturage generally good throughout the Province, and the principal cost of raising stock is that of the hay for winter food, which is not very expensive. Sheep farming is not systematically carried on, although, as Mr. Morrison, former Commissioner of Immigration for the Province observes: "As a sheep-raising country there is, perhaps, no better locality in America, notwithstanding which there is not a single sheep farm in the Province. Every farmer keeps a few sheep, but the flocks are seldom taken proper care of. A number of thoroughbred shepherds, who would introduce the best breeds of sheep, both for wool-producing and for mutton, would, in a few years, make a small fortune. There is a great deal of land suitable for the purpose in every county, and even among the wild lands there are large tracts of open rough pasture that might be made capable of containing vast flocks of sheep at very little expense.

"Farmers in Nova Scotia raise a good deal of pork for their own use an l for market, and many of the farmers' wives obtain considerable pocket money by the sale of poultry and eggs. They also make a great deal of yarn, which they knit and make into socks and warm clothes for their own wear and for sale."

The Fisheries.

The fisheries of Nova Scotia are an important interest for that Province. In 1876, the number of vessels employed was 653, number of boats 9,585, and number of men, 24,142. The quantity of codfish caught was 509,968 cwt., valued at \$2,549,840; of mackerel, 70,964 barrels, valued at \$709,640; of haddock, 13,679,214 lbs., valued at \$320,752; of herrings, 164,142 barrels, valued at \$660,-570; of lobsters, 3,348,720 cans, valued at \$502,308. Of fish cils, the quantity obtained was 345,674 gallons, of a value of \$224,688. The total value of the Fisheries of this Province for 1876 was \$6,029,050.

Lumber and Ships.

Nova Scotia contains large tracts of woodlands which produce timber for shipbuilding and lumber, chiefly for exportation. Millions of feet of pine, sprace, hemlock and hardwood, deals, scantlings, staves, etc., are annually shipped from the different ports of the Province to the West Indies, United States and Europe. This Province occupies the first position of any country in the world, as a shipbuilding and ship owning country. The population by the census of 1871 amounted to 387,800 souls, and in 1876, on Dec. 31st, it had on the Registry Books of the Dominion 2.867 vessels, having an aggregate of 529,252 tons; that is, more than a ton and a quarter for every man, woman and child in the Province; and its ships are to be found in almost every part of the globe.

Mines and Minerals.

This Province is remarkable also for its minerals, especially for its deposits of coal, iron and gold. Coal mines are extensively worked in Cape Breton and Pictou, and latterly in the county of Cumberland. A considerable proportion of the quantity raised goes into domestic consumption, the chief exports being to the United States and other foreign ports and to the British North American Pro-The total coal product for 1876 was 709,646 tons. The vinces. quantity of the product of the gold mines in the same year was 12,039 oz.; of iron ore, 15,274 tons; of gypsum, 80,920. Valuable deposits of high-class iron ore are found in different parts of the Province, which of late have attracted the attention of capitalists, who have erected furnaces with a view to extensive manufacturing operations.

Government.

Nova Scotia, made a Province of the Dominion of Canada by Act of the Imperial Government, has since 1867 been governed in general matters by the Dominion Parliament, and in local matters by the Provincial Legislature. The chief officer is the Lieutenant Governor, appointed by the Governor General, who is advised by an Executive Council of nine members, several of whom are heads of departments. The Legislative body consists of a Legislative Council of twenty-one members, and a House of Assembly of thirty-eight members, elected by ballot to represent the several counties (18) into which the Province is divided.

Nearly three-fourths of the population are Protestants, the remainder, one hundred and two thousand, are Roman Catholies.

Education, which is very general, is partly supported by direct taxation, supplemented by liberal annual grants from the Legislature, which in 1878 amounted to about \$185,000. At the common schools, which are subject to the control of the Government, the average number of scholars in daily attendance has been estimated at one hundred thousand, and all are free.

The quantity of land at the disposal of the Government is limited, the price \$44 per 100 acres of crown land—free grants being, however, given to *bona fide* settlers.

The price of ordinary day labour is from 3s. 9d. to 5s. sterling. Farm labourers, during spring time and harvest, earn even larger wages, and board besides. The cost of provisions is much lower than in England, the price of flour varying from $\pounds 1$ to $\pounds 1$ 10s. sterling per barrel; beef, mutton, veal from 6 to 10 cents per lb. Fish and vegetables are abundant and cheap. The Province is abundantly supplied with newspapers, a larger number being probably published than in any other country with the same population. The postal arrangements are excellent, and the rates of postage moderate. The electric telegraph is found in every section of the Province, and there is direct telegraph communication with all parts of the Continent of America, and by cable with the Continent of Europe.

There are now, besides the ordinary roads of the country, about 350 miles of railway in operation, connecting the capital of the Province (Halifax) with Annapolis in the west, Pictou in the east, and Cumberland in the north. Other railroads have been commenced, and many more projected lines have been surveyed.

External communication other than by railway is carried on by the Allan, Anchor, and other steamship companies with Europe by steamer; between Halifax and Boston and Portland, also by steamer; with Bermuda and Newfoundland, and with places in Canada, by steamboats that ply in the Gulf of St. Lawrence connecting with railway at Pictou.

PRINCE EDWARD ISLAND.

This Province is situated on the south side of the Culf of St. Lawrence, between New Brunswick and Cape Breton, and is separated from them by Northumberland Strait, which is from 9 to 30 miles wide. Its extent from east to west is 130 miles, and from north to south 34 miles, with an area of 2,134 square miles. The Island entered into the Confederation of the Dominion of Canada in 1873.

The coast is indented by numerous bays, two of which nearly divide the island into three parts, and the harbours are numerous. The surface is gently undulating, presenting a charming aspect of hill and dale, and is well watered with numerous springs and rivers. The soil is remarkably fertile, and it has more land under cultivation in proportion to its size than any of the other provinces. All kinds of grain, fruit and vegetables do well. Large deposits of what is called "mussel mud" are found in the beds of all the rivers, some of them from 10 to 30 feet deep, and are used as fertilizers giving very large crops of hay and clover. Potatoes, oats and barley have been the principal staples for export; horses also have been raised in numbers, and are much sought after by dealers from the Northern New England States. The sheep are fine, and are also sought for by New England buyers. Cattle breeding has not yet received much attention, though the pasturage is remarkably good, and both hay and root crops yield very large returns. It is believed that the Island affords favourable facilities for the breeding and fattening of cattle for export to the United Kingdom.

The fisheries are among the best in the Gulf, and give employment to a large number of men. Shipbu-lding is also one of the principal industries.

The climate is temperate and healthy, and fogs do not prevail to the same extent as on the coasts of Nova Scotia.

Farms in go d cultivation with buildings and improvements can be obtained for about \$20 an acre.

A submarine telegraph connects the Island with New Brunswick. There is one railroad on the Island 198½ miles long. It is under the control of the Dominion Government. Steamers ply constantly between the ports on the Islands and the seaports of Nova Scotia, New Brunswick and New England States. The chief drawback is that during a part of the winter communication is interrupted with the main shore owing to ice blockades.

MANITOBA AND THE NORTH-WEST TERRITORIES.

If the reader will consult the map of Canada he will find in the heart of the continent a vast district, extending westward from the Lead waters of Lake Superior to the base of the Rocky Mountains, and northward from the United States boundary line to the Arctic Ocean. This region covers over an area 2,750,000 square miles in extent, and is generally known as "The North-West Territories of British America." Down to the year 1870 this immense territory was in possession and under the control of the Hudson Bay Company. In that year, by Act of the Imperial Parliament, it was transferred to the Canadian Government, and now forms part of the Dominion.

The new Province of Manitoba is formed out of this territory. It contains about 9,000,000 acres of land; but it is comparatively a speck on the map of the vast territory out of which it has been formed. The soil, which is mostly prairie, and covered with grass, is a deep alluvial deposit of unsurpassed richness. It produces bountiful crops of cereals, grasses, roots and vegetables. So rich and inexhaustible is the soil, that wheat has been cropped off the same place for fifty years without manure, and without showing signs of exhaustion. It is especially a wheat growing soil, and is believed to contain the most favourable conditions for the growth of this grain on the continent. Pumpkins, potatoes and roots of all sorts grow to a very large size, and of excellent quality. Strawberries, currants (red and black), raspberries, plums, cherrier, blueberries, whortleberries, cranberries (both bush and marsh), grow wild and in abundance. Flax is very luxu iant. The same remark may be made of hops, which grow wild. The wild grasses of the country, which are very nutritious, are particularly favourable for stock-raising of all sorts. Cattle can be fattened in Manitoba, and driven to St. Paul without loss of weight. There are large tracts of woods along the streams. The beet-root grows in great abundance, but the saccharine qualities of the sugar-beet grown in that Provincehave not yet been tested.

Manitoba is situated in the middle of the continent, nearly equally distant between the Pole and the Equator, and the Atlantic and Pacific Oceans. Its climate gives conditions of decided heat in summer and decided cold in winter. The snow goes away and ploughing begins in April, which is about the same time as in the older Provinces of Canada, the Northern United States on the Atlantic seaboard, and the North-Western States, Minnesota and Wisconsin. The crops are harvested in August and September. The long, sunny days of summer bring vegetation of all sorts to rapid maturity. The days are warm and the nights cool. Autumn begins about the 20th September and lasts till November, when the regular frost sets. in. The winter proper comprises the months of December, January, February and March. Spring comes in April. The summer months are part of May, June, July, August and part of September. In winter the thermometer sinks to thirty and forty degrees below zero; but this degree of cold in the dry atmosphere of the North-West does not produce any unpleasant sensations. The weather is not felt to be colder than that in the Province of Quebec, nor so cold as milder winters in climates where the frost, or even a less degree of cold than frost, is accompanied with dampness. In times of wind storms, however, the cold is found to be specially . searching. The testimony of settlers is universal as to the fact that the winter is, on the whole, both pleasant and healthy; and former residents of both Ontario and Quebec state that they like it quite as well as that of those provinces.

Snow does not fall on the prairies to an average greater depththan eighteen inches, and buffabes and horses graze out of doors all winter. They scratch the snow off the prairie grass, and grow fat upon it. Horned cattle do graze out of doors part of the winter, but, in some states of the weather, they require to be brought in. Instances are, however, stated in which horned cattle have grazed out all winter. Heat and Lumidity are the two chief elements of climate, and these two divisions of the North-West, the prairie and wooded, have high summer temperatures and heavy summer rains. South of the parallel of Manitoba lie the regions of summer droughts and great heat—producing the immense deserts over the western territories of the United States. The abundance of rain in British America, with summer temperatures sufficient to mature all the great staples of the temperate zones, makes it a good agricultural country. The absence of summer rains, with high temperatures, leaves vast areas of the interior of the United States barren wastes, especially those parts of the 'country westward from tho 100th meridian or west of the Missouri. The following table will serve for comparison between the summer temperatures of the Red River and the countries south :—

	June.	July.	August.	Summer Mean.
Red River	69.10	71.16	63.03	67.76
Chicago	62.07	70.08	68.05	67.03
Iowa	66.04	76.05	68.09	68.06
Wisconsin	61.07	68.06	65.07	65.03
New York	64.02	68.05	66.07	66.05
Toronto	64.02	67.95	65	66.98

It will thus be seen that the summer is warmer than that of Northern Illinois, Western Wisconsin, Northern New York or Toronto. In relation to riculture the intensity of winter cold is not injurious, but on the contrary it has advantages, and its effect upon physical comfort is mitigated, as above stated, by a clear, dry winter atmosphere.

In addition to the above-mentioned enumeration of products it may be more particularly stated that wheat is the special crop of It is not only that the yield per acre is very large, but Manitoba. the hard and flinty nature of the grain grown makes it particularly valuable for the manufacture of flour. Flour made from it commands a higher price than that made from wheat grown in more eastern and southern parts of the United States and Canada. Wheat can now be carried from Manitoba to Montreal at prices at which it will pay, and when the railway is completed to Thunder Bay the rate will not probably exceed 15 or 20 cents per bushel. At this rate of freight it is believed that there cannot be any competition with it by wheat grown in the Eastern Provinces or in the United Kingdom, and its growth will soon attain very large proportions.

As bearing on the particular advantages of Manitoba for the cultivation of wheat, the following analysis of a specimen of the alluvial soil from the prairie of the Province of Manitoba is given. It is by Professor V. Emmetling, Director of the Chemical Laboratory of the Agricultural Association of the University of Kiel, Holstein, Germany :---

(Translation of Letter to Senator Emil Klotz.)

KIEL, 29th April, 1872.

"HON. SENATOR :

"The analysis of the Manitoba soil is now completed, and the result is in 100,000 parts :---

Potash	228.7
Sodium	
Phosphoric Acid	
Lime	
Magnesia	
Nitrogen	
	"Yours truly,
(Sign	ned,) "V. EMMERLING."

(Extract from Letter of Senator Emil Klotz to Jacob E. Klotz, Agent for the Dominion Government.)

"KIEL, 4th May, 1872.

"After considerable delay, I succeeded in obtaining the analysis of the Man' oba soil from Professor Emmerling, Director of the Chemical Laboratory of the Agricultural Association of this place, and hope it may be of service to you. Annexed I give you our analysis of the most productive soil in Holstein, whereby you will see how exceedingly rich the productive qualities of the Manitoba soil are, and which fully explains the fact that the land in Manitoba is so very fertile, even without manure.

"The chief nutrients are, first, nitrogen, then potash and phosphoric acid which predominates there; but what is of particularimportance is the lime contained in the soil, whereby the nit-ogen is set free, and ready to be absorbed in vegetable organisms. The latter projecty is defective in many soils, and when it is found defective, recourse must be had to artificial means by putting lime or marl (a clay which contains much lime) upon the same.

"According to the analysis of the Manitoba soil, there is no doubt that, to the farmer who desires to select for his future home a country which has the most productive soil and promises the richest harvest, no country in the world offers greater attractions than the Province of Manitoba, in the Dominion of Canada.

" Analysis of the Holstein Soil and Manitoba Soil compared :

	Holstein	Excess of Properties of
	Soil.	Manitoba Soil.
Potash	. 30	198.7
Sodium	. 20	13.8
Phosphoric Acid	. 40	29 4
Lime	. 130	552.6
Magaesia	. 10	6.1
Nitrogen		446.1 "

The facts above stated sufficiently account for the popular experience of the remarkable production of wheat in the Province of Manitoba.

Oats, barley, rye, potatoes, &c., are less restricted in their range, growing five degrees beyond wheat in the Mackenzie River Valley to the Arctic Circle. Barley is a favourite alternate crop for wheat in Manitoba, and yields very large returns—with a weight per bushel of from 50 to 55 pounds. Oats also thrive well.

It has not yet been demonstrated by experiment whether fruit trees, such as apples, will flourish on the open prairie. But it appears from experience in Minnesota that they will in connection with shelter and forest tree planting. There is, however, no doubt that the hardier kinds of apples will do well in Manitoba. This has been sufficiently established.

Although flax and hemp succeed well in Manitoba, the want of markets has prevented their culture, except to a limited extent. Bees do well here, as in similar northern climates, the clear skies and rich flora being favourable for them. They live better through the long, cold, dry winters, and consume less honey than in the milder and more humid winters of more southern latitudes.

The grasses grow rich and luxuriant for twelve hundred miles north of the southern boundary of Manitoba; and far down the Mackenzie River towards the Arctic Ocean immense herds of buffalo feed upon these plains as their chosen pastures. The significance of this fact is a proof of the vast extent of country in the North-West suitable for pastures.

The quality of the beef and mutton raised upon these northern grasses has been pronounced of superior excellence. Among the peculiar advantages of Manitoba, for stock-raising and wool-growing, the most prominent are : 1st. The richness and luxuriance of the native grasses; the grass is mainly cut on the swamps and meadows, which chequer the prairies or fringe the streams and lakes. 2nd. The great extent of unoccupied land, affording for many years to come a wide range of free pasturage. 3rd. The remarkable dryness and healthfulness of the winter. Wool grows heavier, and mutton, beef and pork are sweeter and more juicy. It is nearly forty years since the introduction of sheep into Red River, and no case of any disease attacking them has ever been known or heard of. Well-fed ewes produce fleeces from 2 to $3\frac{1}{2}$ pounds. Wethers produce fleeces from 6 to 8 pounds, the wool being of a good quality.

It has been stated that the climate of Manitoba and the North-West is pleasant and healthy. It may be added, the dryness of the air, the character of the soil, which retains no stagnant pools to send forth poisonous exhalations, and the almost total absence of fog or mist, the brilliancy of its sunlight, the pleasing succession of its seasons, all conspire to make Manitoba a climate of unrivalled salubrity, and the future home of a healthy, prosperous people, strong in physical, intellectual and moral capabilities. Fevers and consumptions are almost unknown, and diseases of an epidemical character have never been known to prevail.

The average fall of snow is about six inches per month. The snow falls in small quantities at different times, and is rarely blown into drifts so as to impede travelling.

When the North-West Territory passed into the possession of the Canadian authorities in 1870, the white population numbered only a few hundreds, and the chief place was Fort Garry, a mero hamlet. Since then the Province of Manitoba and a considerable part of the territory have been surveyed. In Manitoba a local Government has been established similar to that of the other Provinces. For Garry has become the city of Winnipeg, with a population of about 9,000 souls; and it is already a place of considerable business, and contains a number of handsome buildings. The Province is filling up rapidly by immigration from Europe, as well as by the migration of farmers' sons and others from the older Provinces and from the United States.

That the North-West of British America is destined to become the granary of the continent is clear beyond all doubt. Nature has done her share, and done it well and generously; man's labour and industry are alone required to turn these broad rolling prairies to good account. A drawback at present is remoteness from the older par s of Canada, but this will not last much longer. Already a line of railway, connecting Manitoba with Ontario, is in course of being built; this will be finished in a year or two, and then Manitoba will be in direct communication with the outer world through Canadian territory. Winnipeg is already connected by rail with the United States railway system. Another drawback which has been serious in past years is the visitation of grasshoppers. But these have only come periodically, with long intervals between. And there is reason to believe that the evil can be overcome, as settlement progresses.

