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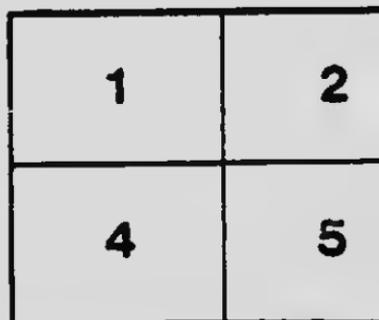
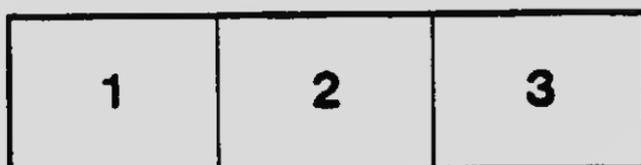
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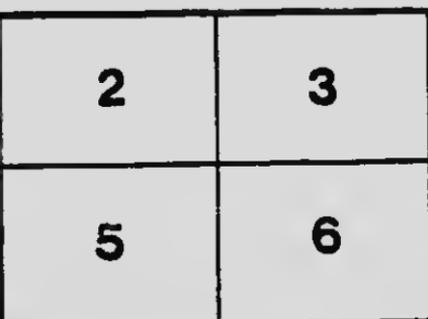
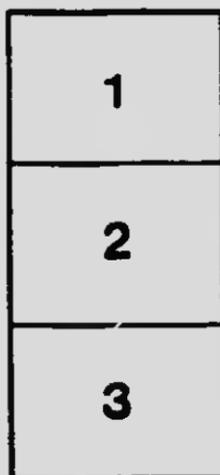
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The Province of Quebec

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THE Province of Quebec ranks second among the Provinces of the Dominion of Canada, both with respect to size and population. British Columbia is larger and the Province of Ontario has a greater number of inhabitants.

The Province of Quebec contains a superficial area of 347,000 square miles. It is as large as France and Germany combined and three times as large as the Kingdom of Great Britain and Ireland.

By the census of 1901, the population of Quebec numbered 1,648,898.

The Province of Quebec extends from the east to the west from l'Anse au Blanc-Sablon at the entry of the straits of Belle-Isle, the gate way to the Atlantic Ocean, to Lake Témiscamingue which forms its western limit. These two places l'Anse au Blanc-Sablon and Témiscamingue are situated, the first in longitude 57° west and the second in 79° 30 west, meridian of Greenwich. From the south to the north the Province extends from the 45th to the 53rd parallel of latitude, thus comprising eight degrees of latitude and more than twenty-two of longitude.

This vast extent of territory, containing at present a population of hardly 1,700,000 souls, will nevertheless in the near future attract the attention of all civilized nations and of capitalists in particular, as the natural conditions of the country are such that human activity will here find an admirable field for the development of the very largest modern industries.

The Province of Quebec contains the largest city and does the greatest amount of external trade. Her ports and her great river are the gateway to all that portion of Canada that lies beyond the provinces by the sea and extends westward to the Rocky Mountains and the Pacific Ocean. In natural resources, also, Quebec stands in the front rank of the Canadian Confederation. Her soil for the most part is exceedingly fertile and well adapted to the most profitable kinds of farming; her forests are comparatively boundless in extent, and contain the most valuable varieties of timber; her mineral wealth is still largely undeveloped, but already exceedingly valuable deposits of iron are being worked, and many others are known to exist. Useful structural material abounds in almost every district, limestone, marble, granite and sandstone; gold has been found in paying quantities in several localities, and copper is being mined. Her fisheries are among the most extensive and the most productive of any in the world, and give employment to a large number of people living in the eastern part of the province. The inland waters are well stocked and thousands of sportsmen seek them each season.

One of the oldest of all crafts, that of the trapper, has still a wide field for its exercise in those vast tracts which lie to the north and west, and still await the axe of the pioneer. Quebec is a province that possesses great possibilities of future growth.

Her position in the Canadian Confederation, and in fact her position on this continent, is unique. Her laws, her language, her traditions, are not those of the other provinces with which she is linked in national

life. Quebec is the New France that Champlain founded, that Frontenac defended, that Vaudreuil surrendered. One hundred and forty-five years have passed since the flag of France ceased to wave over the valley of the St. Lawrence. To-day the French language is the mother tongue of a million and a half of its inhabitants, French civil law prevails and the church of the French-Canadian people enjoys practically the same rights and privileges that it enjoyed under the flag of the Bourbons.

Measuring from Lake Temiscamingue east to Auseau Blanc-Sablon in the Straits of Belle Isle the length of the province is nearly 1,000 miles, and its breadth is 300. Its area, including the islands, the most important of which are Anticosti, Magdalen, 351,873 square miles.

The surface of the country is exceedingly varied and picturesque, embracing several mountain ranges, rolling hills, numerous rivers, several of which are of the largest size. The lakes number thousands, great and small, and the forests cover vast tracts still unsettled and awaiting the axe of the lumberman and the clearing of the pioneer. The older settled portions of the Province are a beautiful and exceedingly productive farming country. The upper portion of the valley of the St. Lawrence and the valley of the Richelieu are level like the prairies of the far West.

Throughout the greater part of its length the Province of Quebec is traversed by the River St. Lawrence which, from its source in the very center of the American continent 3,500 miles from its outlet on the Atlantic, flows into Lake Superior, the first of the great fresh water inland seas of America where it seems for ever lost to view : it however leaves it by the Sault Sainte-Marie and enters Lake Huron where it is once more swallowed up, again to reappear under the name of the river Sainte-Claire by which it reaches Lake Erie, from which by the river Niagara it flows into Lake Ontario which it finally leaves under its true name and

runs between its banks in the Province of Ontario and the United States until it reaches the island of Saint-Regis. At this point it enters the Province of Quebec, through which it runs for the remainder of its length, a distance of over 1,300 miles dividing the Province into unequal and very different parts, until it reaches the Gulf which bears its name and through which its enormous volume of water is discharged into the Atlantic Ocean.

Government

A change in the form of government took place in 1791 when the colony was divided into Upper and Lower Canada, the dividing line being practically identical with that now dividing the Provinces of Ontario and Quebec. Two parliaments were set up, each consisting of the Crown represented by a governor or lieutenant-governor, an appointed legislative council and an elective assembly. The governor was assisted by an executive council, but it was not responsible to the assembly or to the people. Out of this finally grew those troubles which culminated in the uprising of 1837-38 and this led to the Union of 1841, the recognition, and finally the adoption of the principle of government by the Crown through ministers responsible to the elective assembly of the legislature. In 1867, Quebec entered confederation and became a part of the Dominion of Canada.