Taking all the circumstances and surroundings into consideration, there is probably no country more suitable in every respect for settlement by persons from the temperate and northern parts of Europe than the Province of Manitoba.

The common emigrant route for going to Manitoba from the old Provinces is viâ the Canadian railway system and Lakes Huron and Superior to Duluth. Thence by rail to Winnipeg. There is already communication by steamboat navigation from Winnipeg city, viâ Lake Winnipeg and the Saskatchewan to the very foot of the Rocky Mountains. Railway construction is also proceeding very rapidly within the Province of Manitoba.

A light buggy may be driven for a thousand miles in a straight line over the open prairie, the greater part of which is adapted to the production of wheat, not only in the largest quantity to the acre, but of the best quality.

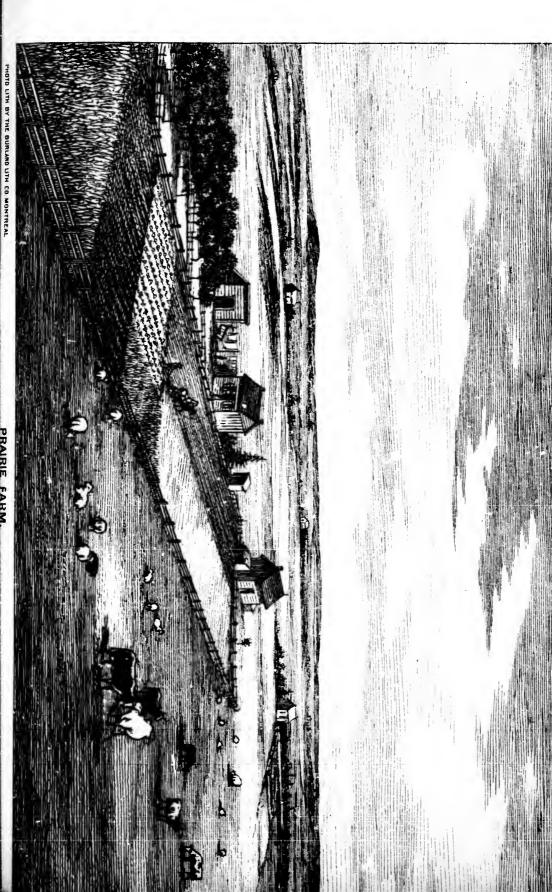
This tract of country to the east of the Rocky Mountains contains under the surface of its rich prairie land one of the largest coal fields in the world, which in some places crops out of the surface on the banks of the rivers. It is almost impossible to over-estimate the importance of this physical eact for the future of the Dominion. The rivers which run east from the Rocky Mountains are rich in gold deposits; and in fact mineral wealth of almost every kind is found in this territory.

The surveys in connection with the Pacific Railway have established the fact that the Peace River Valley contains an immense extent of territory, with climate and other conditions highly suitable for an agricultural country, as far north as the 59th degree of latitude.

THE EARL OF DUFFERIN, GOVERNOR OF CANADA, ON MANITOBA AND THE NORTH-WEST.

In the summer of 1877, Lord Dufferin, in pursuance, as announced by him in public speeches, of a policy of personally visiting all the Provinces within his government, made a tour of Manitoba and part of Keewatin.

In answer to an address of the Mayor and Corporation of Winnipeg, on August 6th, His Excellency, referring to the prospects of that city, said :





"I beg to thank you most warmly for the kind and hearty welcome you have extended to me, on my arrival in your flourishing city, which you rightly designate the metropolis of the North-West, the living centre which is destined to animate with its vital energies the rich alluvial region whose only limit appears to be an everreceding horizon I am not by any means unacquainted with the record of your achievements ; indeed, it is probable that there is no Province in the Dominion with whose situation I am better acquainted, so far as information in such respects can be obtained from books and Parliamentary papers; and it is to perfect, verify and extend that knowledge by personal intercourse with your leading citizens, and by an inspection of the richness of your territory, that I have come amongst you..... I have no doubt that this city and Province generally, nay, the whole territory of the North-West, is now illuminated by the dawn of a great advancement. Although it will not be my good fortune personally to preside much longer over your destinies, I need not assure you that your future will always command my warmest sympathies and continue to attract my closest attention ; and I trust that, though at a distance, I may live to see the fulfilment of many of your aspirations."

On August the 18th, the Vice-Royal Party visited the Rat River Mennonite Settlement, on the east side of Red River. These people had come from Berdiansk, in South Russia, three years before; and there are now about 7,000 of them in Manitoba, in a highly prosperous condition. They left a comfortable and flourishing district in Russia, because they were conscientiously opposed to military service, which was required of them by a Ukase of the Czar, and because they were required to conform to the school system of Russia, and have their children taught, under Russian auspices, the Russian language and incidentally the national creed. The Mennonites said in their address to Lord Dufferin:

"We are pleased to be able to state that we are satisfied in the highest degree with the country and the soil, and also the manner in which the Government have kept their promises to us. Your Excellency has now the opportunity of seeing for yourself what we have accomplished during our short residence. You see our villages, our fields, and our bountiful harvest—witnesses in themselves that the capabilities of the country have not been misrepresented to us. Under the guidance and protection of Divine Providence, we have every reason to look forward confidently to great future prosperity, our villages multiplied, and our herds increased. We are contented and willing to obey the laws of the land, but we cannot reconcile our religious belief with the performance of military duty."

Lord Dufferin made the following remarks in reply, which were translated to them sentence by sentence :

"You have come to a land where you will find the people with whom you are to associate indeed engaged in a great struggle, and contending with foes which it requires their best energies to encounter. But those foes are not your fellow-men, nor will you be called upon in the struggle to stain your hands with human blood-a task which is so abhorrent to your religious feelings. The war to which we invite you as recruits and comrades is a war waged against the brute forces of nature; but those forces will welcome our domination and reward our attack by placing their treasures at our disposal. It is a war of ambition-for we intend to annex territory after territorybut neither blazing villages nor devastated fields will mark our ruthless track; our battalions will march across the illimitable plains which stretch before us, as sunshine steals athwart the ocean ; the rolling prairie will blossom in our wake, and corn and peace and plenty will spring where we have trod.

"The forms of worship you have brought with you, you will be able to practice in the most unrestricted manner, and we confidently trustthat those blessings which have waited upon your virtuous exertions, in your Russian homes, will continue to attend you here; for we hear that you are a sober-minded and God-fearing community, and as such you are doubly welcome among us. It is with the greatest pleasure I have passed through your villages, and witnessed your comfortable homesteads, barns and byres, which have arisen like magic upon this fertile plain, for they prove indisputably that you are expert in agriculture, and already possess a high standard of domestic comfort. In the name, then, of Canada and her people, in the name of Queen Victoria and her empire, I again stretch out to you the hand of brotherhood and good fellowship, for you are as welcome to our affections as you are to our lands, our liberties and In the eye of our law the least among you is the equal of freedom. the highest magnate in our land, and the proudest of our citizens may well be content to hail you as his fellow-countrymen. You will find Canada a beneficent and loving mother, and under her fostering care, I trust your community is destined to flcurish and extend in wealth and numbers through countless generations. In one word, beneath the flag whose folds now wave above us you will find protection, peace, civil and religious liberty, constitutional freedom and equal laws."

Lord Dufferin also visited the Icelandic settlement on the west shore of Lake Winnipeg. This colony had not been settled two years at the time of His Excellency's visit; and, in fact, the larger portion of the colonists had only arrived the previous autumn. They had suffered a very severe affliction from an epidemic of small-pox, and the ravages of scurvy. Both these diseases were aggravated by the insufficient preparations which the Icelanders had been able to make for the winter, and very rigourous quarantine regulations had only been removed five or six weeks before the arrival of His Ex-It may be remarked that the colony contained at that time cellency. about 1,500 souls, and extended from the N. Loundary of Manitoba for about thirty miles on the west shore of the lake. The colony however, in the face of these great discouragements was found to be in a fairly successful condition. 200 commodious houses had been erected, roads had been cut, and from two to ten acres cleared by each settler. There were 600 head of cattle in the colony, and the cows were in good condition and well taken care of. There had not been time to plant much grain, but that which was planted was successful. There were good crops of potatoes; and the soil, after clearing, was found to be rich black alluvium. The fish supply from the lake was abundant, and altogether the Icelandic colonists were in a satisfied and flourishing condition, writing to their friends in Iceland to join them. Lord Dufferin, who appears to have taken particular interest in this colony, spoke with much warmth as follows :-

"Men and Women of Iceland, now Citizens of Canada, and fellow Subjects of her Majesty the Queen :

"When it was my good fortune twenty years ago to visit your island, I never thought that the day would come when I should be called upon, as the representative of the British Crown, to receive you in this country ; but the opportunities I have thus had of becoming acquainted with your dramatic history, with your picturesque literature, and the kindness I have experienced at the hands of your countrymen now enable me with the greater cordiality to bid you welcome. I have learnt with extreme sorrow of the terrible trials to which you have been exposed so soon after your arrival by the unexpected ravages of a terrible epidemic. Such a visitation was well calculated to damp your spirits and to benumb your energies, aggravating as it did those inevitable hardships which attend the first efforts of all colonists to establish themselves in a new land. The precautions which the Local Government was reluctantly compelled to take to prevent the spreading of the contagion through the Province must also have been both galling and disadvantageous, but I trust that the discouragements which attended your advent amongst us have now forever passed away, and that you have fairly embarked on a career of happiness and prosperity.

"Indeed, I understand that there is not one amongst you who is not perfectly content with his new lot, and fully satisfied that the change which has taken place in his destiny is for the better. During

a hasty visit like the present, I cannot pretend to acquire more than a superficial insight into your condition, but so far as I have observed, things appear to be going sufficiently well with you. The homesteads I have visited seem well built and commodious, and are certainly far superior to any of the farmhouses I remember in Iceland, while the gardens and little clearings which have begun to surround them show that you love already tapped an inexhaustible store of wealth in the rich alluvial soil on which we stand. The three arts most necessary to a Canadian colonist are the felling of timber, the ploughing of land and the construction of highways, but as in your own country none of you had ever seen a tree, a cornfield, or a road, it is not to be expected that you should immediately exhibit any expertness in these accomplishments, but practice and experience will soon make you the masters of all three, for you possess in a far greater degree than is probably imagined that which is the essence and foundation of all superiority-intelligence, education and intellectual activity. In fact I have not entered a single hut or cottage in the settlement which did not contain, no matter how bare its walls or scanty its furniture, a library of twenty or thirty volumes ; and I am informed that there is scarcely a child amongst you who cannot read and write.

"Secluded as you have been for hundreds of years from all contact with the civilization of Europe, you may in many respects be a little rusty and behind the rest of the world; nor perhaps have the conditions under which you used to live at home—where months have to be spent in the enforced idleness of a sunless winter-accustomed you to those habits of continued and unflagging industry which you will find necessary to your new existence; but in our brighter, drier and more exhilarating climate you will become animated with fresh vitality, and your continually-expanding prosperity will encourage you year by year to still greater exertions. Beneath the genial influence of the fresh young world to which you have come, the dormant capacities of your race, which adverse climatic and geographical conditions may have somewhat stunted and benumbed, will bud and burgcon forth in all their pristine exuberance, as the germs which have been for centuries buried beneath the pyramids and catacombs of Egypt are said to excel in the exuberance and succulence of their growth the corn seeds of last year's harvest. But, as sun and air and light are necessary to produce this miracle, so it will be necessary for you to profit as much as possible by the example and by the intercourse of your more knowledgeable neighbours.

"I have learnt with great satisfaction that numbers of your young women have entered the households of various Canadian. families, where they will not only acquire the English language, which it is most desirable you should all know, and which they will be able to teach their brothers and sisters, and—I trust I may add, in the course of time, their children—but will also learn those lessons of domestic economy and housewifely neat-handedness which are so necessary to the well-being, health and cheerfulness of our homes.

"I am also happy to be able to add that I have received the best accounts from a great number of people of the good conduct, handiness and docility of these young Ingeborgs, Raghnhildas, Thoras and Gudruns, who, I trust, will do justice to the epical ancestresses from whom they have inherited their names. Many of the houses I visited to-day bore evident signs, in their airiness, neatness and wellordered appearance, of possessing a housewife who had already profited from her contact with the outer world.

"And while I am upon this subject there is one practical hint which I shall venture to make to you. Every single house I visited to-day, many of them being mere temporary huts, with, at the most, two small chambers, was furnished with a large, close iron cooking stove, evidently used not merely for cooking purposes, but also for heating the habitation. I believe that this arrangement is anything but desirable, and that, at all events, in those houses where a separate kitchen cannot be obtained an open fireplace should be introduced. I am very certain that if I were to come amongst you in winter I should find these stoves in full operation, and every crevice in your shanties sealed up from the outer air.

"Now, you are surrounded by an inexhaustible supply of the best possible fuel, which can be obtained with comparatively little labour, and, consequently economy of coal, which is their chief recommendation, need not drive you to an excessive use of these unwholesome appliances. Our winter air, though sufficiently keen, is healthy and bracing, and a most potent incentive to physical exertion, whereas the mephitic vapours of an over-heated, closely-packed chamber paralyze our physical as well as our mental activities. A constitution nursed upon the oxygen of our bright winter atmosphere makes its owner feel as though he could toss about the pine trees in his glee, whereas to the sluggard simmering over his stove-pipe it is a horror and a nameless hardship to put his nose outside the door.

"But why need I speak to Icelanders-to you men and women of

the grand old Norse race—of the necessity of patience under hardship, courage in the face of danger, dogged determination in the presence of difficulties? The annals of your country are bright with the records of your forefathers' noble endurance. The sons and daughters of the men and women who crossed the Arctic Ocean in open boats, and preferred to make their homes amid the snows and cinders of a volcano rather than enjoy peace and plenty under the iron sway of a despot, may afford to smile at any one who talks to them of hardship or rough living beneath the pleasant shade of these murmuring branches, and beside the laughing ripples of yonder shining lake.

"The change now taking place in your fortunes is the very converse and opposite of that which befel your forefathers. They fied from their pleasant homes and golden cornfields into a howling wilderness of storm and darkness, ice and lava, but you I am welcoming to the healthiest climate on the continent, and to a soil of unexampled fertility, which a little honest industry on your part will soon turn into a garden of plenty. Nor do we forget that no race has a better right to come amongst us than yourselves, for it is probably to the hardihood of the Icelandic navigators that the world is indebted for the discovery of this continent. Had not Columbus visited your island, and discovered in your records a practical and absolute confirmation of his own brilliant speculations in regard to the existence of western land, it is possible he might never have had the enterprise to tempt the unknown Atlantic.

"Again, then, I welcome you to this country—a country in which you will find yourselves freemen, serving no overlord, and being no man's men but your own; each, master of his own farm, like the Udalmen and "Bonders" of old days; and remember that in coming amongst us you will find yourselves associated with a race both kindhearted and cognate to your own; nor in becoming Englishmen and subjects of Queen Victoria need you forget your own time-honoured customs or the picturesque annals of your forefathers.

"On the contrary, I trust you will continue to cherish for all time the heart-stirring literature of your nation, and that from generation to generation your little ones will continue to learn in your ancient Sagas that industry, energy, fortitude, perseverance and stubborn endurance have ever been the characteristics of the noble Icelandic race.

"I have pledged my personal credit to my Canadian friends on the successful development of your settlement. My warmest and most affectionate sympathies attend you, and I have not the slightest misgiving but that, in spite of your enterprise being conducted under what of necessity are somewhat disadvantageous conditions, not only will your future prove bright and prosperous, but that it will be universally acknowledged that a more valuable accession to the intelligence, patriotism, loyalty, industry and strength of the country has never been introduced into the Dominion."

On the occasion of the vice-regal visit drawing to a close, the citizens of Winnipeg invited His Excellency the Earl of Dufferin to a public banquet, at which he made a speech in review of his personal observations of the country and the facts he had gathered, from which the following are extracts:

"From its geographical position, and its peculiar characteristics, Manitoba may be regarded as the keystone of that mighty arch of sister Provinces which spans the continent from the Atlantic to the Pacific. It was here that Canada, emerging from her woods and forests, first gazed upon her rolling prairies and unexplored North-West, and learnt as by an unexpected revelation that her historical territories of the Canadas, her eastern seaboards of New Brunswick, Labrador and Neva Scotia, her Laurentian lakes and valleys, corn lands and pastures, though themselves more extensive than half a dozen European kingdoms, were but the vestibules and antechambers to that till then undreamt of Dominion, whose illimitable dimensions alike confound the arithmetic of the surveyor and the verification of the explorer.

"It was hence that, counting her past achievements as but the preface and prelude to her future exertions and expanding destinies, she took a fresh departure, received the afflatus of a more imperial inspiration, and felt herself no longer a mere settler along the banks of a single river, but the owner of half a continent, and in the magnitude of her possession, in the wealth of her resources, in the sinews of her material might, the peer of any power on the earth.

"In a recent remarkably witty speech, the Marquis of Salisbury alluded to the geographical misconceptions often engendered by the smallness of the maps upon which the figure of the world is depicted. To this cause is probably to be attributed the inadequate idea entertained by the best educated persons of the extent of Her Majesty's North American possessions. Perhaps the best way of correcting such a universal misapprehension would be by a summary of the rivers which flow through them, for we know that as a poor man cannot afford to live in a big house, so a small country cannot support a big river. Now, to an Englishman or a Frenchman, the Severn or the Thames, the Seine or the Rhone, would appear considerable streams, but in the Ottawa, a mere affluent of the St. Lawrence, an affluent, moreover, which reaches the parent stream six hundred miles from its mouth, we have a river nearly five hundred and fifty miles long, and three or four times as big as any of them.