The government of the province is in the hands of a lieutenant-governor, appointed for five years by the Governor-General upon the advice of his ministers. The Lieutenant-Governor is assisted by an executive council or cabinet whose members hold seats in the Legislature, and who must possess the confidence of a majority of the members of the popular branch. There are usually 6 ministers with portfolios and 2 without.

These portfolios are :

1. Crown Lands.
2. Attorney-General.

3. Agriculture.
4. Public Works and Colonization.
5. Secretary.
6. Treasurer.

THE LEGISLATIVE COUNCIL—The Legislative Council is composed of 24 members, named for life by the Lieutenant-Governor in Council.

A legislative councillor must be at least thirty years of age and be the owner of property in the division which he represents of a value of four thousand dollars. He must, moreover, be a resident of the Province. All legislation adopted by the Legislative Assembly must be approved by the majority of the members of the Legislative Council, before being presented to the Lieutenant-Governor who by according his sanction, gives to every "Bill" passed by the two Houses, the force of law.

Besides their right to approve or reject the Bills adopted by the Legislative Assembly, the members of the Council have the further right of introducing, discussing and adopting public measures subject to their ratification by the Legislative Assembly.

The duties of the council are particularly to examine and control the legislation adopted by the Legislative Assembly.

THE LEGISLATIVE ASSEMBLY.—The Legislative Assembly is composed of 74 members elected by the 74 counties or electoral colleges of the Province of Quebec.

Each Legislature lasts for five years. Each year the members must be summoned to a session by the Executive Council to attend to public business, grant the necessary credits to the various branches of the administration, enact new laws and amend the old.

Besides the power of enacting laws, the Legislative Assembly possesses also in conjunction with the Legislative Council, executive powers, since the ministry, which governs the country is composed strictly of a committee of its members.

The Legislative Assembly has alone the power to overthrow the Ministry which fails to carry on the Government in accordance with the wishes of the representatives of the people ; as also it alone has the right to introduce measures concerning the creation or employment of the public revenues.

To be eligible to the Legislative Assembly, the candidate must be a British subject, be twenty-one years of age and not affected by any legal disability.

The Legislative Assembly is presided over by one of its members called "The Speaker" who holds his position until the dissolution of the House which has elected him. He has not the right to vote, except in case of a tie or an equality of votes. The members receive a sessional indemnity of \$800.00. The laws against bribery and corruption and for the maintenance of the independence of Parliament are very severe. All cases of contestation in electoral matters are decided by the judicial tribunals alone.

Administrative Divisions

For administrative purposes the Province of Quebec is divided :—1. Into 74 counties or electoral colleges ; 2. 24 electoral divisions, each one of which is represented by a Legislative Councillor ; 3. 21 judicial districts ; 4. Registration divisions ; 5. And lastly into a certain number of local and parish municipalities which regularly increases according to the development of the country.

The county is a portion of the territory of the province the affairs of which are administered by a council composed of the mayors of the parishes comprised within the limits of the county. There are generally a Circuit Court and Registry Office at the chef-lieu (business center) of the county.

The county has both a political and a civil existence. It is created by the Provincial Legislature and is the basis of municipal organization. It is composed of a certain number of parishes or local municipalities.

The County Council is presided over by a Prefect. The Prefect is named by the mayors and chosen from among themselves in the month of March of each year.

The County Council takes cognizance of matters common to the various municipalities within the limits of its jurisdiction. Its meetings must be held at the chef-lieu of the county. The chef-lieu is practically the capital of the county and is generally found in the most central parish of the county.

Population

According to the census of 1901, the population of the Province of Quebec is 1,648,898 souls. In 1891 it was 1,488,535; in 1881, 1,359,027, and in 1871, 1,191,516, which makes for this period of thirty years an increase of 457,385, viz., 38.39 per cent., or an annual average of 1.27 per cent.

From the point of view of origin, the population is divided as follows:—French, 1,322,115; English, 114,710; Irish, 114,642; Scotch, 60,068; German, 6,923; Jewish, 7,607; Indians, 9,166; others, 13,467. The French form 80.18 per cent.; the English, 6.23 per cent.; the Irish, 6.22 per cent., and the Scotch, 3.64 per cent.

In and near the city of Montreal there is an English speaking population of 112,450; in the southern and eastern part of the province there is an English speaking population of 89,550; and in the Ottawa valley, 42,200. In the City of Quebec, the provincial capital, there is an English speaking population of about 10,000.

The population of the seventeen cities and principal towns of the province aggregates 505,061, which in 1901 was divided as follows:—Montreal, 316,973; Quebec, 68,840; Hull, 13,993; Sherbrooke, 11,765; Valleyfield, 11,055; Three Rivers, 9,989; Levis, 7,783; St. Hyacinthe, 9,210; Sorel, 7,057; Lachine, 5,561; Fraserville, 4,569; Joliette, 4,220; St. John's, 4,030; Chicoutimi, 3,826; Granby, 3,773; St. Jérôme, 3,619; Magog, 3,515.

Climate Conditions

Extending over such a great area it is only natural to expect considerable variety of climate in the Province of Quebec; but there are everywhere these prevailing features: cold winters, short springs, and long, bright, sunny summers. During the latter part of March, the snow begins to disappear, and the sunshine and warm showers of April prepare the ground for the reception of crops. Grain is sown during the latter part of April, and potatoes and corn are planted by the middle of May, except in the northern parts of the province where seed time is about two weeks later. Warm summer weather sets in during June and continues well into September. July is the haymaking month, and the grain crop is harvested during August and early in September. Cattle graze from the middle of May until the last of October and sometimes well into the month of November. Snow usually falls in November. The snowfall in the part of the province East of Montreal is considerably heavier than elsewhere, and winter there is longer and more severe, but the cold is modified by the dry bracing atmosphere which renders winter agreeable and healthy. The mean summer temperature averages 58.3 degrees and the mean winter temperature 15 degrees. The average rainfall is 28 inches, and the average snowfall 91 inches.

The snow instead of being a drawback is a great benefit to the country. It protects the dormant vegetable life from the severe frosts, and it is a country saying, that plenty of snow means a good hay crop in the following summer. Snow is also necessary for good winter roads, and without it, lumbering operations would be almost at a standstill.

Apples do well in almost all parts of Quebec, and excellent wheat is ripened in the Lake St. John Region north of Quebec.

Autumn is a charming season throughout the Province; the air is cool and the sunshine bright and mel-

low. The changing foliage, especially of the maple and birch, paints the woodland hills in crimson and gold, and gives the whole landscape a matchless beauty. In winter the greater number of the days are bright with sunshine, and they are generally dry. The climate of the province is healthy and agreeable. The charms of its summer and the beauties and sporting attractions of its rivers and lakes draw to Quebec each season thousands of visitors from many parts of the continent, who come here to spend those months when the heat in southern cities is almost intolerable.