"But, even after having ascended the St. Lawrence itself to Lake Ontario, and pursued it across Lake Huron, the Niagara, the St. Clair, and Lake Superior to Thunder Bay, a distance of one thousand five hundred miles, where are we? In the estimation of the person who has made the journey, at the end of all things ; but to us who know better, scarcely at the commencement of the great fluvial systems of the Dominion; for, from that spot-that is to say, from Thunder Bay-we are able at once to ship our astonished traveller on to the Kaministiquia, a river of some hundred miles long. Thence almost in a straight line we launch him on to Lake Shebandowan and Rainy Lake and River-whose proper name by-the-by is "Réné," after the man who discovered it-a magnificent stream three hundred yards broad, and a couple of hundred miles long, down whose tranquil bosom he floats into the Lake of the Woods, where he finds himself on a sheet of water which, though diminutive as compared with the inland seas he has left behind him, will probably be found sufficiently extensive to render him fearfully sea-sick during his passage across it. For the last eighty miles of his voyage, however, he will be consoled by sailing through a succession of landlocked channels, the beauty of whose scenery, while it resembles, certainly excels the far-famed Thousand Islands of the St. Lawrence.

"From this lacustrian paradise of sylvan beauty we are able at once to transfer our friend to the Winnipeg, a river whose existence in the very heart and centre of the continent is in itself one of nature's most delightful miracles, so beautiful and varied are its rocky banks, its tufted islands so broad, so deep, so fervid is the volume of its waters, the extent of their lake-like expansions, and the tremendous power of their rapids.

"At last let us suppose we have landed our traveller at the town of Winnipeg, the half-way house of the continent, the capital of the Prairie Province, and I trust the future "umbilicus" of the Dominion. Having had so much of water, having now reached the home of the buffalo, like the extenuated Falstaff, he naturally "babbles of green fields" and careers in imagination over the primeval grasses of the prairie. Not at all. Escorted by Mr. Mayor and the Town Council, we take him down to your quay, and ask him which he will ascend first, the Red River or the Assiniboine, two streams, the one five hundred miles long, the other four hundred and eighty, which so happily mingle their waters within your city limits.

"After having given him a preliminary canter upon these respective rivers, we take him off to Lake Winnipeg, an inland sea three hundred miles long and upwards of sixty broad, during the navigation of which for many a weary hour he will find himself out of sight of land, and probably a good deal more indisposed than ever he was on the Lake of the Woods, or even the Atlantic. "At the north-west angle of Lake Winnipeg he hits upon the mouth of the Saskatchewan, the gateway and high road to the North-West, and the starting point to another one thousand five hundred miles of navigable water flowing nearly are east and west between its alluvial banks.

"Having now reached the foot of the Rocky Mountains our 'Ancient Mariner'—for by this time he will be quite entitled to such an appellation—knowing that water cannot run up hill feels certain his aquatic experiences are concluded. He was never more mistaken. We immediately launch him upon the Athabaska and Mackenzie Rivers, and start him on a longer trip than he has yet undertaken—the pavigation of the Mackenzie River alone exceeding two thousand five hundred miles. If he survives this last experience, we wind up his peregrinations by a concluding voyage of one thousand four hundred miles down the Fraser River ; or, if he prefers it, the Thompson River to Victoria, in Vancouver, whence, having previously provided him with a first-class return ticket for that purpose, he will probably prefer getting home vid the Canadian Pacific.

" Now, in this enumeration, those who are acquainted with the country are aware that for the sake of brevity I have omitted thousands of miles of other lakes and rivers which water various regions of the North-West-the Qu'Appelle River, Bellv River, Lake Manitoba, the Winnipegosis, Shoal Lake, ctc., etc., along which I might have dragged and finally exterminated our way-worn guest-but the sketch I have given is more than sufficient for my purpose; and when it is further remembered that the most of these streams flow for their entire length through alluvial plains of the richest description, where year after year wheat can be raised without manure, or any sensible diminution in its yield, and where the soil everywhere presents the appearance of a highly-cultivated suburban kitchen garden in England, enough has been said to display the agricultural riches of the territories I have referred to, and the capabilities they possess of affording happy and prosperous homes to millions of the human race.

"But in contemplating the vistas thus opened to our imagination, we must not forget that there ensues a corresponding expansion of our obligations. For instance, unless great care is taken we shall find, as we move westwards, that the exigencies of civilization may clash injuriously with the prejudices and traditional habits of our Indian fellow-subjects.

"Happily in no part of Her Majesty's dominions are the relations existing between the white settlers and the original natives and masters of the land so well understood or so generously and humanely interpreted as in Canada, and, as a consequence, instead of being a cause of anxiety and disturbance, the Indian tribes of the Dominion are regarded as a valuable adjunct to our strength and industry.

"Wherever I have gone in the Province—and since I have been here, I have travelled nearly a thousand miles within your borders —I have found the Indians upon their several reserves, pretermitting a few petty grievances of a local character they thought themselves justified in preferring—contented and satisfied, upon the most friendly terms with their white neighbours, and implicity confiding in the good faith and paternal solicitude of the Government.

"In some districts I have learnt with pleasure that the Sioux, who some years since entered our territory under such sinister circumstances—I do not, of course, refer to the recent visit of Sitting Bull and his people—who, however, I believe, are remaining perfectly quiet—are not only peacable and well-behaved, but have turned into useful and hardworking labourers and harvest men ; while in the more distant settlements, the less domesticated bands of natives, whether as hunters, voyageurs, guides, or purveyors of our furs and game, prove an appreciably advantageous element in the economical structure of the colony.

"There is no doubt that a great deal of the good feeling thus subsisting between the red men and ourselves is due to the influence and interposition of that invaluable class of men, the half-breed settlers and pioneers of Manitoba, who, combining as they do the hardihood, the endurance, and love of enterprise generated by the strain of Indian b'od within their veins, with the civilization, the instruction, and intellectual power derived from their fathers, have preached the Gospel of peace and good-will, and mutual respect, with equally beneficent results to the Indian chieftain in his lodge and to the British settler in his shanty.

"Nor can I pass by the humane, kindly and considerate attention which has ever distinguished the Hudson Bay Company in its dealings with the rative population. But though giving due credit to these fortunate influences amongst the causes which are conducing to produce and preserve this fortunate result, the place of honour must be adjudged to that honourable and generous policy which has been pursued by successive Governments towards the Indians of Canada, and which at this moment is being superintended and carried out with so much tact, discretion and ability by your present Lieutenant-Governor, under which the extinction of the Indian title upon hberal terms has invariably been recognized as a necessary preliminary to the occupation of a single square yard of native territory.

"But our Indian friends and neighbours are by no means the only

alien communities in Manitoba which demand the solicitude of the Government and excite our sympathies and curiosity.

"In close proximity to Winnipeg two other communities—the Mennonites and Icelanders—starting from opposite ends of Europe, without either concert or communication, have sought fresh homeswithin our territory; the one of Russian extraction, though German race, moved by a desire to escape from the obligations of a law which was repulsive to their conscience—the other, bred amid the snowsand ashes of an Arctic volcano, by the hope of bettering their material condition.

"Although I have witnessed many sights to cause me pleasure during my various progresses through the Dominion, seldom have I beheld any spectacle more pregnant with prophecy, more fraught with promise of a successful future, than the Mennonite settlement. When I visited these interesting people they had only been two years in the Province, and yet in a long ride I took across many miles of prairie, which but yesterday was absolutely bare, desolate and untenanted, the home of the wolf, the badger and the eagle, I passed village after village, homestead after homestead furnished forth with all the conveniences and incidents of European comfort and a scientific agriculture, while on either side the road corn-fields already ripe for harvest and pastures populous with herds of cattle stretched away to the horizon.

"Even on this continent—the peculiar theatre of rapid change and progress—there has nowhere, I imagine, taken place so marvel lous a transformation; and yet, when in your name, and in the name of the Queen of England, I bade these people welcome to their new homes, it was not the improvement in their material fortunes that pre-occupied my thoughts. Glad as I was to have the power of allottingthem so ample a portion of our teeming soil—a soil which seems to blossom at a touch, and which they were cultivating to such manifest advantage—I felt infinitely prouder in being able to throw over them the ægis of the British Constitution, and in bidding them freely share with us our unrivalled political institutions, and our untrammelled personal liberty.

"We ourselves are so accustomed to breathe the atmosphere of freedom that it scarcely occurs to us to consider and appreciate our advantage in this respect. It is only when we are reminded, by such incidents as that to which I refer, of the small extent of the world's surface over which the principles of Parliamentary Government can be said to work smoothly and harmoniously, that we are led to consider the exceptional happiness of our position.

"Nor was my visit to the Icelandic community less satisfactory than that to our Mennonite follow-subjects. From accidental circumstances I have been long since led to take an interest in the history and literature of the Scandinavian race, and the kindness I once received at the hands of the Icelandic people in their own island, naturally induced me to take a deep interest in the welfare of this new immigration.

"When we take into account the secluded position of the Icelandic nation for the last thousand years, the unfavourable conditions of their climatic and geographical situation, it would be unreasonable to expect that a colony from thence should exhibit the same aptitudes for agricultural enterprise and settlement as would be possessed by a people fresh from intimate contact with the higher civilization of Europe.

"In Iceland there are neither trees, nor cornfields, nor highways. You cannot, therefore, expect an Icelander to exhibit an inspired proficiency in felling timber, ploughing land, or making roads, yet unfortunately these are the three accomplishments most necessary to a colonist in Canada. But though starting at a disadvantage in these respects, you must not underrate the capacity of your new fellow-countrymen. They are endowed with a great deal of intellectual ability, and a quick intelligence. They are well educated. I scarcely entered a hovel at Gimli which did not possess a library.

"They are well-conducted, religious and peaceable. Above all they are docile and anxious to learn. Nor, considering the difficulty which prevails in this country in procuring women servants, will the accession of some hundreds of bright, good-humoured, though perhaps inexperienced, yet willing, Icelandic girls, anxious for employment, be found a disadvantage by the resident ladies of the country. Should the dispersion of these young people lead, in course of time, to the formation of more intimate and tenderer ties than those of mere neighbourhood between the Canadian population and the Icelandic colony, I am safe in predicting that it will not prove a matter of regret on the one side or the other.

"And, gentlemen, in reference to this point, I cannot help remarking with satisfaction on the extent to which a community of interests, the sense of being engaged in a common undertaking, the obvious degree in which the prosperity of any one man is a gain to his neighbours, has amalgamated the various sections of the population of this Province, originally so diverse in race, origin, and religion, into a patriotic, closely-welded, and united whole.

"In no part of Canada have I found a better feeling prevailing between all classes and sections of the community. It is in a great measure owing to this widespread sentiment of brotherhood that on a recent occasion great troubles have been averted, while at the present moment it is finding its crowning and most triumphant expression in the establishment of a University under conditions which have been found impossible of application in any other Province of Canada—I may say in any other country in the world —for nowhere else, either in Europe or on this continent, as far as I am aware, have the bishops and heads of the various religious communities into which the Christian world is unhappily divided, combined to erect an *Alma Mater* to which all the denominational colleges of the Province are to be affiliated, and whose statutes and degrees are to be regulated and dispensed under the joint auspices of a governing body in which all the churches of the land will be represented.

"An achievement of this kind speaks volumes in favour of the wisdom, liberality, and Christian charity of those devoted men by whom in this distant land the consciences of the population are led and enlightened, and long may they be spared to see the efforts of their exertions and magnanimous sacrifices in the good conduct and grateful devotion of their respective flocks. Nor, I am happy to think, is this good fellowship upon which I have so much cause to congratulate you, confined either within the limits of the Province or even within those of the Dominion.

"In a world apart, secluded from all extraneous influences, nestling at the feet of her majestic mother, Canada dreams her dream, and forebodes her destiny—a dream of ever-broadening harvests, multiplying towns and villages, and expanding pastures; of constitutional self-government and a confederated Empire; of page after page of honourable history added as her contribution to the annals of the Mother Country and to the glories of the British race; of a perpetuation for all time upon this continent of that temperate and well-balanced system of Government which combines in one mighty whole, as the eternal possession of all Englishmen, the brilliant history and traditions of the past, with the freest and most untrammelled liberty of action in the future.

"Most heartily do I congratulate you upon all that you are doing, and upon the glorious prospect of prosperity which is opening out on every side of you. Though elsewhere in the Dominion stagnation of trade and commerce has checked for a year or two the general advance of Canada, here at least you have escaped the effects of such sinister incidents, for your welfare being based upon the most solid of all foundations, the cultivation of the soil, you are in a position to pursue the even tenour of your ways untroubled by those alternations of fortune which disturb the world of trade and manufacture. You have been blessed with an abundant harvest, and soon, I trust, will a railway come to carry to those who need it the surplus of your produce, now, as my own eyes have witnessed, imprisoned in. your storehouses for want of the means of transport. May the expanding finances of the country soon place the Government in a position to gratify your just and natural expectations."

HONOURABLE MR. SUTHERLAND'S EVIDENCE.

COMMITTEE ROOM, HOUSE OF COMMONS,

Monday, April 3rd, 1876.

Honourable JOHN SUTHERLAND, Senator, of Kildonan, Manitoba, appeared before the Committee, and, in answer to questions, said :

I have been in the North-West all my life. I was born within the corporation of Winnipeg. My age is fifty-three years. I am a practical farmer.

From my long experience there, and from what I have seen in other provinces, I have come to the conclusion that the soil, climate and other natural advantages of Manitoba are conducive to successful farming, and that a poor man can more easily make a living there than in other parts of the Dominion.

The usual depth of alluvial deposit on the prairie is about two and a half feet, and on bottom lands from two and a half to twenty feet. The natural grasses are very nutritious, and cattle can be wintered without any coarse grain, neither is it customary to feed any grain except to milch cows or stall-fed animals.

The usual yield of prairie grass when cut into hay is an average of from three to four tons per acre. It usually grows about five or six feet high, and, although coarse, is very nutritious.

I consider the North-West as very well adapted for dairy purposes, as we have many miles of natural meadows throughout the country, and hay can be cut and cured for about \$1 per ton. We have five or six varieties of grasses that are good and well adapted for stock-feeding, while a few others are not so suitable.

We have occasional frosts; generally one frost about the first of June, but not severe enough to injure the growing crops, and showers are frequent during summer. The average depth of snow throughout Manitoba is about 20 inches, and is quite light and loose.

I would consider it advantageous for a farmer to take improved stock, but not agricultural implements, as they can be procured there at a reasonable rate. They are partly procured from the United States and partly from Ontario. I think the grade cattle might be got in cheaper from Minnesota than from Ontario. In many parts of the Province there are natural springs and creeks on the surface, and good water can be obtained by digging about twelve feet, while in other parts it may be necessary to dig some fifty or sixty feet. I recollect only two seasons which were very dry, but not so much so as to prevent having fair average crops, and in the absence of showers there is sufficient moisture in the earth to render the soil productive.

The frost penetrates in exposed places to the depth of from three to four feet, that is, where the earth is not covered at all with snow. Where it is covered with snow it is seldom frozen deeper than eighteen inches. Vegetation begins and progresses to fore the frost is all out of the ground, and we generally begin sowing when it is thawed to the depth of six inches, at which time the surface is perfectly dry. We believe this frost helps the growth of crops, owing to the heat of the sun by day causing a continual evaporation from the underlying strata of frost.

I consider the country healthy, and we have not been subject to any epidemic. We had fever in Winnipeg in 1875, but none in the country places. It was brought into Winnipeg, and it owed its continuance there, no doubt, to overcrowded houses and insufficient drainage. We never had small-pox in our Province. As a rule, I think the country is very healthy.

The average yield and prices of grain are as follow :---

Wheat,	about	30	bushels	per acre,	price \$1.00.
Oats,	"	40	66		30c. to 40c.
Barley,	"	35	""	66	50c. to 70c.
Peas,	66	50	"	"	60c. to 70c.

The soil and climate are well adapted for growing root crops. Our potatoes are pronounced the best in the world. Indian corn is not extensively cultivated, and I think the large kind could not be cultivated to advantage, but the smaller kind might, and I think could be profitably grown.

We have had a ready home market for the last fifteen years for all our surplus produce, consequentle have not exported any farm produce.

I think that extensive settlemer; "It prevent the ravages of the grasshoppers, and we have good reason to believe that we will be exempt from them during the coming season, as there were no deposits of eggs in the Province in 1875, and, in all probability, we will be relieved from that plague for many years to come. To my own knowledge, the Province was not affected by grasshoppers for forty years previous to 1867, since which date we have had them off and on.

The fences are composed of posts of spruce and poplar, the latterof which, with the bark removed, will last 20 years. Pine and basswood lumber are also used, the former being from \$20 to \$60 per thousand feet.

Poplar and oak are chiefly used, and are in sufficient quantity to supply the present demand, but I fear there is not enough to supply a very large population, in which case there might be a scarcity of hardwood, but plenty of poplar and tamarac, the former of which is reproduced very rapidly. Coal is not known to exist in the Province of Manitoba, but is said to be found about 30 miles west of the boundary of the Province.

It is customary to plough in the fall, but I have generally found it necessary to cultivate the soil in the spring before sowing, to prevent the growth of weeds.

I consider Manitoba adapted to sheep-raising, and from my experience have found it profitable.

I have raised sixty bushels of spring wheat per acre, weighing sixty-six pounds per bushel, the land having been measured and the grain weighed carefully. I have also received reliable information to the effect that seventy (70) bushels of wheat have been produced from one bushel sown.

It is my opinion, in the event of a considerable immigration going into the Province of Manitoba, and also into the North-West Territories, that those immigrants will, in the first instance, be consumers, at all events for the first year after their arrival; and if, as I hope, the construction of the Canadian Pacific Railway is carried on, I do not doubt that these circumstances combined will absorb our surplus produce until we shall have an outlet for exportation. I may also add that the fur trade has, for many years, consumed a large proportion of our surplus produce, and I expect it will continue to do so for years to come in the North-West Territories.

PROFESSOR MACOUN'S EVIDENCE.

COMMITTEE ROOM, HOUSE OF COMMONS,

Friday, March, 24th, 1876.

Professor JOHN MACOUN, of Albert University, Belleville, appeared before the Committee and, in answer to questions, said :

A continuous farming country extends from Point du Chien to the Assiniboine, at Fort Ellice, a distance of 230 miles, without a break. Beyond this there are 25 miles of dry, gravely ground, of little account for anything except pasture. Then follows a veryextensive tract of country stretching westward to the South Saskatchewan and extending indefinitely north and south. This wide region contains many fine sections of rich fertile country, interspersed with poplar groves, rolling, treeless prairie, salt lakes, saline and other marshes, and brackish or fresh-water ponds. What is not suited for raising eereals is excellent pasture land. Only a few of the salt lakes would be injurious to cattle or horses, and fresh water can be obtained without doubt a little below the surface.

The soil of this whole region is a warm, gravelly or sandy loam. The surface soil, to a depth of from one to three feet, is a brown or black loam, the subsoil, being generally either sand or gravel. consisting principally of limestone pebbles; many boulders are found in some sections. The land between the two Saskatchewans is Prince Albert Mission settlement is situated in nearly all good. this section. At Carleton I crossed the North Saskatchewan, and therefore know nothing personally of the immense region extending west and south thence to the boundary. All accounts, however, agree in saying it is the garden of the country. Good land, generally speaking, extends northward to Green Lake, a distance of 170 miles from Carleton. How much further eastward this good land extends I am unable to state; but Sir John Richardson says that wheat is raised without difficulty at Cumberland House. The good arable land is about 25 miles wide at Edmonton, but possibly not so wide at Fort Pitt, more to the east, but further north. This region is bounded on the south by the North Saskatchewan, and on the north by the watershed between it and the Beaver and Athabasca Rivers. Within this area there are five settlements where wheat is raised regularly without difficulty, viz. : the Star Mission, (Church of England,) sixty miles north of Carleton on the Green Lake Road ; Lac La Biche Mission, (R. C.) 100 miles from Fort Edmonton; Victoria Mission, (Wesleyan) eighty miles east of Edmonton. and St. Albert Mission, (R. C.) nine miles north of Edmonton, and at Edmonton itself. Edmonton seems to be the coldest point in the district in question, and suffers most from summer frosts.

Next is a very extensive district forming the watersheds between the Saskatchewan and Peace Rivers, and through which the Athabasca River flows for its whole course, and from which it receives its waters. This region is all forest, and consists of muskeg (swamp) spruce and poplar forest. Very little is known of this region, but the soil where I crossed it is generally good where not swampy. West of Edmonton, where the railway crosses the section, there is said to be much swamp, but between Fort Pitt and the Forks of the

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Athabasca there is scarcely any swamp, although it is nearly all forest.

Next comes the Peace River section extending along the Rocky Mountains from a little north of Jasper's House to Fort Liard, Lat. 61 N.; and from the former point to the west end of Little Slave Lake; thence to the Forks of the Athabasca, and down that River to Athabasca Lake, and from thence to Fort Liard. The upper part of this immense area is principally prairie, extending on both sides of the Peace River. As we proceed to the north and east, the prairie gradually changes into a continuous poplar forest with here and there a few spruces, indicating a wetter soil. The general character of this section is like that of Manitoba west from Portage La Prairie to Pine Creek.

Wheat was raised last year at the Forks of the Athabasca, at the French Mission, (Lake Athabasca,) at Fort Liard, and at Fort Vermillion in this section.

The following observations and extracts will speak for themselves. I was on Peace River during the whole month of October, 1872; part of my work was to note the temperature, which I did with care. The average reading of the thermometer at eight o'clock, p.m. for the ten days between the 10th and 19th October was $42\frac{1}{2}^{\circ}$ in Lat. 56°, while at Belleville, Ontario, in Lat. 44°, it was only $46\frac{1}{2}^{\circ}$ at 1 p.m., being only 4° higher with a difference of 12° in Latitude. (For details see Pacific Railway Survey Report for 1874, page 96.)

Captain Butler passed through the same region in the following April, and states that the whole hillside was covered with the blue anemone (anemone patens), on the 22nd of A pril. (See Wild North Land.)

Daniel Williams (Nigger Dan,) furnished the following extracts from his notebook :

"1872.

"Ice began to run in river November Sth.

"River closed November 28th.

"First snow October 28th.

"1873.

" April 23rd, ice moved out of river.

"Planted potatoes April 25th.

"First permanent snow November 2nd.

"River closed November 30th.

" 1874.

"River broke up 19th April.

" First geese came 21st April.

"Sowed barley and oats April 22nd.

"River clear of upper ice May 3rd."-N.B. Upper ice from above the Rocky Mountain canyon.

" Planted potatoes May 5th.

"Potatoes not injured by frost until 22nd September. Then snow fell which covered them, but soon went off. Dug over 100 bushels from one planting." This is possibly too large.—J. M.

"Ice commenced to run in river October 30th.

" River closed November 23rd.

" Snowed all night November 4th.

" 1875.

"Ice broke up in river April 15th.

"Warm rains from north-west; blue flies and rain, February 18th.

"Ice cleared out in front of Fort, April 16th.

"Potatoes planted 8th, 9th and 10th May.

" Barley and oats sown May 7th.

"Snow all gone before the middle of April. This applies to both the river valley and the level country above." Difference in level 746 feet.

The potatoes were dug out in quantities, and were both large and dry. On the 2nd August, seventeen men got a week's supply at this time. These men were traders from down the river who depended on their guns for food. The barley and oats were both ripe about the 12th August. (Both on Exhibition at Philadelphia.)

Extract from the Hudson Bay Company's Journal, Fort St John, Peace River, for a series of ten years. Lat. 56° 12 North. Long. 120° West. Altitude above the sea, nearly 1,600 feet.

Opening of Riv	ver.	First ice drifting in river.				
1866-April 19						
1867— do 2	1	do	3 or 8			
1868- do 20)	•••• do	7			
1869— do 23	3	do	8			
1870- do 20	3	do	No record.			
1871- do 18	8	do	10			
1872- do 19	9	do	8			
1873- do 23	3	do	4			
1874- do 19	9	October	s 31			
1875- do 1	6					

In a pamphlet published by Malcolm McLeod, Esq., in the year 1872, he shows that the summer temperature at Dunvegan, 120 miles farther down the river, is about half a degree less than that of Toronto, the one averaging 54° 14 and the other 54° 44.

At Battle River, over 100 miles further down, Indian corn has ripened three years in succession, and my observations tend to show that the summer temperature at this point is greater than it is higher up.

At Vermillion, Lat. 58°. 24, I had a long conversation with old Mr. Shaw, who has had charge of this Fort for sixteen years; he says the frosts never injure anything on this part of the river, and every kind of garden stuff can be grown. Barley sown on the 8th May, cut 6th August, and the finest I ever saw. Many ears as long as my hand, and the whole crop thick and stout. In my opinion this is the finest tract of country on the river. The general level of the country is less than 100 feet above it.

At Little River I found everything in a very forward state. Cucumbers started in the open air were fully ripe; Windsor, pole beans and peas were likewise ripe, August 15th. Fort Chipweyan, at the entrance to the Lake Athabasca, has very poor soil in its vicinity, being largely composed of sand; still, here I obtained fine samples of wheat and barley—the former weighing 68 lbs. to the bushel, and the latter 58 lbs. The land here is very low and swampy, being but little elevated above the lake. At the French-Mission, two miles above the Fort, oats, wheat and barley were all cut by the 26th August. Crop rather light on the ground.

Mr. Hardisty, Chief Factor in charge of Fort Simpson, in Lat. 61° N., informed me that barley always ripened there, and that wheat was sure four times out of five. Melons if started under glass ripen well. Frost seldom does them much damage.

Chief Trader Macdougall says, that Fort Liard, in Lat. 61° N., has the warmest summer temperature in the whole region, and all kinds of grain and garden stuff always come to maturity. He has been on the Yucon for twelve years, and says that most years barley ripens under the Arctic Circle in Long. 143° W.

The localities mentioned were not chosen for their good soil, but for the facilities which they afforded for carrying on the fur trade, or for mission purposes. Five-sixths of all the land in the Peace River section is just as good as the points cited, and will produce as good crops in the future. The reason so little is cultivated is owing to the fact that the inhabitants, whites and Indians, are flesh-eaters. Mr. Macfarlane, Chief Factor in charge of the Athabasca District, told me that just as much meat is eaten by the Indians when they receive flour and potatoes as without them.

At the Forks of the Athabasca, Mr. Moberley, the gentleman in charge, has a first class garden, and wheat and barley of excellent. quality. He has cut an immense quantity of hay, as the Hudson Bay Co. winter all the oxen and horses used on Methy Portage at this point. He told me that in a year or two the Company purposed supplying the whole interior from this locality with *food*, as the deer wore getting scarce and supplies rather precarious. This is the identical spot where Mr. Pond had a garden filled with European vegetables when Sir Alexander Mackenzie visited it in 1787.

The following extracts are from Sir Alexander Mackenzie's travels. He passed the winters of 1792 and 1793 near Smoky River, and writes as follows :-- "November 7th. The river began to run with ice yesterday, which we call the last of navigation. On the 22nd the river was frozen across, and remained so until the last of April." Between the 16th November and the 2nd December, when he broke his thermometer, the range at 8.30 a.m. was from 27° above to 16° below zero; at noon the range was from 29° c bove to 4° below; and at 6 p.m. it was from 28° above to 7° below. " On the 5th January, in the morning, the weather was calm, clear and cold, the wind blew from the south-west, and in the afternoon it was thawing. I had already observed at the Athabasca that this wind never failed to bring us clear, mild weather, whereas when it blew from the opposite quarter it produced snow. Here it is much more perceptible, for if it blows hard from the south-west for four hours a thaw is the consequence. To this cause may be attributed the scarcity of snow in this part of the world. At the end of January very little snow was on the ground, but about this time the cold became very severe, and remained so to the 16th March, when the weather became mild, and by the 5th April all the snow was gone. On the 20th the gnats and mosquitoes came, and Mr. Mackay brought me a bunch of flowers of a pink colour and a yellow button (anemone patens), encircled with six leaves of a light purple. On the other side of the river, which was still covered with ice, the plains were delightful-the trees were budding, and many plants in blossom. The change in the appearance of the face of nature was as sudden as it was pleasing, for a few days only were passed away since the ground was covered with snow. On the 25th the river was cleared of the ice."

I consider nearly all the Peace River section to be well suited for raising cereals of all kinds, and at least two-thirds of it fit for wheat. The soil of this section is as good as any part of Manitoba, and the climate, if anything, is milder.

The Thickwood country, drained by the Athabasca, has generally good soil, but it is wet and cold. At least one-half is good for raising barley and wheat, while much of the remainder would make first-class pasture and meadow lands. I am not so well acquainted with the Saskatchewan section, but from what I know of it, it has generally good soil and a climate not unsuitable for wheat-raising. Between Fort Pitt and Edmonton there is a tract which I consider subject to summer frosts, but it would produce immense crops of hay. This district is the only dangerous one in the Saskatchewan country.

Of the high country between the South Saskatchewan and Manitoba, and south to the boundary, I know but little. If it could be shown that summer frost did no injury in the region in question, I could say that, from its soil and vegetation, the greater part would produce wheat. At all events, barley and peas will be a sure crop. I cannot speak decidedly of this large area, as from its exposed position and height from the sea, there is a danger of injury to the crops from frosts. The future will decide the point.

Q. Referring to the cultivable parts of the central or prairie regions between the Province of Manitoba and the Rocky Mountains, can you state whether there are early or summer frosts which would be likely to prove detrimental to the cultivation of wheat ?

A. In answering the last question, I stated that I could not be certain from my own observations, but I incline to the opinion that many large areas will be found altogether free from frosts, while others will be injured by them. While crossing the Plains with Mr. Fleming, in August, 1872, the thermometer fell to 30° on the morning of the 14th, and ice was formed in some of the vessels, but I saw no injury done to vegetation. This was about ninety miles east of the South Saskatchewan. Captain Palliser records the thermometer falling below freezing point on the 14th August, 1857, in the neighbourhood of Fort Ellice, but vegetation did not seem to suffer. It seems that the first frost to do any injury comes about the 20th of this month, and that it is just as likely to affect Manitoba as the country further west.

I have noticed the large claims, as respects the yield of wheat in the valley of the Red River, advanced, but doubt their accuracy. From what I could learn, I should think thirty-five bushels per acre as pretty near the average. Cultivation like that of Ontario would give a much greater yield, as there are more grains to the ear than in Ontario. The grain is heavier. Peas will always be a heavy erop in the North-West, as the soil is suitable, and a little frost does them no harm.

All my observations tended to show that the whole Peace River country was just as capable of successful settlement as Manitoba. The soil seems to be richer—the country contains more wood; there are no saline marshes or lakes; the water is *all* good—there are no summer frosts—spring is just as early and the winter sets in nosooner. The winter may be more severe ; but there is no certainty of this.

I would not advise any attempt to settle this region until after the settlement has extended at least to Edmonton, as there is at least 150 miles of broken country between the two.

From my former answers it will be seen that about the 20th of April ploughing can commence on Peace River, and from data in my possession the same may be said of the Saskatchewan regions generally.

It is a curious fact that spring seems to advance from north-west to south-east, at a rate of about 250 miles per day, and that in the fall winter begins in Manitoba first and goes westward at the same rate.

The following data selected from various sources will throw considerable light on the question of temperature. It is worthy of note that Halifax on the sea coast is nearly as cold in spring and summer as points more than twelve degrees further north.

Spring, summer and autumn temperature at various points, to which is added the mean temperature of July and August, the two ripening months.

1	Latitude north.	Summer.	Spring.	Autumn.	July d August.
Cumberland House		62.62	33.04	32.70	64.25
Fort Simpson	61.51	59.48	26.66	27.34	62.31
Fort Chipweyan		58.70	22.76	31.89	60.60
Fort William	48.24	59.94	39.67	37.80	60.52
Montreal	45.31	67.26	39.03	45.18	68.47
Toronto	43.40	64.43	42.34	46.81	66.51
Temisoamingue	47.19	65.23	37.58	40.07	66.43
Halifax	44.39	61.00	31.67	46.67	66.55
Belleville	44.10	temperature	nearly	that of	Toronto.
Dunvegan, Peace River	56.08	average sum	mer six	months	54.44
Edmonton	53.31		39.70		
Carleton	52.52		35.70		
Winnipeg	49.52	64.76	30.13	35.29	65.32

Any unprejudiced person making a careful examination of the above figures will be struck with the high temperatures obtained in the interior. Edmonton has a higher spring temperature than Montreal, and is eight degrees farther north and over 2,000 feet above the sea. The temperatures of Carleton and Edmonton are taken from Captain Palliser's explorations in the Saskatchewan country, during the years 1857 and 1858. It will be seen that the temperatures of the months when grain ripens is about equal throughout the whole Dominion from Montreal to Fort Simpson north of Great Slave Lake.

The country, in my opinion, is well suited for stock-raising throughout its whole extent. The winters are certainly cold, but the climate is dry, and the winter snows are light, both as to depth All kinds of animals have thicker coats in cold climand weight. ates than in warm ones, so that the thicker coat counter-balances the greater cold. Dry snow never injures cattle in Ontario. No other kind ever fails in Manitoba or the North-West, so that there can be no trouble from this cause. Cattle winter just as well on the Athabasca and Peace Rivers as they do in Manitoba; and Mr. Grant, who has been living on Rat Creek, Manitoba, for a number of years, says that cattle give less trouble there than they do in Nova Scotia. Horses winter out without feed other than what they pick up, from Peace River to Manitoba. Sheep, cattle and horses will require less attention and not require to be fed as long as we now feed them in Ontario. Owing to the light rain-fall the uncut grass is almost as good as hay when the winter sets in, which it does without the heavy rains of the east. This grass remains good all winter as the dry snow does not rot it. In the spring the snow leaves it almost as good as ever, so that cattle can eat it until the young grass appears. From five to six months is about the time cattle will require to be fed, and shelter will altogether depend on the farmer.

Q. Could, in your opinion, the arid portion of the Central Prairie region, and particularly that part supposed to be an extension of the "American Desert," be utilized for sheep grazing or any other agricultural purpose ?

A. Laramie Plains, in Wyoming Territory, are spoken of by all American writers as eminently fitted for sheep and cattle farming, and our extension of the "Desert" has, from all accounts, a better climate—is at least 4,000 feet lower in altitude, and from the able Reports of Mr. George Dawson (1874,) and Captain Palliser (1858,) I am led to infer that our part of the "Desert," besides being firstclass pasture land, contains many depressions well suited for raising all kinds of grain. Mr. Dawson specially remarks that its soil is generally good, but that the rain-fall is light. Speaking of the worst part, he says : "It scarcely supports a sod," but this tract is not tifty miles wide. This is the winter home of the buffalo, and hence cattle and sheep can live on it in the winter without difficulty. I have seen the Laramie Plains and the cattle upon them—I have examined the flora of both regions, and believe ours is warmer in winter and certainly not so dry in sur uer.

Mr. George Dawson, speaking of Las region, says: "In July of last summer (1873,) I saw a band of cattle in the vicinity of the Line south of Wood Mountain, which had strayed from one of the United States forts to the south. They were quite wild, and almost as difficult of approach as the buffalo; and notwithstanding the fact that they had come originally from Texas, and were unaccustomed to frost and snow, they had passed through the winter and were in capital condition." Comment is unnecessary.

Whatever desert region there is lies between the Souris and the Milk River on the boundary, and the Qu'Appelle and South Saskatchewan on the north.

Q. Is there any other wood than poplar in the Peace River country?

A. Five-sixths of all the timber is poplar, and is invariably a sign of dry soil and good land. Balsam poplar is very abundant on the islands in all the north-western rivers, often attaining a diameter of from 6 to 10 feet, even as far north as Fort Simpson. White spruce grows to a very large size on all the watersheds and the slopes of the south bank of the.Peace River, on islands in all the rivers, and very abundantly on the low lands at the west end of Lake Athabasca. I have often seen it over three feet in diameter, but the usual size is from one to two feet. Banksian pinewas not observed on Peace River, but it occurs at Lake Athabasca, and is abundant as you approach the Saskatchewan from the north. Its presence indicates sandy soil unfit for cultivation.