From a hygienic point of view, it is well known that there is no climate more healthy than that of the province of Quebec. That the climate is conducive to health and longevity is amply proved by the experience of old residents. The fevers, agues and malarial diseases which are frequently the scourge of newly developed countries, where the land is swampy or low-lying, are unknown in Quebec. Though this province is abundantly watered, the undulating surface secures a rapid flow of the natural drainage, and prevents the accumulation of stagnant water or the formation of fever-breeding marshes.

Water-ways

We have already spoken of the St. Lawrence and of the great facilities it affords to navigation since steamers of the largest tonnage are able at all times and without delay to ascend it as far as Montreal. The St. Lawrence has three principal tributaries which are themselves really all large rivers.

1°. THE OTTAWA.—Which takes its rise in lake Capmechigama falls into the St. Lawrence near Montreal after a navigable course of nearly 800 miles.

The extent of land watered by the Ottawa and its tributaries is about 60,180 miles, of which 19,957 are in the Province of Ontario, and 50,324 in the Province of Quebec, which figures united together represent a superficial area of 38,451,200 acres.

The basin of the Ottawa contains nine entire counties, among which are included Pontiac, with its 21,000 miles or 13,500,000 square acres; Ottawa which comprises 6,700 miles as 4,280,000 acres and lastly Argen-teuil which contains at least 600,000 acres. Still in this vast extent of country there are not more than 200,000 inhabitants.

In this region are found Lakes Keegrawa, Victoria and Kekabonka, the lengths of which vary from 30 to 50 miles and numbers of lakes of lesser importance which have caused the region to be named "The Zone of the Lakes."

The principal tributaries of the Ottawa are the river du Moine, with a course of 130 miles, the Black river, 135 miles, the river Gatineau, 260 miles, the river Coulonge 160 miles, the river La Rouge, 120 miles, the North river, 70 miles and the river L'Assomption, 90 miles.

In this region also is found Lake Temiscamingue which at the 47° of latitude North, separates the Province of Quebec from that of Ontario. This lake is 75 miles long, with a width varying from 4 to 8 miles. It is navigable for vessels of large tonnage and the basins of the rivers flowing into it contain an area of not less than 18,000,000 acres.

The land in this region is admirable for agricultural purposes and under the name of the Temiscamingue region has become one of the portions of the Province the most sought after for purposes of colonization.

2. THE ST. MAURICE.—The St. Maurice runs from the east to the west over a course of 350 miles in length and empties itself into the St. Lawrence near the town of Three Rivers (lat. north 26-25').

The numberless rapids, cascades and falls to be found along the Saint Maurice and its tributaries form together an admirable collection of hydranlic powers, while the forest which still covers the greater part of the ground, will for years to come, supply material for

the factories and work-shops which may be established later on, the construction of which has already been commenced on a very large scale.

Among the principal falls to be met with along the St. Maurice are the falls of La Tuque, of Grand'Mère, of Shawenegan, of des Piles and of des Grés.

The falls of La Tuque.— Situated at the head of the navigation of the river, surrounded by fertile lands, acting as the intermediary of the trade of the Hudson's Bay Company with Three Rivers, in easy and comparatively close communication with lake St. John by the river Croche, provided with immense retaining booms to hold the timber and lumber of commerce brought down by the tributaries of the St. Maurice, the present post of La Tuque may look forward to a rapid growth and to its speedy transformation into a flourishing city.

The recent erection at Grand'Mère of two enormous constructions, one for the manufacture of pulp and the other for that of paper, has established in that locality, which a few years ago was absolutely barren of habitation or cultivation, the foundation of a center of population and industry which already counts a population of more than three thousand souls.

The same may be said of the falls of Shawenegan where vast enterprises have been undertaken and where works of various kinds have been established, among others, paper and pulp mills, establishment for the manufacture of carburet of calcium, of materials for railroads, &c. ; as a result the District of Three Rivers which up to the present has attracted but little attention, will in the near future become one of the most active fields of labor in the Province.

The Mattawin.—This river is the largest tributary of the St. Maurice : the surrounding country is covered with magnificent forest and cut up by small rivers and lakes abounding in fish. In the angle formed by the meeting of the St. Maurice and the Mattawin, can be

counted no less than 70 lakes in which trout, pike and perch of the choicest are found in great abundance.

The other tributaries of the St. Maurice, besides those named above are the grand and little Bostonnais, the La Trauche, the La Pierriche, the La Windigo, the La Shawenegan, the Au Rat, the La Flamand, the La Manouan and the river Au Ruban, without counting the feeders of these latter, which like so many small veins furrow the surface of the ground.

3. **THE SAGUENAY.**—The River Saguenay, the third grand tributary to the St. Lawrence, less important in its size, length and the number of its tributaries, is still of great importance owing to its enormous depth of one thousand feet which gives it the appearance of a Norwegian fjord or a narrow sinuous gulf running far into the country and which allows vessels of the largest tonnage to ascend 63 miles from its mouth to receive their annual cargoes of lumber. But it is above all of importance as the outlet of the Lake St. John, continually swollen by its large tributaries which flow principally from the distant reservoirs of the north, the inexhaustible sources of the largest water courses of the Province.

Entering Lake St. John at its western extremity under the name of the river Chamouchouane after having traversed nearly 200 miles of country, it leaves the lake at its opposite extremity under the names of the Grande and the Petite Décharge, two roaring outlets, which, having surrounded the island of Alma in their violent grasp, unite again a little further down to form the wonderful River Saguenay which from rapid to rapid and from fall to fall plunges forward and downward to the neighbourhood of Chicoutimi where it resumes its even and regular course which it maintains until it reaches Tadousac the point at which it discharges into the River St. Lawrence.

The principal tributaries falling into Lake St. John are, on the south, the Metahetchonane and the Ouatouchouane, on the east the La Belle Rivière, on the

west the Chamouchouane, on the north west the Ticouapee and the Mistassini, on the north and north-east the great and the little Peribouca.

The Perihouca is navigable for thirty miles from its mouth for steamers of ordinary size. It is an exceedingly long river, said to be four hundred miles to its source.