-White birch is not abundant along the Peace River, but is common on the Athabasca and Mackenzie Rivers. The Northern Indians make large quantities of syrup from its sap in spring.

These are the most important trees. There are no beech, maple, ash, oak, elm, white or red pine in the country.

Q. What fruits grow spontaneously in the Peace River country and Athabasca regions ?

A. The berry of the Amelanchier Canadensis (Service Berry of Canadians, Poires of the French Half-breeds, and Sas-ka-tum berries of the Indians) is collected in immense quantities on the Upper Peace River, and forms quite an article of food and trade. When I was at Dunvegan last summer the Indians and Half-breeds were camped out collecting the berries which were then in their prime (August 6th.) Bears are very fond of them, and resort to the sunny slopes of the Peace River at this time in great numbers to feed upon the berries. The Indian women press them into square cakes while fresh, and then dry them for future use, but those intended for the Hudson Bay Company's post are dried in the sun and mixed with dry meat and grease to form penmican, or are fried in grease for a dessert.

Strawberries and raspberries are very abundant in most districts on Peace River, especially at Vermillion. Another raspberry (*Rubus Arcticus*), of an amber colour, is very abundant at Lake Athabasca and up around Portage La Loche and the Valley of the English River. Its fruit is converted into jellies and jams, and gives a relish to many a poor meal.

High bush cranberries (Viburnum pauciflorum and Opulus) are very abundant in the wooded districts on both sides of the Athabasca and Clear-water rivers and around Lake Athabasca.

Gooseberries and currants of many species are found, but are not much sought after. Blueberries, low bush cranberries, and the cowberry (Vaccinium Vitis Jolea), are abundant in particular localities in the above district. Two species of cherries—the bird cherry and the choke cherry—complete the list.

The Peace River is navigable from the Rocky Mountains for at least 500 miles by river,—in none of this distance is it less than six feet deep. A canal of two miles would overcome the obstructions at this point. For two hundred and fifty miles below this there is no obstruction except a rapid, which I think is caused by boulders in the channel. Their removal would probably overcome the difficulty.

The Athabasca is navigable for one hundred and eighty miles above Lake Athabasca. Mr. Moberly, an officer in the Hudson Bay Company's service, sounded it all the way from Fort Macmurray, at the Forks of the Clear-water and the Athabasca, to Lake Athabasca, and no spot with less than six feet at low water was found. Between Lake Athabasca and the Arctic Ocean only one break exists, but this is fourteen miles across by land; after that is overcome, 1,300 miles of first-class river navigation is met with, which takes us to the ocean.

The Hudson Bay Company purpose opening a cart road from Fort Pitt on the Saskatchewan to the Forks of the Athabasca, and contemplate having a steamboat on the Athabasca and the Peace and Slave Rivers. By this means ingress and egress will be obtained, and their goods will be more easily distributed to distant points. This road will be made and the steamer built in time for the trade of 1877.

The moose is still abundant on both sides of the Peace River, and the wood buffalo is still found between the Athabasca and the Peace River about lat. 57°. From five hundred to one thousand head is the estimate of the hunters. Black bears are very numerous on the upper part of Peace River, and furnish the chief food of the people in July and August. Cariboo are north and east of Lake Athabasca, and are the chief food of the Indians and Half-breeds of that region. Rabbits are in immense numbers wherever there is timber, and are easily taken. Waterfowl are beyond computation, during September, in the neighbourhood of Lake Athabasca, and large flocks of Canadian geese are found on Peace River all summer. Lynx, beaver, martin and fox make up the chief fur-bearing animals.

Large deposits of coal have been observed, by Mr. Selwyn, on the Saskstchewan, between the Rocky Mountain House and Victoria, a distance of 211 miles. He speaks in one place of having seen seams 20 feet thick, and in his report for 1873 and 1874, he gives a photograph, on page 41, of this seam.

Rev. Mr. Grant, in "Ocean to Ocean," speaks of a seam of coal on the Pembina River—a tributary of the Athabasca—ten feet thick, and from which they brought away specimens that were afterwards analysed by Professor Lawson, and found to contain less than 3 percent. of ash.

While on my trip to Peace River, in company with Mr. Hcretzky, in the fall of 1872, I discovered coal in large quantities in the bank of one of the rivers which flow into Little Slave Lake. It was also seen in small quantities in a number of other localities in the vicinity of the Lake. It is also reported from the upper part of Smoky River, and I have seen it in small quantities on the upper part of Peace River and its tributaries on the right bank. I observed no indications of coal below Smoky River, but Sir John Richardson speaks of lignite being abundant on the Mackenzie.

Clay ironstone is associated with the coal wherever it has been observed; although possibly not in paying quantities. Coal, then, and ironstone may be said to extend almost all the way from the boundary to the Arctic Ocean. Gypsum of the very best quality, and as white as snow, was seen at Peace Point on Peace River, and for a distance of over 20 miles it extended on both sides of the river, averaging 12 feet in thickness. Sir John Richardson says in his "Journal of a Boat Voyage to the Arctic Ocean," Vol. 1, page 149, that he found this same gypsum associated with the salt deposits on Salt River, about 70 miles N.N.E. from Peace Point, and he infers that the country between is of the same character.

Sir John examined the salt deposits at Salt River and found that they were derived from the water of salt springs, of which he found a number flowing out of a hill and spreading their waters over a clay flat of some extent. The evaporation of the water leaves the salt incrusting the soil, and in some places forming mounds out of which the purest salt is shovelled.

For many miles along the Athabasca, below the Forks, there are outcrops of black shale from which liquid petroleum is constantly ozing. At various points, at some distance from the immediate bank of the river, there are regular tar springs, from which the Hudson Bay Company get their supply for boat building and other purposes. The tar is always covered with water in these springs, and something like coal oil is seen floating on this water. Besides those mentioned, other springs are known to exist on the Clearwater, a tributary of the Athabasca, and on Peace River, near Smoky River, and Little Red River on the same stream. Sulphur springs are frequent on the Clear-water, and large metalliferous deposits are said to exist near Fond du Lac, on the north shore of Lake Athabasca. Gold is found in small quantities on the upper Peace River, but it is of very little account. Immense quantities of first-class sandstone occur for over 300 miles along Peace River, and other minerals will be discovered when the country is better known.

Grasshoppers, from their very nature, cannot be yearly visitors, but are almost certain to be occasional ones. It seems to be a law that insect pests eventually *breed* their own destruction. This seems to have been *their* history in the past, and I believe will be the same in the future. A few reached the South Saskatchewan in 1875, but none have ever been seen on Peace River. Owing to the belt of timber which intervenes between it and the Saskatchewan, they can never injure that fine country, nor will they ever do much damage in the Saskatchewan country, as they are likely to move towards the east and north, which takes them away from it. I know of no mode of prevention except tree planting, which will be at best a slow process.

At six points in the Peace River country, I made a section by enumerating all the flowering plants in the vicinity. These points were Hudson's Hope, just east of the mountains; St. John's, 60 miles below; Dunvegan, 120 miles further down; then Vermillion, about 30 miles lower down; then Little Red River, 100 miles further down, and lastly at Lake Athabasca. As will be seen, the flora of the whole river is much like that of Central Ontario, and of the prairie region. It may be as well to remark that we can only deduce the temperature of the growing season from the vegetable productions. The following table gives the result of a botanical examination in a very condensed form :—

Hudson's Hope	Total. 211	Belleville. 136	Quebec.	West of Mountains 17	Western Plains. 51
St. John		161	3	6	78
Dunvegan	246	160	2	5	79
Vermillion		112	2	1	44
Little Red River	128	88	1	0	39
Lake Athabasca	245	186	7	2	50

The only plants that show any signs of a boreal climate are those from Quebec. The two at Vermillion were Yellow Rattle (*Rinanthus* Cristagalli) and High Bush Cranberry (Vibernum pauciflorum). The most prominent feature in the whole region was a richness in the soil and rankness in the vegetation never seen in Ontario.

Where Peace River leaves the mountains it is at least 800 feet below the level of the plain. At Fort Chipweyan on Lake Athabasca the country is on a level with the water.

CHAPTER V.

PRACTICAL FARMING IN THE NORTH-WEST.

MR. KENNETH MACKENZIE'S STATEMENTS.

The following questions and answers contain a report of the experience of Mr. Kenneth Mackenzie, a farmer, who emigrated from the Province of Ontario and settled in Manitoba. Mr. Mackenzie wrote the answers in 1873, to questions sent to him to obtain the information he has given :--

Question.—How long have you been a resident of Manitoba? Answer.—Four years.

Q. From what part of Ontario or the old country did you come ?

A. Scotland, in 1842, then twenty years of age ; lived in Puslinch, County of Wellington, twenty years.

Q. How many acres of land have you under cultivation at the present time ?

A. One hundred and forty under crop, and about sixty more broken this summer. We plough the first breaking two inches deep, and the next spring or fall plough it a second time, and turn up two inches more.

Q. Is it broken from bush or prairie land?

A. Prairie.

Q. What is the quality of the soil, and of what does it consist ?

A. Around Fort Garry to Poplar Point rather clayey with rich alluvial soil above; from Poplar Point west, clay loam with fine alluvial soil above, but in several places sand loam. There are to the south-west of here places too sandy for good farming land.

Q. Do you consider it good agricultural productive soil?

A. I never saw better, except that which is too sandy. Thereare settlers north-west from here for fully thirty miles, and although newly settled, they have good, fair crops, and no grasshoppers.

Q. Is prairie hard to break ?

A. When the summer is wet or moist I would sooner break it than old spear grass sod, as we do not require to break so deep.

Q. What month do you consider best to break it in ?

A. June and July, but earlier will do if you have time, as later does not answer so well.

Q. What kind of a plough do you use for breaking?

A. American, made by John Dean Moline, but other Americans make good breaking ploughs—light with gauge wheel in front, and revolving coultermould boards and coulter and shear, all steel. No use for any other material here in ploughs but steel. The soil is rich and very adhesive, and even to steel it will stick a little in wet weather, more so after it is broken and cultivated.

Q. What kind, and whose make, of a plough do you consider best adapted both for breaking and after-ploughing ?

A. The American ploughs answer for both at present. I have a Canadian plough which does very well, but I think a good light Canadian, all steel, or even glass mould-board, would be better after the land begins to be old or long broken. We cannot go deep enough with the American ploughs when land is getting old and needy.

Q. How many horses or oxen do you use with each plough when breaking the prairie ?

A. On a twelve-inch breaker, we use one pair horses, or one yoke oxen. When sixteen-inch, we use three horses or two yoke oxen. I prefer twelve-inch ploughs to larger ones.

Q. How many acres will a good team break in a day?

A. About one acre is a fair day's work, *i.e.*, day after day. Some, of course will do more. The large plough and more team will break one and a-half acre.

Q. How many ploughings do you give the land before cropping, and at what time ?

A. Two ploughings for first crop answers best, *i.e.*, one light or two-inch in summer, and then two inches more, stirred up, next spring; we plough both times same way, and not cross the first breaking. I have raised potatoes and turnips last year on first breaking; had a fair crop, but would not like to depend on it if the season was dry.

Q. What crops do you grow most extensively?

A. This year, spring wheat, ninety acres; barley, thirty acres; oats, 1 acre; peas, eight acres; rye, 1 acre; flax, $\frac{1}{2}$ acre; potatoes, six acres; the rest, roots of various kinds, and clover and timothy.

Q. What kinds of fall wheat do you grow ?

A. I have tried fall wheat, but do not consider it a profitable crop to raise here at present.

Q. How many bushels do you sow per acre?

A. About two bushels per acre.

Q. What is the average yield per acre, one year with the other ?

A. Fully thirty bushels; I have had over forty.

Q. Does Indian corn grow well, and yield a good crop?

A. It does not mature very well. They have a small kind that ripens, but I do not like it.

Q. What kind of barley do you grow ?

A. Common four rowed, but think any variety will do well.

Q. How many bushels do you sow per acre?

A. About two bushels.

Q. What is the average yield per acre ?

A. About thirty-five bushels, but I have seen over fifty per acre.

Q. What kind of peas do you grow ?

A. Russian blue and small white peas.

Q. How many bushels do you sow per acre ?

A. A little over two.

Q. What is the average yield ?

A. I think this year about twenty or twenty-five per acre; my land being new tilled this year, they did not do so well.

Q. What kind of oats do you grow ?

A. Black oats.

Q. How many bushels do you sow per acre ?

A. Two bushels.

Q. What is the average yield of bushels?

A. I have but little, but I see fields from here to Poplar Point I think will yield from forty-five to sixty per acre.

Q. Do timothy and clover grow successfully ?

A. I have had both do well, but timothy seems to do best.

Q. Do rye and flax grow successfully ?

A. Rye is a fair crop, and flax I never saw better.

Q. How are the soil and climate suited to growing root crops ?

A. All kinds of roots and vegetables that I have raised each year have done very well.

Q. Are these crops troubled with flies and insects, as in Ontario?

A. I have heard some complain of grubs, but have not suffered any by them on my crops, and I have sown turnips in May and they did well, and all through June and no flies to hurt.

Q. Has your settlement been troubled by the grasshoppers ?

A. Not since I have been here. I am eight miles west of Portage la Prairie, and no settler was before me west of the Portage. Poplar Point is about twenty-five miles east of here, or seventeen from Portugal.

Q. How many times have the crops been destroyed or injured by

them; at what season do their ravages generally commence, and how long do they generally continue?

A. In 1868 they destroyed all from Portage at that time to Fort Garry, and all settled. This year they destroyed all down on Red River or around Fort Garry, and partially up the Assiniboine River up to Poplar Point, but no farther. There are several fair crops in Headingly and White Horse Plains, *i.e.*, half way between Poplar Point and Fort Garry.

Q. Do you think that this plague will continue when the country is better settled and more land cultivated ?

A. I cannot positively say, but think their ravages are partial. Some may suffer, while others escape. They only made three clear sweeps, I am told, since 1812, when the country was first settled, and then all the portion that was settled was a small spot round Fort Garry. Rev. Mr. Nesbitt had a good crop in Prince Albert Mission, Saskatchewan, in 1868.

Q. Are there any crops that they do not destroy ?

A. They are not so bad on peas as on other crops.

Q. Are the grasshoppers the only plague that you have been subjected to since settling in the Province ?

A. I have not suffered any as yet from grasshoppers. Blackbirds were very bad at first, especially on oats, and that is the reason I had no more sown this year. I have not seen one-fifth so many this year as before. I intend, if spared, to sow more oats in future.

Q. How do the seasons correspond with ours in Ontario ?

A. Fall and spring are drier. About the middle of April spring commences generally, but I sowed wheat this year on the 3rd of April, and ploughed in 1870 on the 5th of April.

Q. Is the snow melted by the sun, wind or rain ?

A. Nearly all goes with the sun.

Q. Have you much rain during the spring ?

A. Very little till May, June and July.

Q. What time does the frost leave the ground ?

A. About the 20th of April; in places it may be longer.

Q. Have you much frost after growth commences ?

A. J have seen a little in May, but I have not had any of my crops injured by frost since I came to Manitoba.

Q. How soon may ploughing and sowing be dene?

A. You may sow as soon as the ground is black, or snow off. The frost was not three inches out when I sowed my first wheat; I have it stacked now, and a good crop.

Q. Is the summer different from ours in Ontario?

A. Generally rather drier and vegetation more rapid.

Q. Have you showers during May, June and July, and have you heavy dews at night? A. Yes.

Q. Is growth as rapid as in Ontario?

A. I think more so.

Q. Have you any summer frosts?

A. None whatever since I have been here to injure crops.

Q. When do you generally cut your hay?

A. From 15th July to 15th September.

Q. Does wheat, barley and oat harvest commence later or earlier than in Ontario?

A. Later ; generally about first week in August.

Q. Is the fall early, wet, or dry?

A. Early; generally dry.

Q. What date do frosts generally commence?

A. First of the season, about 8th or 10th September, but fine weather after.

Q. When does the winter commence? How soon is the ground frozen, and when does snow fall?

A. Generally frozen about 10th or 12th November; snow about 1st December. Some seasons are earlier; others later.

Q. Have you deep snow early in or during the winter ?

A. First three winters snow would average from 16 to 20 inches; last winter 10 inches. The frost is generally a steady freeze.

Q. Have you many severe drifting snow storms?

A. Not any more than in Ontario generally; last season, none, but that is an exception.

Q. Have you wood convenient, and what kind?

A. From two to three miles; greater part poplar, but some oak and white ash, and small ash leaf maple.

Q. How do you fence your fields, with rails, wire, or sods ?

A. With rails.

Q. How deep do you have to dig to get water in yours, as well as your neighbouring settlements? Is it good?

A. Generally they get water from nine to eighteen feet, but in this locality it is not so easily got. We expect to have a test well this fall.

Q. Have you a hay meadow convenient?

A. About two miles off I have a large one of my own.

Q. What grass grown in Ontario does prairie grass, cut for hay, most resemble ?

A. Beaver meadow hay; only ours here, I think better, and more variety.

Q. Does it make good hay, and do cattle and horses feed well on it !

A: It makes good hay for cattle, and they feed well on it, but I do not think it near so good for horses as timothy hay.

Q. What is the average yield in tons to the acre?

A. From one ton to two and a half tons; different seasons and different grasses vary a good deal.

Q. To what height does grass on the open prairie generally grow ?

A. On hard dry prairies not over ten inches, but on hay meadows I have seen four feet.

Q. Is it as pasture equal to our timothy and clover in Ontario?

A. No, it is much thinner, and does not start so readily as clover, when eaten or cropped.

Q. Do the grasshoppers at any time destroy this grass; or can it at all times be relied upon as pasture?

A. They do a little cropping when very bad, but not, to my knowledge, to destroy it for hay or feed.

Q. How often do the settlers fire the prairie, and are your crops ever endangered by such fires ?

A. There is a law against setting out prairie fires. I have not suffered any by them. I plough a few furrows around my fields and fences.