Above the Saguenay, the principal rivers discharging into the St. Lawrence are : the Maskinongé, the Batis-can, the Jacques-Cartier, the Montmorency, the Sainte-Anne, the Gouffre and the Malbaie. Below : the Port-neuf, the Bersimis, the Des Outardes, the Manicouagan, the Pentécote, the Moisie, the Saint-Jean, the Natashquan, the Mécatina and the Des Esquimault. All these rivers flow from the northern slope of the St. Lawrence ; the southern slope overtopped by the nearness of the mountains, is too narrow to give rise to considerable streams. Still there are rivers on the south shore of the St. Lawrence, which, although far from having as lengthy a course as those from the northern slope, are nevertheless water courses of great importance and most useful for travelling in the interior as well as for the working of factories and the various other industries to which they furnish an inexhaustible motive power. Such are the rivers Richelieu, Yamaska, Nicolet, Becancour, Chaudière, Etchemin, Rivière Ouelle, Rivière du Loup, Rimouski, Trois Pistoles, Rivière Verte, Metis, Blanche, Matane, Madeleine, &c., &c., without counting the net-work of rivers in Gaspesia, which include the Matapédia, Bonaventure, Grande Cascapédia, Nouvelle and the Restigouche. In a word the whole country is furrowed with an immense network of water courses of all sizes without counting the large rivers and the infinite number of lakes chained and bound to one another by the pleasant and picturesque rivers running between them. The principal water courses of the province would alone give a liquid chain of more than ten thousand miles in length.

The action of the currents has contributed to estab-

lish a great inequality in the appearance and formation of the north and south banks of the River St. Lawrence.

In the harmonious outlines of the south shore, is seen the action of a continuous and regular movement of the tide, whereas the north shore, against which the tide is continually beating in the flow and the ebb, is much more uneven, more cut up into creeks, more rugged with headlands.

The Betsiamis, the river des Outardes, the Manicouagan, the Moisie, the Mingan, the St. Augustin, the river des Esquimaux, and others divide themselves up in the sea into small deltas of sand and mud. In their upper waters all these rivers resemble one another in their chains of lakes in their rapids and water falls.

All these water courses abound with fish especially with salmon and trout. Between these large rivers are a multitude of smaller streams even better stocked with fish than the large ones, all of them are fished with nets by the riparian proprietors.

The Grand-Nord, says Mr. Henri de Puyjalon in an interesting report which he, four years ago, addressed to the Minister of Lands, Forests and Fisheries, is that part of Labrador, belonging to the Province of Quebec which extends from Kegaska ($61^{\circ}.20'$) on the west, to Blanc-Sablon ($57^{\circ}.7'$) the limit of the Province on the east. Along the whole of this coast the shore line is uninterruptedly cut up, indented and penetrated by creeks, coves and narrow bays, long and often very deep, almost always hidden from the outside view by innumerable islands and islets.

Besides those above referred to, there are four, other large rivers which up to our day have not been of any great use, because neither trade nor colonization have penetrated far enough to the north, but which, thanks to the new projected railways, will in the near future, play a more important part in the economic organization of the Province. When the time comes that the vast regions through which they flow shall be joined to the South by the iron road, capital will go

there as it has elsewhere to assure the working and development of the riches of the forest and the ground by utilizing the natural forces which nature has so prodigally distributed even in these distant regions.

The names of these rivers are the Hamilton, the East Main, the Rupert, and the Nottaway. The first is well known as one of the largest rivers of the world. The other four are less well known, but are none the less almost as large. Thus the Nottaway, unknown even in Canada, up to 1895, is nearly 400 miles in length, measured by the windings of its course. It reaches a width of two and a half miles. It is the largest river of the Hudson Bay country. The Rupert is the outlet of the Lakes Great and Little Mistassini, which have a joint area of 756,000 acres, or over 1180 square miles. The course of this river exceeds 300 miles in length. It falls into James Bay. The East Main is another large river which rises about 325 miles east of James Bay, and whose length, measured by the sinuosities of its course, is over 450 miles. The length of the Hamilton river which empties its waters into the North Atlantic exceeds 700 miles, and an idea may be formed of the volume of this river from the fact that seven only of the lakes furnishing it the tribute of their waters have a collective surface of 1,038,000 acres.

That portion of the St. Lawrence comprised within the Province of Quebec, from the Strait of Belle Isle to St. Regis, measures 1,045 miles in length. It has been calculated that this river discharges every day into the ocean, 11,423,200,364 gallons of fresh water, or about 18,000,000 gallons a minute.

Railways and Maritime Service

In the province there are 3,471.51 miles of railway (steam) in operation, or one mile of railroad for every 421 persons of the population. The principal systems forming this total are those of the Canadian Pacific, 1,162.81 miles; the Grand Trunk, 469.87 miles; the Intercolonial, 449.98 miles; the Quebec & Lake St.

John, 249.92 miles ; the Great Northern, 200.27 miles, and the Central Vermont, 121 miles. There are in addition 140.64 miles of electric railways, making a total of 3,612.15 miles of railway. At the time of Confederation, in 1867, there were in the province only 515.25 miles of railway. There is at present one mile of track for every 100 square miles of area. The Intercolonial extends from the boundary of New Brunswick to Montreal. The Canadian Pacific line runs from Quebec city along the north shore of the St. Lawrence River to Montreal, and from thence westward along the Ottawa River, and also through the country between the St. Lawrence and the International Boundary. The Great Northern begins at Quebec city and, crossing the Ottawa River at a point about seventy miles west of Montreal, connects with the Canada Atlantic Railway, and thus forms a trunk line to the Great Lakes.

The tonnage of sea-going vessels carrying cargoes during the course of a year to and from the ports of the province is in round numbers three million tons, and in the coasting trade there are annually employed vessels of a total tonnage of more than seven million tons. The tonnage of British ships employed in both classes of trade is almost six and a half million tons a year. (See Montreal and Quebec.)



Agriculture

32

FOR many years the population of the Province of Quebec was comprised almost exclusively of farmers who devoted themselves principally to the raising of crops of wheat and other cereals, the magnificent valley of the St. Lawrence with its immense plains furnishing them with every facility for the carrying on of that industry. The population, which was small in numbers and which increased so slowly during the 17th and 18th centuries, was confined chiefly to the parishes bordering the St. Lawrence and business communications were limited to exchanges between the neighbouring parishes. But economic conditions having become entirely different throughout the world, a prodigious change having taken place in all branches of human endeavour, the Province of Quebec irresistably drawn into the movement, speedily effected such changes in its then existing conditions, as to have apparently become a new country. In agriculture the evolution was profound, less extensive and varied no doubt than in business of all kinds, but nevertheless sufficiently pronounced to compel the agriculturist to adopt methods absolutely new in the management of his land and in discovering new outlets for the new products which he raised from the same. The dairy industry which concentrates in itself so much of the business of the farm was started at this period, and in a very few years, took on very large proportions indeed.

Owing to the enormous production of wheat in the North West, which, immediately upon being put under the plough, became one of the three great granaries of the world, the Province of Quebec was obliged to aban-

don the cultivation of that grain which had formerly been one of her great sources of wealth, and devote all her attention and energy to the dairy industry, a new business into which she was about to enter, well suited to the country and of which undoubtedly she will soon become the mistress, as all the conditions of climate and cultivation which it is possible to desire for the assurance of its success are found within her borders.

It was soon understood that in order to achieve success in the dairy industry, one of the first things necessary was the economic production of milk and that this itself depended largely upon the improvement of the milch cow.

This improvement has now been carried on for a certain number of years and the result has been such that our dairy industry, at first small and confined to domestic requirements alone, now brings in millions of dollars to the Province, as the reader can ascertain in the pages devoted to this industry.

General Organization

At the head of the agricultural organization of the Province is the Department of Agriculture, which is composed of a minister, who is at the same time a member of the executive Council of the Province; a deputy, who is called assistant minister, a general secretary whose duties are most important and varied an accountant and a sub-accountant and lastly a secretary of the council and of agricultural societies.

THE COUNCIL OF AGRICULTURE.—The Council of Agriculture was established by an act of the Legislature of Quebec and is composed of 23 members.

Agricultural Societies

The Agricultural Societies are County Societies in distinction to the Farmers' clubs, the operations of which are limited to the parishes in which they are organized.

There are now 75 agricultural societies in the Province with a membership of 18,295 and last year they expended the sum of near \$60,000 upon the improvement of agriculture.

Their powers are defined in the following articles of their by-laws :

1. By holding meetings for discussion and for hearing lectures on subjects connected with the theory and practice of improved husbandry.
2. By promoting the circulation of agricultural papers ;
3. By offering prizes for essays on questions of theoretical or practical agriculture ;
4. By importing or otherwise procuring animals of superior breeds, new varieties of plants and grain, and seeds of the best kinds ;
5. By organizing ploughing matches, competitions respecting standing crops and the best cultivated farms ;
6. By holding exhibitions and by according thereat premiums for the raising or introduction of superior breeds of stock, the invention or improvement of agricultural implements and machines, the production of all kinds of grain or vegetables, for excellence in any agricultural productions or operations, and generally for the improvement of domestic and manufacturing industry, and for works of art.

During the last 4 or 5 years these societies have interested themselves in a branch which had hitherto been neglected. In many places by the assistance of Government grants and facilities of payment, these societies have been able to improve the horses of the country by the importation of thoroughbred stallions.

Each agricultural society receives from the Government an annual grant of money in proportion to the number of its members.

Farmers' Clubs

Of farmers' clubs there are 698, each receiving an annual grant from the Government ; they have a total

membership of 52,700 and in the year 1903 they expended \$85,000 in the encouragement of agriculture.

Each club is managed by seven directors and their object is the improvement of agriculture and horticulture.

1. By holding meetings for discussions and for hearing lectures on subjects connected with the theory and practice of improved husbandry.
2. By promoting the circulation of agricultural papers.
3. By offering prizes for essays on questions of theoretical and practical agriculture.
4. By importing or procuring animals of superior breeds, new varieties of plants and grain and seeds of the best kinds.
5. By organizing ploughing matches and competitions respecting the best cultivated farms.
6. By procuring books, revues and newspapers treating of agricultural subjects for the use of their members.
7. By promoting and favoring experiments in farming, in manure and in improved agricultural machinery and implements. Many of these clubs hold annual meetings for the object, above referred to.

They have abandoned having exhibitions but organize instead many competing in crops, principally with the object of increasing the production of fodder, and roots and the employment of fertilizers.

In addition to the societies above mentioned, there are a certain number of organizations created by or under the control of the Government whose sole object is the education of the agricultural classes in the ways of progress. Only the most important of these will be mentioned here.

SCHOOLS OF AGRICULTURE.—There are three schools of agriculture in the Province, that of Oka, that of Ste. Anne de la Pocatière and that of Compton, in which the pupils receive free of charge a theoretical and practical training in all the varied branches of agriculture.

THE GIRLS TRAINING SCHOOL OF ROBERVAL (*Ecole Ménagère*). At this school young girls are taught all the branches of domestic and rural economy necessary to fit them for the positions of good housekeepers, well prepared and capable of performing their duties on a farm.

The model farm attached to this institution contains 100 acres of land and is stocked with everything necessary for a complete course of practical farming.

School of Veterinary Art

This School, which is under the control of the Minister of Agriculture, has been in existence for the past twelve years and is affiliated with the Laval University of Quebec.

In return for an annual grant which it receives from the Provincial Government, the school is bound to give a free course of lectures to such students holding fellowships as the Government may send to it.

The complete course lasts three years and comprises every thing necessary for obtaining a diploma of the veterinary Art

The school possesses a museum with a varied and valuable collection of objects.

School of Arts and Manufactures

There are nine schools of Arts and Manufactures in the Province; they are under the control of the Minister of Agriculture and are located at Montreal, Quebec, Levis, Sherbrooke, Sorel, Three Rivers, Saint-Hyacinthe, Valleyfield and Fraserville.

The following subjects are taught in these schools: free hand, architectural and mechanical drawing, lithography, shoemaking, modelling, stair building, plumbing, and the art of cutting out ladies dresses.

Dairy School

A dairy school, receiving government assistance, has existed in St. Hyacinthe since 1892. It opens every

year at the beginning of Novem' and closes on the thirtieth of April of the following year.

The instruction given is on three principal subjects.

1. On the best methods :

For the production of milk in winter as in summer ;

For the making of butter and cheese ;

For testing milk.

2. The formation of inspectors of creameries and cheese factories for existing and future syndicates :

3. The experimental study of new systems of dairy machinery and implements, and of any new process of manufacture, as well as to watch the progress made in the dairy industry.

A new school on the dairy industry will be opened in the Province in the course of next year ; it will be furnished with every improvement and device which progress has revealed or science has taught and nothing will be spared to make it a model of its kind.

Competition of Agricultural Merit

In 1890 the Provincial Legislature passed a law establishing competitions of agricultural merit in the Province.