Q. Is it necessary to burn the grass on the prairie every fall in order to have a good growth the following year?

A. Not at all.

Q. Have you any fruit trees, if so, how have they done?

A. I have a few apple trees from seed, not well attended to, three years old. I do not think it very good for apples or pears, unless we have a very hardy kind; Siberian will do well. Plums are very good, and likewise wild grapes, though small, grow finely on the banks of our streams, and better hops I never saw than grow here wild. We use them for our bread raising. Currants, raspberries and strawberries grow wild abundantly. I think the growth of apple trees too rapid, and wood does not ripen, the soil being rather rich, and not much shelter in general.

Q. What kind of lumber is st plentiful, and what is the average price for good lumber?

A. Poplar lumber, heretofore, and from twenty-five dollars to thirty dollars per thousand; now good fair pine is to be had at Fort Garry, dressed for same price, and soon we will have a mill to cut up white wood pine, or rather spruce pine.

Q. Would you advise persons coming from Ontario, to settle as farmers to bring stock, such as working horses, oxen, cows, sheep, pigs, etc., or would you advise them to bring with them any machinery, such as reapers and mowers, waggons, ploughs, fanning mills, etc., or can they be bought as cheap in Manitoba as they are brought when we count the heavy freights and risk in doing so ?

A. I would not advise to bring many horses. At first they do not

thrive so well; besides grain is expensive till raised. Oxen I prefer at first. They do more work on rough feed, and are far less risky. I think nearly 20 per cent. of the horses die, or are useless the first two years after being here. If a farmer wants a driving mare or to breed, all well, but by far too many horses are brought in, till we have more timothy hay and oats raised. Oxen and cows thrive well,

and none can go wrong to bring them in. They can be got here. Freight by United States route is very high. On immigrants' goods it costs in general about five dollars and a half per cwt; that is, counting bonding, etc.

Q. What is the price of a good span of horses in Manitoba?

A. I think about fifteen to twenty per cent. higher than same quality in Ontario, no regular paice ; same for oxen, etc.

Q. What is the price of a good yoke of oxe.

A. I have sold them from \$125, \$130, \$35, \$40, \$50, \$65, \$70, \$85, to \$200 and \$210, the latter were prime, *i.e.*, here or in Ontario.

Q. What is the price of a good cow?

A. I have sold them from \$30 to \$60.

Q. What is the price of good sheep?

A. I have none; they would do well if people had pasture fenced; I think they would sell pretty high, but wool, as yet, has been cheap.

Q. What is the price of good pigs?

A. Probably about twenty per cent. over same quality in Ontario. There are some very good pigs here.

Q What is the price of a combined reaper and mower ?

A. From \$200 to \$240.

Q. What is the price of a good plough, also fanning mill ?

A. Wooden ploughs, Canadian, do. American, about \$40. Fanning mills from \$45 to \$50, both far too high for all the work on them.

Q. Would it not be a good speculation to bring out some thoroughbred stock, such as cattle, sheep and pigs?

A. I think so. My thoroughbred cattle thrive well here both summer and winter.

Q. How do you think the country is situated for dairy, cheese, and butter making ?

A. Very well ; just the thing required.

Q. Have you always a ready market for your produce ?

A. Can sell nearly all I raise at the door.

Q. What season of the year would you advise settlers (with or without families, who intend to settle as farmers) to come in ?

A. In spring, if possible ; but any season will do. I would advise

immigrants with families to rent the first year or "share," and take a little time to select their location, and then to work and put in a crop on the place they rent; generally plenty of farms can be got to rent or share. My reason for not raising more cats is, that the blackbirds heretofore were very troublesome, and seemed worse on the oats, but there is not now the one-fifth quantity of them that there used to be, and I hear they are generally worst at first. I intend to sow fully 20 acres next year (I would sow more if it were ready) with carrots, turnips and mangel-wurzel. These crops grow well, but the want of root houses is a disadvantage at present.

All the land around bere, say from 30 miles west, *i.e.*, third crossing of White Mud or Palestine River, to say 25 miles east, or Poplar Point, is rapidly filling up, especially this summer, but plenty is to be had all the way westward to the Rocky Mountains. I think few countries in the world are superior to ours for agricultural purposes, and, although the winter is hard and long, cattle, if provided for, thrive well. I wintered 91 head last winter and lost none, all turning out well in the spring. Most of them had only rough open sheds for shelter, and ran loose. We have none of the wet sleet in spring and fall that hurt cattle elsewhere. We are now stacking our grain, and I think my average will be fully 36 bushels per acre all round; last year I had 32 bushels per acre. I raised about 300 bushels of onions last year. I expect fully as good a crop this year.

I again say, bring fewer horses into the country, but as much other stock and implements as possible. First-class marsh harvesters, or machines which will employ two men binding and of the most improved make, are wanted. I have two combined ones, made by Sanger & Co., Hamilton, which answer well, but those that will cut wider and quicker are required. There are no hills, stumps, or stones to trouble us, and I have not a single rood lodged this year, although my crops are very heavy. Straw is generally stiff herc, and not apt to lodge. This year we have excellent crops of potatoes, and a neighbour of mine, Mr. Hugh Grant, yesterday, dug an early rose potatoe, weighing over two pounds, and not then full grown. I think grain drills or broadcast sowers would be an improvement, as it is generally windy here in spring. They should be wider than those used in Ontario, say from eleven to twelve feet. I never saw better buckwheat in Ontario than the few patches grown here. I think by ploughing round our farms, and planting lines of trees, we could have shelter, and live posts to which wire fences could be attached with small staples. Timber grows fast If we had yellow or golden willow, which grows rapidly here. from cuttings, it would do well. Poles, that I planted, of black poplar, or balm of gilead, are shooting out, and we could plant

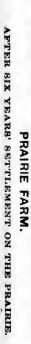
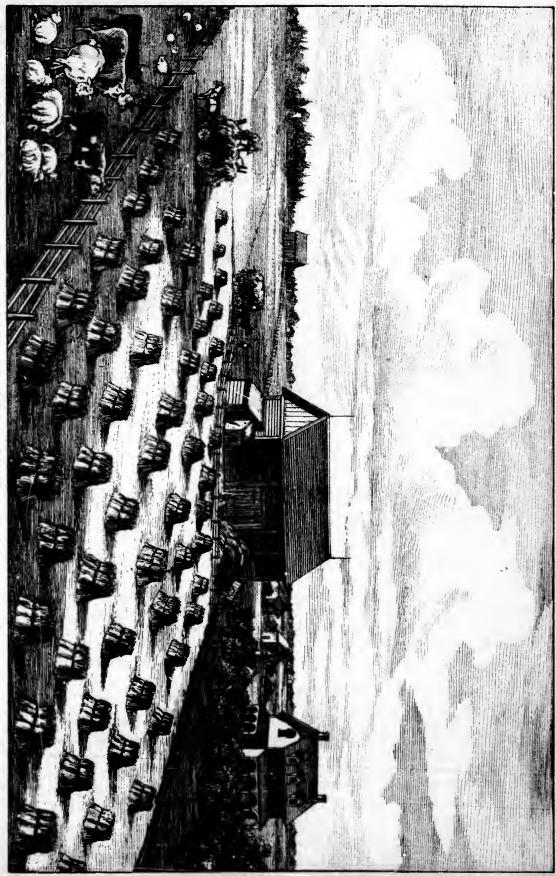


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hardier and better trees amongst them, which, though slower of growth, would replace them. In several localities the Indians make maple sugar from small trees.

I have not seen grain or other crops in either Minnesota or Dacotah to equal ours in Manitoba. I have been in those States in all seasons of the year, and have friends farming in Minnesota, who are desirous; if they can sell out, of coming here. I have seen people, newly arrived from the old country, grumble for a time, and afterwards you could not induce them to go back. Some that did go back soon returned. I have heard of some faint-hearted Canadians who, frightened with tales of grasshoppers and other drawbacks, returned without even examining the country, but I think we are well rid of such a class. We have a large increase this year, principally from Canada, and I think they are likely to prove good settlers. I think, however, immigrants from the old country will be better off, as the population there is denser, with less chances; whilst Ontario, for those who are already settled there, offers as good a chance as here, without moving. The grasshoppers that come here are driven by the wind from the deserts south of us. Our storms are not so bad as those in Minnesota, as the reports of the last few winters show.

MR. SHANTZ ON MANITOBA.

BEST TIME TO GO, AND WHAT CAPITAL TO COMMENCE WITH.

Mr. Jacob Y. Shantz, of Berlin, Ontario, who wrote in 1873, at the request of the Minister of Agriculture, a narrative of his visit with a Mennonite deputation, gives the following opinion as to the best time for the settler to go to Manitoba, and the amount of capital on which he may begin.

THE BEST TIME FOR THE SETTLER TO GO.

The settler should, if possible, be on his land by the 1st of June, when he would be in time to plant a patch of potatoes which will grow in an ordinary season when ploughed under the prairie sod. The ploughing for the next spring's crops should be done in June or July, when the sap is in the roots of the grass; being turned over at this season of the year, it will dry up and the sod will rot, so that the ground will be in proper order for receiving and growing crops in the following spring.

WHAT CAPITAL IS NECESSARY WITH WHICH TO COMMENCE.

This is a question frequently asked—the answer depends entirely upon surrounding circumstances. A young man without family, willing to work and save, would secure himself a home in a few years, provided he had only ten dollars to pay the fees for a free grant homestead claim. Work is to be had at high wages, and he could work for other parties part of the time, and then hire help again in turn to assist in putting up a small homestead house.* After that he could plough and fence in a few acres for a crop in the following spring. The next year he could earn enough to buy a yoke of oxen and other cattle, and thus, in a short time, he might become, comparatively, an independent farmer. A settler with a family ought to have provisions for one year (or the wherewithal to procure them).

Such a one, desiring to start comfortably, should have the following articles, or the means to purchase them, viz.:

One yoke of oxen	\$120	00	
One waggon		00	
Plough and harrow		00	
Chains, axes, shovels, etc		00	
Stoves, beds, etc	60	00	
House and stable, say	150	00	
Total	\$465	00	

A person having \$800 or \$1,000 can, if he wishes to carry on farming on a large scale, purchase another quarter section in addition to his free grant, when he will have a farm of three hundred and twenty acres of land for cultivation, and in addition can cut all the hay he wants in the marshes, if he thinks it desirable.

In conclusion, I would remark that a poor man can adopt the mode of farming on a small scale for the commencement, as practised by the Half-breeds. They have carts made of two wheels and a

[•] In respects to work, it should be borne in mind that while wages are high the country is new, and the labour market therefore limited. Mechanics especially should take special information before they start. The Pacific Railway works will, of course, call for a good many men; and the progress of agricultural settlement will pave the way for many kinds of artisans.

straight axle, with two poles fastened on the axle to form shafts, and a rack or box thereon. To a cart so made is hitched one ox. The cart costs about ten dollars, and the ox and harness \$50 to \$60. With such a vehicle a man can do all the teaming that is required on a small farm—and after the first ploughing one ox can plough all that is required.

I strongly recommend Manitoba as a home for German emigrants, and as they can obtain large grants of land *en bloc*, they can form a settlement or settlements of their own, where they can preserve their language and customs, as in the Western States of America.

BRITISH COLUMBIA.

The Province of British Columbia is the most western of the group of provinces which constitute the Dominion of Canada, and has a coast line of about 500 miles on the Pacific Ocean, with innumerable bays, harbours and inlets. It has an area of 220,000 square The harbour of Esquimalt is the best on the Pacific north of miles. San Francisco. It has an almost even depth of 36 feet, with an excellent bottom, and it is perfectly safe and sheltered. It is well lighted, and may be entered with facility at all times. Only a tongue of land, 750 feet wide, prevents free communication between it and the harbour of Victoria. Still further on the east coast of the Island of Vancouver is Nanaimo, sixty-five miles from Victoria. It is well situated, large and safe. The coal mines are near this port ; there are also fine quarries near, and it is very important, as the most convenient port for the fisheries, especially whale fisheries.

Barclay Sound is on the west coast of the Island. It opens into the Pacific Ocean itself, and is about thirty-five miles long. At its head it is only fourteen miles from the east coast, and easy communication may be had with it. The water is very deep, and once in harbour, the shelter is perfect.

The harbours on the mainland are Burrard Inlet, Howe Sound, Bute Inlet, Milbank Sound, River Skeena and River Nass.

Burrard Inlet is situated on the Gulf of Georgia, a few miles from New Westminster. It is nine miles long, deep and safe. It is the port from which the lumber trade is chiefly carried on. It is very easy of access to vessels of any size or class, and convenient depth of water for anchorage may be found in almost every part of it.

Howe Sound is north of Burrard Inlet, separated from it by Bowen Island, and comparatively difficult of access.

Bute Inlet is much further north, is surrounded with lofty mountains, and receives the waters of the River Hamathco. Valdez Island lies between its mouth and Vancouver. Milbank Sound, still further north, will become valuable as a harbour, as the gold mines on Peace River attract population.

The River Skeena is now ascended by steam vessels from Nanaimo, and is one of the routes to the Ominica gold mines.

The River Nass, a little further north, is near the frontier of Alaska. It has been ascended by a steamer more than twenty-five miles. It is believed that the region it waters is rich in gold, and both it and the Skeena are valuable for the fisheries.

The Province of British Columbia from its climate and great mineral wealth may be described as at once the Britain and California of the Dominion of Canada. It has also great wealth in its forests and its fisheries, and its harbours are the nearest point on the continent to the heart of the great eastern trade with China and Japan. They are also favoured by the trade winds. It has been decided that Burrard Inlet shall be the Western terminus of the Canadian Pacific Railway, and 125 miles of this end of the line are now under contract.

As respects the agricultural resources of British Columbia the following particulars are condensed from the evidence of Professor John Macoun, as given before the Immigration and Colonization Committee of the House of Commons of Canada in 1876. Mr. Macoun accompanied the Director of the Geological Survey, in the capacity of Botanist; and also the Chief Engineer of the Pacific Railway, in an exploring expedition across the continent. The following is the substance of his evidence:

"The Island of Vancouver is about 300 miles in length, with an average breadth of about 60, and probably contains 20,000 square miles. Whatever soil I saw was good, but the surface is so much broken by rock that it is altogether impossible to tell the amount of good arable land on the Island. There is no doubt the day will come when Vancouver will support a large population—partly agricultural and partly engaged in mining, lumbering and fishing. The land which is under cultivation around Victoria at present consists of rich bottom land much like the patches of rich soil found among the Laurentian rocks of Ontario. It is generally wet in spring, but, by a proper system of tillage, seed could be sown much earlier than it is at present. When I reached Victoria, May 2nd, 1875, very little spring ploughing had been done, and yet apple trees were in full bloom, and in some places grass was a foot high. The climate is wet in winter and spring, but the summer is dry and very pleasant.

"Vancouver can never become an agricultural country; but, with a different class of settlers from those that do the loafing and the grumbling in Victoria, it will become in time a very valuable portion of the Dominion. "The climate of British Columbia, west of the Cascades, including Vancouver Island and Queen Charlotte's Islands, is wonderfully like that of Great Britain, except that the summers are very much drier. A warm current of water flows down the west coast of America, just as the Gulf Stream flows up along the coasts of Great Britain, and in its passage warms up the coast from Alaska to the Columbia, and gives to the western slope of the Cascades those forests which are the wonder of the world. The vapour rising from the warm sea is blown inwards, and, becoming condensed by the cooler air of the land, falls in rain or fog upon the slopes and valleys and produces the moist climate of the winter and spring. During the summer months the temperature of the land and sea are slightly reversed, and the land, instead of condensing the vapour, dissipates it—at least in the neighbourhood of Victoria.

"The Valley of the Fraser below the Cascades is included in this region, and has a climate much like that described above, except that I would expect a wetter summer than there is on the coast.

"Twenty-five miles above Yale we pass the outer Cascade Range, and in doing so pass from almost constant rain to the opposite extreme. About 12 miles higher up we pass over another mountain and reach a region of complete aridity.

"At Lytton we are fairly in the interior basin, and from here to Clinton the waggon road passes through a region where nothing can be raised except by irrigation, and this means can only be employed to a limited extent.

"The road passes through about 70 miles of this country, and during the greater part of the year the ground is scarcely ever moistened by a shower. The river flats and lower hill sides are almost without vegetation. Scarcely anything of a woody nature except 'Sage Bush' can grow, but, as you ascend the hills, bunch grass begins to form a sward, and after attaining a height of about 2,500 feet above the sea the lower limit of the Douglas pine is reached, and above that the forest is almost continuous. It is upon the slopes between the forest and the dry valleys that the splendid grazing lands of British Columbia are to be found. The Nicola Valley is of this nature, and the only soil in it fit for farming purposes is found in the narrow valley along the river, or on the 'benches' to which water can be brought for irrigation purposes. The whole region, from the American boundary on the Columbia by Okanagan and the Shuswap Lakes, Kamloops and north-westward across the Fraser, to and beyond the Chilcoten Plains, is arid, and to a great extent only suited for a grazing country. Taking this section as a whole, it is only fit for pasture, but all the level portions on which water can be brought will produce enormously, as the soil everywhere is good, being only deficient in moisture. Owing to the light snow fall and the comparative mildness of the weather, cattle winter out without difficulty.

"The waggon road leaves this section at Clinton, and passes over a very elevated portion as far as Soda Creek on the Frazer. This is a very rough section, but still it is far from being barren; much good land is scattered through it, but not continuously. It is rather a risky business to winter stock on these hills, but still it is done. The greater part of this tract is covered by forest, and hence has a greater rain and snow fall than the lower country. The spring too is much later, being nearly three weeks behind that of the Nicola Valley. The spring in the latter valley seems to be about as early as that on the Lower Frazer. Vegetation is about as far advanced on the 1st of May in the Nicola Valley as it is at Belleville, Ontario, on the 24th.