The farms of those competing are visited by judges appointed by the government. The distinctions conferred upon the fortunate competitors are :

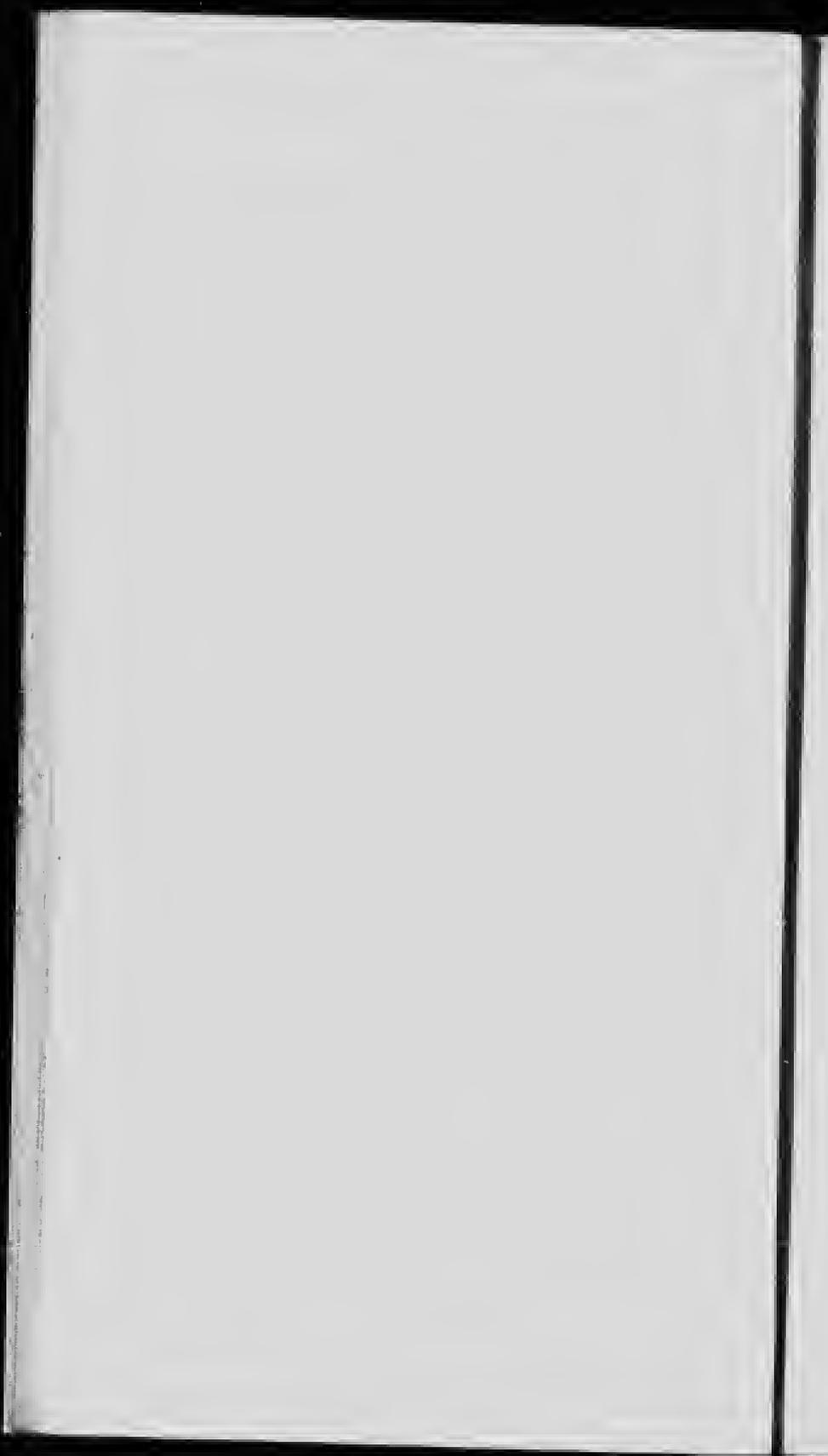
1. A diploma and a silver medal to the one who has obtained the degree of " distinguished merit " ;
2. A diploma and a bronze medal to the one who has obtained the degree of " great merit " ;
3. A diploma to the one who has obtained the degree of " merit " .

To obtain the " distinguished merit " , 85 points must be gained out of a possible hundred awarded for a perfect cultivation. For the " great merit " 75 points are required, while 65 will suffice for the " merit " alone.

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FRENCH CANADIAN FARM, COUNTY OF BERTHIER



The judges send in to the Minister of Agriculture a detailed report of the farm and of the method of cultivation of each competitor.

The reports are published every year and are of great value to the agricultural classes. The subjects which form the object of these competitions are agricultural book-keeping, drainage, manures, commercial fertilizers, wheat, grain for feeding purposes, green fodders, orchards, breeding, etc.

Competitions in Products of the Dairy

For the past four years, three competitions for butter and three for cheese have been organized each year by the Minister of Agriculture. For each competition the Minister collects twenty five samples of butter and the same number of cheese.

A chemical analysis of all the samples is made by an expert chemist, so as to point out to the makers the improvements necessary in their work, at the same time as they receive the remarks of the judges as to the qualities of the various samples. These competitions give very satisfactory results. They are an encouragement to all who are interested in the advancement of the dairy industry and at the same time furnish them with most valuable information.

There are four classes for butter and the same number for cheese. The maximum number of points which a competitor can obtain is one hundred.

The first class comprises the products which have obtained from 97 to 100 points, the second class those obtaining from 93 to 97 and the third class from 85 to 93 points.

The products obtaining less than 85 points are classed as inferior butter or cheese.

Each competitor receives a copy of the report of the judges and of the experts with the advice suggested by the examination of the products, for the improvement of their qualities.

The Minister further publishes a general report on the common and most serious defects noticed in the

products, examined at all these competitions, as well as the methods to be adopted to cause them to disappear.

Competition of Milch Cows

Convinced that the choice and selection of cows, with a view to the production of milk, is one of the first conditions of success in the dairy industry and with the object of making known the best animals of the Province, the Honorable Minister of Agriculture has instructed the Agricultural Societies and Farmers' Clubs to organize competitions of milch cows in which the return in milk both as to quantity and quality will be the only matter of consideration.

To facilitate and encourage these competitions the Minister supplies the registers to be kept. He further grants a special allowance to such agricultural association in each county, as shall offer the highest prizes at these competitions.

These should be parish competitions and not organized for the county generally. During the competition, the cows should be milked in the presence of the judges three times during two consecutive days, the two last milkings alone being considered in the competition. No cow giving less than thirty pounds of milk per day should be judged in the competition or entered in the register.

Roads

In the Province of Quebec for a long time travelling was a difficult undertaking. Most of the roads, miserably kept, presented a succession of deep ruts in most places and could only be driven over in vehicles specially constructed for the purpose; but at the present time, thanks to the assistance afforded by the Government during the last five years, road making has made considerable progress.

Since 1899, reports from the various Municipalities, which have acquired road repairing machines, have been sent in to the department. These reports all show that a great number of roads have been repaired

and that an undeniable progress in their improvement has taken place.

Realizing the importance of putting an end to this disastrous state of affairs the Minister of Agriculture offered to pay to each municipality the sum of seventy five dollars towards the purchase of a machine for repairing the roads.