"In the vicinity of Quesnelle the land is comparatively good, and irrigation is unnecessary, although many are of the opposite opinion. Mr. Selwyn brought home with him wheat, oats, barley and timothy, which were raised in the neighbourhood, and certainly they were as fine samples as could be produced anywhere.

"Taking a retrospective view of the country from this point, I must say that British Columbia does not present a field for the agricultural immigrant at present, but will when her mining interests are considered of more importance than at present. British Columbia above the Cascades can never export her agricultural products with profit, and whatever is raised in the country must be consumed there. That there is enough good land to raise all the food necessary for a very large mining population is certain, and that the day will come when one will be there is just as sure.

"Between Quesnelle and Fort St. James, on Stewart's Lake, is a wide extent of country (180 miles) with a very diversified aspect and a cool, moist climate. The Valley of the Nechaco River is very wide and perfectly level. On both sides of the river are beautiful prairies and poplar copse wood, and at the time we passed (June 15) through it, everything looked beautiful and inviting. I cannot speak with certainty of the absence or occurrence of summer frosts, but if they should not be severe this would be one of the finest tracts (Nechaco Valley) in all British Columbia.

"The whole country above Quesnelle seems to have a cool, moist climate, and to be more like Quebec in its productions than Ontario. Fort St. James, on Stewart's Lake—the highest point in the district —has always been known to produce garden vegetables, potatoes, barley and oats, but, whether wheat has ever been raised or not, I am unable to say. All this region is an elevated plateau with broken rocky hills at intervals, but scarcely anything which could be called a mountain. Should the railway pass as far north as the Neshaw, many fine settlements would spring up along the river.

"Labour is much higher than in Ontario, usually prices being from \$40 to \$60 per month. There is no more difficulty in cultivating land in British Columbia than in Ontario, but the price paid for the labour performed is too high. Where irrigation is required the expense must be greatly increased, but the yield is very great in such locations.

"The Chinese monopolize many lines of manual labour, and by so doing prevent the immigration of white labourers. They are the market gardeners, labourers of all descriptions, house servants, cutters of wood, laundry-men, etc., to the whole Colony. One result of this is that the country is not properly developed. These people are only sojourners in the land, and, like many others, remain only for a time, and carry their gold away with them.

"What British Columbia wants is a class of men who are not above manual labour, and who have made up their minds to remain in the country and become permanent settlers. Such men can only be acquired by holding out proper inducements to them for settling in the country.

"That section spoken of as being west of the Cascades and including Vancouver and Queen Charlotte's Islands, is covered with, probably, one of the finest forests in the world. Chief amongst the trees is the Douglas Fir (*Abies Douglasii*), which is the chief forest tree, and which is used throughout the country for building purposes, and for export in the form of deals and spars.

"White Cedar (*Thuja gigantea*) is another giant, and in the valley of the Frazer and up the coast attains to an immense size. The Indians use this wood altogether in the construction of their houses, and in building those large canoes which are the wonder of the eastern people.

"The other trees are a species of Yew, another of Alder, two species of Fir (Abies Menziesii and grandis); two species of Pine (Pinus contorta and monticola); two species of Maple (Acor macrophyllum and circinatum); Hemlock Spruce (Abies Mertensiana) is a common tree on the mainland; while a species of Oak (Quercus Gayrrana) is abundant on the Island, but has not been detected on the continent. An evergreen tree (Arbutus Menzieșii) is quite common along the coast of the Island, and, both summer and winter, its foliage contrasts finely with that of the sombre-hued Douglas Fir.

"In the second, or arid district, a Pine (Pinus ponderosa) takes the place of the Douglas Fir of the coast, and is a very valuable tree, growing to a large size, with clean trunk, and resembling the Red Pine of Ontario very much. The tops of the lower mountains and the sides of the higher ones support a heavy growth of Douglas Fir, but it is far from being the beautiful tree of the coast.

"The timber of the third region is not so good, and consists principally of Poplar and Black Pine (*Pinus contorta*) with occasional groves of Douglas Fir on the higher hills. Black and White Spruce with a little Balsam Fir make up the remainder.

"The soil in the valleys, whether they are narrow or wide, "benches' or otherwise, is always good. The valleys are partly alluvium and partly the detritus washed down from the hills. Apparently there was a time when the rivers stood much higher than they do now, and the 'benches' which show along their sides were then about on a flood level with the river. Since then the river has successively broken through the barriers which confined it, and left these terraces ('benches') at various heights. The slopes of all the hills are more or less grassy, and the valleys along their base have scarcely any loose stone upon them in consequence.

"I was in Victoria from the 12th to 28th December, 1872, and from the 2nd to 14th May, last year. While I was in Victoria in 1872, a fall of snow and slight frost took place, and the papers came out next day with an account of the extraordinarily cold weather, and I was led to infer from that that such weather was not common in winter. Jessamine, roses, and violets were in flower, and everything betokened a mild winter. The summer on the coast is everything that can be desired, being dry and pleasant.

"In the arid region the spring is about as early as on the coast ; the winter is comparatively cold, with very little snew, and the summer is dry and hot. Summer frosts can do no harm in these regions.

"From Clinton upwards the winter is very cold, with a considerable snowfall and frosts extending through the month of May, and possibly into June. I heard of no injury from frosts at Quesnelle or any point on the Frazer, but noticed frost on the grass on the 27th May, at or near Soda Creek. From this date until the 4th June, the weather kept cold, but there was no frost. On the 28th June at Macleod's Lake, latitude 55°, there was a severe frost, and many wild flowers were injured, but nothing was hurt in the garden. This frost extended to St. John's, east of the mountains, but no further.

"One important point in connection with spring or summer frost should be kept in mind: that swampy soil is more liable to injury from frost than dry soil, and a frost occurring in a swampy region is no proof that the surrounding country is liable to suffer from such frost. We all know that in the vicinity of swamps we have alight frosts in many parts of Ontario even as late as the beginning of June, and numbers of farmers can point out spots in their wheat fields injured by them.

"I would expect spring frost in the upper region, but have noknowledge of the fact, other than what I before stated.

"I think that on the whole British Columbia has a very healthy climate, and one that would tend to long life.

"Various species of raspberries, currants, gooseberries, strawberries, and blueberries are found throughout the country. The Oregon grape (*Berberis aquifolium* and *nervosa*) extends all the way from Vancouver to lat. 55° in the interior, and to Alaska along the coast.

"Perhaps there is no better place in the world for raising fruit than Victoria.

"Apples and pears of a very large size are produced in such abundance that the former can hardly be sold at any price. The orchards are all in the low, wet grounds, and will begin to decay in a few years, whereas if they were planted among the rocks, where the oak grows, the trees would live longer and probably produce better fruit. I can see no reason why grapes could not be produced in abundance on any part of Vancouver, if the summer temperature is high enough. After the railway is built, Vancouver will send immense quantities of fruit into the interior, as it can be raised to any extent and of every kind.

"From the boundary line to Alaska there is not a bay, ford or river that is not teeming with fish. Salmon are caught in great numbers, both in spring, summer and autumn. Last spring large quantities of fish were being caught at New Westminster for export. An establishment for the canning of salmon has been established there, and it is to be hoped that this is the beginning of a very prosperous business. Salmon ascend the Fraser all the way to Stewart's Lake, which they reach about the month of August; they likewise ascend the Skeena into the Babine Lake, and are caught by the Indians and Hudson Bay Company's people and dried for winter's use. The salmon of Babine Lake are both larger and fatter than those caught in Stewart's Lake, and are therefore brought across to supply Fort St. James with food in winter.

"Sturgeon 700 lbs. weight are often caught in the above-mentioned lakes, and every lake and stream in Upper British Columbia teems with trout of different species, besides many other varieties of less value.

"Of salt-water fish I saw the 'Houlican' in the Fraser in myriads last spring. Many were lying dead along the river, and served as food tor various animals. Halibut were very plentiful in Victoria, and many other seafish. I believe the fisheries of British Columbia, if properly conducted, would eventually be as profitable as those of the Gulf of St. Lawrence.

"About the island of Formost, on the eastern coast of China, a current analogous to the Gulf Stream is observed moving to the north-east. It passes Japan, and part of it enters Behring's Sea and warms the northern part of Alaska, while the other part is deflected further to the east, and passes down the West Coast of America, carrying with it the heat necessary to produce the exceptionally warm climate of Vancouver and the West Coast generally. It is this stream which gives the heat and moisture that are the cause of the magnificent forests found from Alaska southwards. The forests of Norway and those of Western America are the product of the two great currents—the 'Gulf Stream' on the east and 'Kuro Siwo' on the west, and sceptics may rest assured that the value of the West Coast timber far exceeds that of the Eastern Provinces.

"Gold has been found in paying quantities at Okanagan on the American Boundary,-at Shuswap Lakes--at Cariboo-on the Ominica-on the Stickeen-and latterly at Cassiar, and an examination of the map will show that all this gold is produced from mountains lying between the Rockies and the Cascades. Copper, iron and silver have been found at various points in the Cascades, and coal is abundant on Vancouver and Queen Charlotte's Islands. I just mention these and ask : Are these all, or are they merely indications of what is to come? After having travelled over 1,000 miles through British Columbia, I can say with safety that there will yet be taken out of her mines wealth enough to build the Pacific Railway. Consider that gold has been found in paying quantities, at various points, along a northwest line for more than ten degrees of latitude, before you decide that the foregoing statement is that of an enthusiast."

In addition to the above statements of Mr. Macoun, it may be remarked that the Geological Survey in connection with the Pacific Railway have established that gold exists over the whole extent of the Province, from the Cassiar Mines to the U. S. boundary. And recent quartz workings have developed great richness. The Minister of Mines has shown in his last report that the average number of miners engaged in the gold mines of the Province is 3,171; the average earnings per man per year \$663; the yield in 1876 was nearly two million dollars; and the total yield from 1858 to 1876 was \$39,953,618. The output of coal in the year 1876 was 139,191 tons, which was rather less than the quantity sold. The coal of British Columbia is sought for in San Francisco on account of its superior excellence.

As respects lands, the following particulars are taken from a recent publication by the Agent-General of British Columbia :

"The soil of British Columbia is at the disposal of the Parliament of the Province, not of the General Government as in the United States.

"Public Lands.—The Land Act of 1874 makes most liberal provision for the acquisition by settlers of land, either as Free Homesteads, or by purchase. Land can be secured against seizure.

"Free Homesteads.—Heads of families, widows, or single men of 18 years and upwards may obtain free grants of 320 acres eastward of the Cascade range of mountains, or of 160 acres in other parts of the Province. The settler selects his own land, records it in the office of the District Commissioner, the fee for which is two dollars, and at once enters upon occupation. After two years' occupancy, and certain conditions as to improvements having been complied with, a Crown grant or conveyance will be made, the only expense of which would be five dollars—so that a farm of 320 acres may be obtained in a beautiful and healthful country for about thirty shillings !

"Sale of Surveyed Lands.—Lands, the surveys of which have been duly made and confirmed by notice in the Government Gazette, are open for purchase at the rate of one dollar per acre—to be paid in one full payment, or in two annual payments of 50 cents per acre; payment to be made in two years from time of purchase.

"Unsurveyed Lands.—Persons desirous of purchasing unsurveyed, unoccupied, and unreserved Crown lands must first have the land surveyed by a surveyor approved by the Government.

"Tracts of land near the land actually occupied can be *leased for* grazing purposes, on terms designed to be liberal to the pre-emptor. Such leased land is liable to be 'pre-empted' by others, but, in that case, the lessee's rent is reduced proportionately.

"Land covered with wild hay can also be leased in the above way, but not more than 500 acres of it to any one person, and not for longer than five years.

"Mining and timber leases will be named under their proper heads further on.

"Military and naval officers in Her Majesty's service are entitled to free grants on certain conditions. The Agent-General will give information.

Homestead Act.—Most important Act. If a settler have a wife and children, this Act must be dear to him; the farm and buildings, when registered, cannot be taken for debt incurred after the registration; it is free up to a value not greater than 2,500 dollars (£500 English); goods and chattels are also free up to 500 dollars (£100 English); cattle 'farmed on shares' are also protected by an Exemption Act.

"Farm lands in private hands may be bought at almost any price, from 5 dollars (20s. English) to 40 dollars (£8 English) per acre, according to situation and improvement."

CHAPTER XXI.

SUMMARY.

THE preceding pages give a plain and unvarnished statement of the capabilities and resources of the Provinces and Territories of the Dominion of Canada. It has been considered better to under rather than to over-state the advantages which Canada offers to emigrants qualified to make their way in the Colonies. Every disappointed, still more every deceived emigrant naturally becomes hostile to the country by whose authorities he has been induced to leave his native land on false or exaggerated representations. Whatever disappointments, however, may be met with cannot be laid to the door of the Dominion Government, which has warned unsuitable emigrants against coming to Canada, and has carefully pointed out the description of settlers whose propects of success, as a class, seemed most assured. Individually, each man of each class must o we his advancement to his own character and qualifications.

The DOMINION OF CANADA, as has been shown, consists of seven Provinces and the immense tract of country known as the "North-West Territories." The five Eastern Provinces constitute the oldest settled parts of the country, and have very varied resources. Those on the Atlantic seaboard, in addition to their agricultural lands, are noted for their extensive sea fisheries, a lucrative trade, employing many vessels and men, and for ship building, which is an important branch of industry. Immense deposits of coal are found in Nova Scotia, besides gold and other minerals, which also abound in the other Provinces. Mining industries are, there can be little doubt, destined to assume large proportions as the country becomes more thickly settled. Great strides have been made in these Provinces in manufactures of different kinds, there being every facility for their prosecution. The products of the forest are a large source of revenue and employ large numbers of men, both in the woods and in preparing the material for market, either in a partially or completely finished state. The supply of animal food which can be exported from these Provinces is limited only by the demand, the trans-Atlantic trade being but of recent origin and for some time simply an experiment. Now that it has been demonstrated that it can be successfully conducted, it must assume larger proportions yearly ; and the vigilance that has been exercised to prevent the introduccion of disease among the herds has been rewarded by immunity from loss from that cause. The favourable conditions on which cattle, sheep, etc., can be raised, and the nearness to European markets, must make the rearing and fattening of cattle for export of increasing importance to the farmers of these Provinces.

BRITISH COLUMBIA, on the Pacific Coast, has a large extent of splendid timber lands; most productive fisheries, which are yearly becoming more valuable, and deposits of coal, whose excellence is undoubted, and which, being easily accessible, is cheaply won. The value of the gold mining of this Province is well known.

The NORTH-WEST TERRITORIES, including in this term the Province of Manitoba, present every indication of becoming the granary of the world. All who have closely examined the country agree as to its wonderful fertility, and the facility with which its lands can be brought under cultivation. The construction of the Canadian Pacific Railway, now being prosecuted, will rapidly open the country and give easier access to ma kets; and already population is pouring in to occupy what but a few years ago was known as the "Great Lone Land," but which before long will be filled by industrious and prosperous communities.

There is thus a varied choice in Canada for those who seek to emigrate. Among the farming population some may prefer to enter upon improved land, in old settled localities where they can engage in stock raising and dairy farming to advantage, and to these the Eastern Provinces offer great inducements, the farming being more varied in character and the dairy products of acknowledged excellence. In the North-West, for some time at least, wheat must be the great staple, although there can be no doubt that stock raising will accompany it; as for meat and dairy products there must inevitably be a demand from the men engaged in the work of building the Pacific line, as well as for export to the South, where the cattle which have been raised in the Territories are in demand. Every facility will be given to those who come to settle and to make homes for themselves

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and their children, but it must be borne in mind that no Government aid can secure men from failure who are not fit to cope with the difficulties inseparable from a new condition of things. It is for each man to resolve for himself to succeed, and success can only be attained by earnest, faithful and persevering labour. There is no royal road to independence; there are always difficulties, but they can be overcome by the man who determines to conquer them.

DOMINION GOVERNMENT AGENTS TO WHOM APPLI-CATION MAY BE MADE.

Halifax, N.S.	E. Clay.
Si. John, N.B.	
'Quebec (City)	L. Stafford.
Montreal	J. J. Daley.
Ottawa	W. J. Wills.
Toronto	J. A. Donaldson.
Mamilton	John Smith.
London (Ont.)	A. G. Smythe.

AT DULUTH,

during the season of navigation, a special agent is placed, Mr. W. C. B. Grahame. He will be in attendance on the arrival of all steamers, to assist emigrants in the bonding of their baggage, and otherwise to give them information.

All emigrants should be implicitly guided by his disinterested official advice in preference to listening to persons whom they do not know, who may have interest to deceive them.

AGENTS IN MANITOBA.

These agents will give emigrants all possible information and advice.

SPECIAL CAUTION TO SETTLERS.

It may save a great deal of trouble if immigrants will be careful not to settle on Sections 8 and 26, these being Hudson Bay Lands, or on Sections 11 and 29, these being School Lands. The Dominion Lands Act specially sets aside these Reserves, and they are not open to the public.

APPENDIX A.

NOTES BY PROFESSOR MACOUN ON THE CLIMATE OF MANITOBA AND THE NORTH-WEST TERRITORIES.

The region included in the following observations lies between the boundary (latitude 49°) and latitude 60° north, these parallels forming the southern and northern boundaries of the territory while it extends from the 95th meridian to the Rocky Mountains, following their north-western trend to latitude 60° north.

For many years this vast extent of territory lay as a blank on the maps, almost unknown to Englishmen or Canadians, and counted valueless except as a fur-bearing country ; yet, as long ago as 1812, Lord Selkirk said that the valley of the Red River alone would maintain a population of over 20,000,000. The Americans were always alive to its true value, but, like true patriots, extelled their own country in preference to the land of the stranger. Over 20 years ago, their writers called attention to it, and Wheelock spoke glowingly of it in his work on Minnesota. Seven years since I had the good fortune to spend a number of months in the territory, and travelled over its whole extent from east to west, and, being impressed with its importance as a field for immigration, I have since then taken every opportunity to make myself acquainted with its climate and capabilities. In the following pages will be found my conclusions and the facts upon which they are based.

Geologists have been aware for a length of time that high arid plains, about 40° north, always ameliorate the climate of countries north of them; and Blodgett, in his work on the Climatology of the United States, says that high and arid plains are decisive of a high degree of summer heat, with an arid atmosphere and little rain or snow. Within the United States there are at least 500,000 square miles of arid country, almost constantly receiving enormous quantities of heat by day and giving it off at night by radiation. The general level of this plateau is fully 6,000 feet. At Laramie City it is about 7,000 feet above the sea, but from this point it rapidly falls off to the north, so that when it reaches the boundary (lat. 49°) at Pembina it is considerably less than 1,000 feet in altitude, and at the base of the Rocky Mountains under 4,000 feet. As the plain descends to the north the rainfall increases, the "cactus" and "sagebrush" give place to bunch-grass, and this, north of the line, soon passes into sward, quickly followed as we proceed northward by copse wood, which, north of the Saskatchewan, is replaced by an aspen forest, and this on the water-shed into one of spruce. No appreciable alteration in temperature takes place, but only an increase of moisture, as we pass to the north, and with this increase of humidity a more equable temperature is noticed. Less radiation takes place as we leave the high treeless plains, and, consequently, the variation of temperature is less strongly marked between day and night.

A careful examination of Blodgett's and Dove's charts shows that the isothermals curve upward from the Gulf of Mexico, and reach their northern bend, in the United States, on the 110th meridian. Here in lat. 50° the mean summer temperature is placed at 70°, while at Winnipeg, 600 miles to the east, it is 65°. Following these lines 9° farther north, we find that the isothermal of greatest heat passes Fort Vermillion, lat 58.24, on the Peace River and Edmonton on the Saskatchewan, both of these points being noted for their productions. On the Pacific side the isothermals commence to curve north from the head of the Gulf of California, reaching our boundary at the 115th meridian, having actually crossed the Rocky Mountains before reaching this point, thus producing those warm dry winds of the south-west, which are known in Montana and north of the boundary as "Chinook Winds." These winds are noticed more particularly in winter, and often raise the temperature over 60° in the course of an hour or two. They are noted for being both warm and dry, as they evaporate the snow as fast as they melt it. Their effects are not much felt north of lat 52°, and how far east they extend is not known.

Here, then, we have two currents of warm air flowing constantly into our territory, the one from the Gulf of Mexico, the other from the Gulf of California, and unitedly giving us heat and moisture which they have carried over the "Great American Desert" to leave on the lower plain to the north. Owing to the height and aridity of the "Desert" much heat is absorbed during the day, but it is constantly sent into the atmosphere at night, causing the air above the plain to be just as warm at night as during the day. Fort Laramie, in Wyoming Territory, is in the same latitude as Boston, and yet, strange to say, the former, although 7,000 feet above the sea, has a summer temperature as high as the latter. A very little reflection will show that, were the "Desert" an inland sea. the winters of our interior would be like those of Fastern Europe, and we would have a cooler summer and a warmer winter. In an article like the present it would be out of place to discuss the climate of Eastern Europe, but the forces which enable the Russian to build his Capital almost on the 60th parallel are precisely the same as

those which send the warm air of the Gulfs [to ameliorate the climate of our own north-west, and cause wheat and other cereals to be produced, in the highest perfection, as far north as this same parallel. The following table of temperature is extracted from the Meteorological Report for 1876.

	April.	May.	June.	July.	August.	September.	Average for 6 months.	Average for 3 months.
Winnipeg, lat. 50°, long. 97°	35.4	52.1	59.2	65 • 8	63.3	51.8	54.6	62.8
Fort McLeod, lat. 50°, long. 113°	39.8	53.3	60.6	63.3	57.0	50.3	54.0	60.2
Fort Calgary, lat. 51°, long. 114°	36.7	51.8	61.0	59.0	53.5	47.2	51.5	57.8
Fort Simpson, lat. 61°, long. 113°		44.6	58.8	63.4	63.2	46.9		61.8
Toronto, lat. 44°, long. 79°	38.2	51.5	65.5	68.8	70.2	57.5	58.6	68.2

It will be seen by the above data that Fort McLeod and Winnipeg, although 600 miles apart, have almost the same temperature, and, more surprising still, that Fort Simpson, although 770 miles due north of Fort Macleod, is *warmer*. Here we have a triangle with its three angles having almost the same summer temperature—its base being 660 miles in length, its perpendicular 770 and its hypothenuse 900. Further observations will largely increase this area, but, no continuous observations having been taken, we do not hazard a statement.

After temperature, the most important factor is humidity, and here, again, we have a remarkable example of a well-known natural law. As stated above, the winds are constantly drifting northward, and in winter, owing to their passage across the "American Desert," which is now very cold, they lose most of their moisture, and pass over our prairie as dry winds. In summer the very reverse of this takes place—the dry, hot plains prevent deposition, and hence the winds come loaded with moisture, and give the summer rains which cause such astonishing growth in June and July. In most cases, this dryness of the atmosphere is injurious to growing crops, but, owing to the situation of the plains, in our case it is a positive good, the rains coming just when wanted, and ceasing when of no further use to the growing crop. The following data, taken from the Meteorological Report of 1876, illustrate this.

I	34	

	Winter.	Spring.	Summer.	Autumn
Quarterly rainfall at Winnipeg " Toronto	00 · 5 · 51	5 · 69 6 · 63	10·52 5·74	0·04 3·18
			lst half of year.	2nd hall of year.

It will be seen by the above table that the rainfall at Winnipeg in summer and spring is nearly equal to that of Toronto for winter, spring and summer, and, where Toronto has over three inches in autumn, Winnipeg has scarcely any. The absence of autumn rains in the west is a priceless boon, as it enables the farmer to thresh and harvest his grain without injury, and, besides, gives him excellent roads when he needs them most.

The progress of the seasons and the labours of the husbandman, throughout the north-west, may be summed up as follow :- Early in April, the hot sun dissipates the slight covering of snow, and, almost immediately, ploughing commences, as, after the frost is out six inches, spring work may begin, Seeding and ploughing go on together, as the ground is quite dry, and in a few days the seed germinates, owing to the hot sunshine; the roots receive an abundance of moisture from the thawing soil, and, following the retreating frost through the minute pores opened in it, by its agency penetrate to an astonishing depth, (often two feet) all the time throwing out innumerable fibres. By the time the rains and heat of June have come, abundance of roots have formed, and the crop rushes to quick maturity. It is just as much owing to the opening power of the frost as to the fertility of the soil that the enormous crops of the North-West are due, and, as long as the present seasons continue, so long will the roots penetrate into the subsoil, and draw rich food from the inexhaustible reservoirs which I know are there.

After the middle of August the rains almost cease, and for ten weeks scarcely a shower of rain falls, giving the farmer ample time to do all necessary work before the long winter sets in. These general characteristics apply to the climate of the whole North-West, and the same results are everywhere observed over tracts embracing 300,000 square miles of territory. One important result of this peculiar climate is the hardness and increased weight of the grain caused by it. Another, equally important, is the caring of the natural hay, and our experience of the last two months has been that the horses and cattle do better to collect their own food on the prairie than to be fed with hay. All stockraisers know that it is not cold that injures cattle or horses, but those storms of sleet or soft snow which are so common in Ontario and the Eastern Provinces. Such storms as those are never seen in the North-West, and the cattle are never wet from November to April.

Many intelligent persons are afraid of the winters of the North-West, as they measure the cold by the thermometer rather than by their ewn sensibilities. It is not by the thermometer that the cold should be measured, but by the humidity of the atmosphere, as, according to its humidity so is the cold measured by individuals. All through the fall my men never noticed a few degrees of frost, and it was no uncommon thing to see a man riding in a cart without his coat when the thermometer was below freezing point. J. A. Wheelock, Commissioner of Statistics for Minnesota, wrote as follows concerning the atmosphere of that State, over 20 years ago :--"The dryness of the air in Minnesota permits a lower range of temperature without frosts than in moist climates. The thermometer has frequently been noticed at 20 degrees without material injury to vegetation. In the damp summer evenings of Illinois and Ohio, for example, the heat passes off rapidly from the surface of the earth and from plants. Frosts develop under such circumstances at a comparatively high temperature. The constant bath of moisture has softened the delicate covering and enfectled the vitality of plants; and thus a fall of the thermometer, which in Minnesota would be as harmless as a summer dew, in Ohio would sweep the fields like a fire."

What Wheelock says of Minnesota is equally true of the North-West Territories, and more so, as they are certainly drier than it. Dry air is a non-conductor of heat, and as the dryness increases with the lowering temperature, the increasing cold is not felt by either animals or plants, and we find a solution to the paradox, that, although water may freeze, vegetation is not injured except when a humid atmosphere is in immediate contact with it. The increase of dryness in the air has the same effect as an increase of warm clothing for man and beast, and we suffered less from a temperature of 10 degrees below zero, this winter, though lying in tents, without fire, than we would have done in Ontario with 10 degrees of frost.

In conclusion, after seven years' study of all available material and constant observation, I can state as a fact that our peculiar climate is caused by the great American Desert, which, in fact, commences at the 100th meridian, exactly south of our prairies, and extends with little interruption to the boundary of California. The winds passing over it descend on our interior plain, giving out heat and moisture in the summer, and in the winters wrapping the whole country in a mantle of dry air, which moderates the climate so much that without the aid of a thermometer no one would believe the cold was so intense. We, then, have a dry, clear, cold winter,—a dry spring with bright sunshine—a warm summer with an abundance of rain, but not necessarily a cloudy atmosphere, and a dry^{*} serene autumn, with possibly a snow storm about the equinox.

An atmosphere like this, with a soil of abounding fertility, extending over a region of almost boundless extent, causes me to feel that the words of Lord Beaconsfield were those of a far-seeing statesman, and that our great North-West is truly a land of "illimitable possibilities."

JOHN MACOUN, F.L.S.

26th December, 1879.

APPENDIX B.

REGULATIONS RESPECTING THE DISPOSAL OF CERTAIN PUBLIC LANDS FOR THE PURPOSES OF THE CANADIAN PACIFIC RAILWAY.

DEPARTMENT OF THE INTERIOR,

OTTAWA, Oct. 14th, 1879.

Public notice is hereby given that the following provisions, which shall be held to apply to the lands in the Province of Manitoba, and in the Territories to the west and north-west thereof, are substituted for the Regulations, dated the 9th July last, governing the mode of disposing of the Public Lands situate within 110 (one hundred and ten) miles on each side of the line of the Canadian Pacific Railway, which said Regulations are hereby superseded :---

1. "Until further and final survey of the said railway has been made west of the Red River, and for the purposes of these provisions, the line of the said railway shall be assumed to be on the fourth base westerly to the intersection of the said base by the line between ranges 21 and 22 west of the first principal meridian, and thence in a direct line to the confluence of the Shell River with the River Assiniboine.

2. "The country lying on each side of the line of railway shall be respectively divided into belts, as follows:---

"(1) A belt of five miles on either side of the railway and immediately adjoining the same, to be called Belt A;

"(2) A belt of fifteen miles on either side of the railway, adjoining Belt A, to be called Belt B;

"(3) A belt of twenty miles on either side of the railway, adjoining Belt B, to be called Belt C;

"(4) A belt of twenty miles on either side of the railway, adjoining Belt C, to be called Belt D; and

"(5) A belt of fifty miles on either side of the railway, adjoining Belt D, to be called Belt E.

3. "The even-numbered sections in each township throughout the several belts above described shall be open for entry as homesteads and pre-emptions of 160 acres each respectively.

4. "The odd-numbered sections in each of such townships shall not be open to homestead or pre-emption, but shall be specially reserved and designated as Railway Lands.

5 "The Railway Lands within the several belts shall be sold at the following rates, viz:—In Belt A, \$5 (five dollars) per acre; in Belt B, \$4 (four dollars) per acre; in Belt C, \$3 (three dollars) per acre; in Belt D, \$2 (two dollars) per acre; in Belt E, \$1 (one dollar) per acre; and the terms of sale of such lands shall be as follow, viz: —One-tenth in cash at the time of purchase; the balance in nine equal annual instalments, with interest at the rate of six per cent. per annum on the balance of purchase money from time to time remaining unpaid, to be paid with each instalment.

6. "The Pre-emption Lands within the several belts shall be sold for the prices and on the terms respectively as follow :—In the Belts A, B and C, at \$2.50 (two dollars and fifty cents) per acre; in Belt D at \$2 (two dollars) per acre; and in Belt E at \$1 (one dollar) per acre. The terms of payment to be four-tenths of the purchase money, together with interest on the latter at the rate of 6 per cent. per annum, to be paid at the end of three years from the date of entry; the remainder to be paid in six equal instalments annually from and after the said date, with interest at the rate above mentioned on such portions of the purchase money as may remain unpaid, to be paid with each instalment.

7. "All payments for Railway Lands, and also for Pre-emption Lands, within the several Belts, shall be in cash, and not in scrip or military or police bounty warrants.

8. "All moneys received in payment of Pre-emptiom Lands shall

inure to and form part of the fund for railway purposes, in a similar manner to the moneys received in payment of Railway Lands.

9. "These provisions shall be retro-active so far as relates to any and all entries of Homestead and Pre-emption Lands, or sales of Railway Lands obtained or made under the Regulations of the 9th of July, hereby superseded; any payments made in excess of the rate hereby fixed shall be credited on account of sales of such lands.

10. "The Order in Council of the 9th November, 1877, relating to the settlement of the lands in Manitoba which had been previously withdrawn for railway purposes, having been cancelled, all claims of persons who settled in good faith on lands under the said Order in Council shall be dealt with under these provisions, as to price of Pre-emptions, according to the Belt in which such lands may be situate. Where a person may have taken up two quarter-sections. under the said Order in Council, he may retain the quarter-section upon which he has settled, as a Homestead, and the other quartersection as a Pre-emption, under these provisions, irrespective of whether such Homestead and Pre-emption may be found to be upon an even numbered section or otherwise. Any moneys paid by such person on account of the lands entered by him under the said Order in Council, will be credited to him on account of his Pre-emption purchase, under these provisions. A person who may have taken up one quarter-section under the Order in Council mentioned will be allowed to retain the same as a Homestead, and will be permitted to enter a second quarter-section as a Pre-emption, the money paid on account of the land previously entered to be credited to him on account of such Pre-emption.

11. "A.' entries of lands shall be subject to the following provisions, respecting the right of way of the Canadian Pacific Rail...ay, or of any government colonization railway connected therewith, viz :

a. "In the case of the railway crossing land entered as a Homestead, the right of way thereon, and also any land which may be required for station purposes, shall be free to the Government.

b. "Where the railway crosses Pre-emptions or Railway Lands, entered subsequent to the date hereof, the Government may take possession of such portion thereof as may be required for right of way or for station grounds or ballast pits, and the owner shall only be entitled to claim payment for the land so taken, at the same rate per acre as he may have paid the Government for the same.

c "In case, on the final location of the railway through lands unsurveyed, or surveyed but not entored for at the time, a person is found in occupation of land which it may be desirable in the public interest to retain, the Government reserves the right to take possession of such land, paying the squatter the value of any improvements he may have made thereon. 12. "Claims to Public Lands arising from settlement after the date hereof, in territory unsurveyed at the time of such settlement, and which may be embraced within the limits affected by the above policy, or by the extension thereof in the future over additional territory, will be ultimately dealt with in accordance with the terms prescribed above for the lands in the particular belt in which such settlement may be found to be situate, subject to the operation of sub-section c of section 11 of these provisions.

13. "All entries after the date hereof of unoccupied lands in the Saskatchewan Agency, will be considered as provisional until the railway line through that part of the territories has been located, after which the same will be finally disposed of in accordance with these provisions, as the same may apply to the particular belt in which such lands may be found to be situated, subject, as above, to the operation of sub section c of section 11 of these provisions.

14. "With a view to encouraging settlement by cheapening the cost of building material, the Government reserves the right to grant licenses, renewable yearly, under Section 52 of the 'Dominion Lands Act, 1879,' to cut merchantable timber on any lands situated within the several belts above described, and any settlement upon, or sale of lands within, the territory covered by such licenses, shall for the time being be subject to the operation of such licenses.

15. "The above provisions, it will, of course, be understood, will not affect sections 11 and 29, which are public school lands, or sections 8 and 26, Hudson Bay Company's lands."

Any further information necessary may be obtained on application at the Dominion Lands Office, Ottawa, or from the agent of Dominion Lands, Winnipeg, or from any of the local agents in Manitoba or the Territories.

By order of the Minister of the Interior,

J. S. DENNIS, Deputy of the Minister of the Interior.

LINDSAY RUSSELL, Surveyor-General.

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APPENDIX C.

CHANGE OF ALLEGIANCE.

Canada, being part of the British Empire, the emigrant from the United Kingdom to any of the Provinces or Territories of the Dominion of Canada makes no change in his nationality or allegianceby settling there. The emigrant to the United States must, on the other hand, abjure his own country absolutely and entirely, as will be seen by the following oaths, which each immigrant must take in order to become a citizen of the United States:—

Declaration of Intention.

I, Robert Brown, do declare on oath, that it is *bond fide* my intention to become a citizen of the United States, and to renounce for ever all allegiance and fidelity to all and every foreign Prince, Potentate, State and Sovereignty whatever; and particularly to Victoria, Queen of the United Kingdom of Great Britain and Ireland.

ROBERT BROWN.

Sworn in open Court,

this

ORLANDO DAGGET, Clerk.

Oath at the Time of Admission to Cilizenship.

1, Robert Brown, do solemnly swear that I will support the Constitution of the United States, and that I do absolutely and entirely renounce and abjure all allegiance and fidelity to every foreign Prince, Potentate, State or Sovereignty whatever; and particularly to Victoria, Queen of the United Kingdom of Great Britain and Ireland, of whom I was formerly a subject.

ROBERT BROWN.