This far sighted proposal bore immediate fruit and a fair number of municipalities took advantage of the offer of the Minister.

Further the County Councils have been asked to purchase stone breaking machines for metalling the roads and the Government comes to their assistance by paying half the price up to a sum of \$1200.00. In numbers of localities, there is noticed the desire to put an end to that spirit of inertness which has always prevailed and at the same time the determination to adopt all modern improvements both in methods and in implements which lead so surely and rapidly to the results desired to be attained.

The Dairy Industry

As stated above the dairy industry is to-day the leading branch of agriculture in the Province of Quebec and the better to assure the diffusion of the knowledge of the best methods of conducting it and the general advancement of this industry, the Province has been divided into regional districts in which syndicates of proprietors of creameries and cheese factories may be formed. There are now forty eight syndicates for the manufacture of cheese and each of the establishments belonging to or forming part of them is visited several times during the summer by inspectors, experts in the manufacture of the product.

These organizations are doing most valuable work.

The Government also employs seven general inspectors to visit the cheese and butter factories which are not connected with the syndicates. Their visits have already produced most excellent results

The local inspector has charge of a group of factories, situated in a comparatively limited district which he can easily visit in a month.

The result is that the factories in this district are visited regularly, the instruction afforded is the same to all and a greater uniformity in the quality of the product is assured.

In addition to the premiums granted for the construction of creameries and cheese factories, the Provincial Government assists in the construction of suitable buildings for the ripening of the cheese to the extent of from one to two hundred dollars, according to the dimensions of the building.

That the reader may form a correct idea of the growth of the trade in Canadian butter, let us draw attention to the comparative figures of the exportations to Great Britain for the years 1897 and 1898: the first year shows an exportation of 12,253,024 pounds, while in the following year it reached to 17,568,880 pounds and in 1902, 32,005,680 pounds.

The exportation of eggs and bacon has also grown enormously.

In 1897 Canada exported to England 5,687,690 dozen of eggs and in 1902, 11,353,825 dozen.

In 1897, 32,511,696 pounds of bacon were exported to Great Britain, while the following year, 1898, it had increased to 60,018,448 pounds, an increase of 90 per cent, and in 1902, it was 105,841,366 pounds.

The census of 1901 gave 549,454 as the number of milch cows in the Province of Quebec, against 490,997 in the census of ten years before, that of 1891.

The exportation of horses has fallen off since 1896, but that of cattle has more than doubled.

In 1896, Canada exported 104,451 head of cattle and in 1898 it had already reached the figure of 213,010 head.

Some years ago, by an arrangement with the Federal Government, several ocean steamship companies provided their vessels with cold storage compartments for

the transport in good condition of perishable objects, such as fruit and the products of the dairy. As a result the exportation of these products, especially from the Province of Quebec, has increased to an enormous extent; and Canadian butter has now an excellent name in the markets of Great Britain. A few years ago it was looked upon as only of third or fourth quality, while to-day it brings a much higher price in all foreign markets.

Two thirds of the creameries of Canada to-day may be said to be provided with refrigerating arrangements for the preservation of the butter from the commencement of its manufacture to the moment of its delivery. Butter importers from England who have visited Canada, declare that Canadian butter, freshly made, is in every respect the equal of the finest qualities of butter imported into Great Britain from other countries.

The steamers provided with cold storage compartments have a total capacity of 200,000 boxes of butter, which they carry, winter and summer from the Canadian ports of Montreal, Halifax and Saint-John to the ports of Great Britain doing business with Canada, such as London, Bristol, Liverpool, Manchester and Glasgow.

Farms

The Province of Quebec has an area above tide level of 225,198,561 acres, comprising 218,723,687 acres of land and 6,474,874 acres of water surface. Of the land area 6-60 p.c. is occupied as farms and lots. The average size of lots is 0.97 acres and of farms, 110.82 acres. Of the 20,441 lots under five acres, 51.31 p. c. are less than an acre each, and 48.69 p. c. are an acre or more; and of the 130,158 farms of five acres and over, 2.85 p. c. are five to 10 acres, 15.40 p. c. are 11 to 50 acres, 35.20 p. c. are 51 to 100 acres, 33.97 p. c. are 101 to 200 acres, and 12.58 p. c. are 201 acres or more. The land owned is 93.18 p. c. and the land leased or rented 6.82 p. c. of the whole area occupied as farms, while of the small area occupied as lots 84.30 p. c. is owned

and 15-70 p. c. leased or rented. Almost the whole extent of the land in lots is in an improved state, with 53-76 p. c. of it in crop and 27-59 p. c. in orchard and garden. The land in farms comprises 51-45 p. c. in an improved and 48-55 p. c. in an unimproved state. The unimproved land consists of 5,442,204 acres in forest and 1,560,960 acres in various other conditions, such as swamp, marsh, rock or waste land, and land in rough or natural pasture but not in a state fit for cultivation. Field crops, fruits and vegetables, and pasture to a large extent, occupy the improved land. But as part may be in fallow and part (like orchard and garden areas) may grow two crops in the year, and as pasture may include unimproved tracts, the extent devoted to the several purposes cannot be definitely apportioned. It is near enough to say that about 63-25 p. c. is in field crops, 0-78 p. c. in orchard, garden, vineyard and nursery, and the rest in pasture.

Values in the possession of farmers are estimated as follows (census 1901.)

Land	\$ 248,236,261
Buildings	102,313,893
Rent of land and buildings leased.....	1,039,212
Farm implements and machinery.....	27,038,205
Horses.....	24,164,149
Milch cows.....	20,757,611
Other horned cattle.....	6,629,784
Sheep.....	2,376,471
Swine.....	3,142,925
Poultry	1,166,314
Bees.....	251,203
Thorough-bred stock.....	1,133,611
Field crops.....	44,851,108
Fruits and vegetables.....	2,564,801
Nursery stock sold.....	64,124
Live stock sold during year.....	6,650,486
Meats and products of all animals slaughtered on the farm.....	8,006,328
Dairy products.....	20,207,826

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FRENCH CANADIAN HOMESTEAD, COUNTY OF ST. MAURICE



Wool	570,093
Eggs.....	2,007,320
Honey and wax.....	112,315
Maple sugar and syrup.....	1,356,480
Hired labour on farm, weeks.....	894,534
Value of hired labour.....	4,512,674

The average value of horses on a farm, is \$73.60 per head, of milch cows \$26.79, of other cattle \$11.09, of sheep \$3.63, of pigs \$7.71.

The total value of horses on each farm will average \$159.90, of milch cows \$151.16, of other cattle \$50.43, of sheep \$18.12, of pigs \$23.00, and that of poultry and bees \$9.57.

The milk and cream sold to creameries and cheese factories, to the amount of \$12,874,367, are included in the value of the products of the dairy. During the year of the census, there were 1992 establishments in operation in the Province, in 340 of which both butter and cheese were made, in 1207 cheese only and in 445 butter only, which combined produced 80,630,199 lbs. of cheese, worth \$7,957,611 and 24,625,000 lbs. of butter worth \$4,916,576 making a total of \$12,874,367; during the year of the preceding census there were in the Province 617 cheese factories and 111 creameries, the total production of which was valued at \$2,918,527. The increase in the value of the manufactured products of the dairy between 1890 and 1900 in the Province of Quebec therefore reached the sum of \$9,955,840 or 341 per cent.

During the past three years this increase has been accentuated and he is no optimist who asserts that before very long the products of the dairy industry in the Province of Quebec will reach a value of \$20,000,000 a year.

The production of bacon is another branch of the business of the farm which has lately shown a considerably increasing growth.

In 18 years Canada barely exported \$22,500,000 worth of bacou, while in the two years, 1902 and 1903

alone, the exportation reached the sum of \$28,230,000, almost the whole of which came from the Provinces of Ontario and Quebec.

The following figures will show the steady increase of Canadian Exportations and it will be noticed that since 1890 the ascending progression has been more rapid than ever before.

Year	Export of products of the farm	Total
1868.....	\$ 19,746,222.....	\$ 57,567,888
1869.....	20,952,109.....	60,174,781
1870.....	25,814,780.....	73,573,490
1871.....	22,462,430.....	74,173,618
1872.....	26,085,858.....	82,639,663
1873.....	29,238,357.....	89,786,922
1874.....	33,269,311.....	89,351,928
1875.....	29,958,865.....	77,886,979
1876.....	34,754,234.....	80,966,435
1877.....	28,909,993.....	75,875,393
1878.....	32,028,611.....	79,323,667
1879.....	33,729,068.....	71,491,255
1880.....	39,901,905.....	87,911,458
1881.....	42,628,546.....	98,290,823
1882.....	51,490,471.....	102,137,203
1883.....	43,102,862.....	98,085,804
1884.....	35,343,957.....	91,406,496
1885.....	39,855,397.....	89,238,361
1886.....	39,718,212.....	85,251,314
1887.....	43,073,172.....	89,515,811
1888.....	40,155,657.....	90,203,000
1889.....	37,308,818.....	89,189,167
1890.....	57,015,025.....	96,749,148
1891.....	39,634,599.....	98,417,296
1892.....	50,708,134.....	113,963,375
1893.....	53,785,989.....	118,564,352
1894.....	49,559,622.....	117,524,944
1895.....	50,106,898.....	113,638,803
1896.....	50,591,002.....	121,003,852

Year	Export of products of the farm	Total
1897.....	57,227,898....	137,950,253
1898.....	77,364,755....	164,152,083
1899.....	69,696,045....	158,896,903
1900.....	83,665,416....	191,894,723
1901.....	80,276,797....	196,487,932
1902.....	96,313,897....	211,640,286
1903.....	114,441,863....	225,849,724

Our total Exportations have doubled since 1896 and are five times as large as in 1867.

The exportation of agricultural products has doubled since 1896 and is now more than ten times greater than it was in 1867.

Commercial Increase

The following table shows the general increase of the great commercial countries of the world during the last year :

Country	Increase	Average
Canada.....	\$227,472,289	107.43
Japan.....	129,359,208	97.20
Cape Colony.....	87,031,400	52.50
United States.....	775,058,014	47.18
Italy.....	197,468,942	5.99
Germany.....	683,111,578	38.59
Belgium.....	206,037,529	34.84
Argentine Republic....	65,004,094	11.31
Switzerland.....	81,755,424	26.82
Great Britain.....	822,453,502	6.29
France.....	300,885,900	21.98

Canada leads with an average increase of 107.43 per cent.



The Public Domain

3



As stated before, the Province of Quebec occupies an immense territory, computed to contain 347,000 square miles, or 222,120,000 acres.

An order in Council of the Federal Government, dated the 8th July, 1896, established these figures.

Up to that time the Province was only admitted to contain 241,500 square miles, equal to 155,000,000 acres and her Northern boundary was fixed at the water-shed dividing the waters falling into the St. Lawrence from those falling into Hudson's Bay. But the various Provincial Administrations and more particularly the administration of which Mr. Mercier was the head, never ceased protesting against this unjustifiable limitation of frontier, which deprived the Province of a very considerable extent of territory to which she claimed the right.

The statement of the case, which Mr. Mercier presented to the Federal parliament in support of the claims of the Province contains the following declaration :

“ For her northern boundary the Province of Quebec should have the same frontier as the late Province of United Canada, that is to say the frontier of what was formerly New France, no matter what changes have taken place since then. Now if ancient documents, emanating from the first English Governors after the cession of New France, are consulted, it will be found that the Northern boundary of the late Province of Canada was formed by the shores of Hudson's Bay and of James' Bay a part of the former.

Consequently these shores form the frontier of the Province of Quebec. According to ancient records the earlier Governors of the colony, after the cession to Great Britain, held jurisdiction over the whole of this extent of territory".

After the presentation of the report of the committee of the Provincial House, the question of the Northern boundary of the Province of Quebec seems to have been in a way forgotten and experienced a long period of delay, until the day, when the Federal Government by an Order in Council of the 8th of July, 1896, adopted the conclusions of the report and fixed the line which it considered should be the Northern frontier of the Province. On the 11th of November following, the Government of the Province of Quebec notified the Government at Ottawa of its acceptance of this decision which was equivalent to a complete admission of her claims.

This vast accession of territory has been since divided into three distinct regions under the respective names of Ashuanipi, Abbittibi and of Mistassini.

Hamilton Inlet, where the Northern boundary of the Province terminates, is a deep indentation in the Labrador coast into which the large river Esquimaux is discharged at the 54th parallel of latitude. From there the North Eastern frontier follows the interior boundary of Labrador as far as l'Anse au Blanc-Sablon at the entrance to the Straits of Belle-Isle at the 51° 30 parallel of latitude North and the 57 parallel of longitude West.

Of the 222,000,000 of acres comprised in the Province of Quebec, about 10,680,000 had been conceded under the old Seigniorial tenure, which was in existence up till the year 1854 and 12,185,000 have been granted under letters patent or location tickets since the year 1860, leaving in round numbers close upon 200,000,000 acres which still form part of the public domain. This extent of country is the wilderness, but it is also the wealth of the country, the reserve of the future. This immense forest which seems to retire before advancing civiliza-

tion, is the domain which is open to the spirit of enterprise of the people of Canada. Into this vast wilderness the woodsman and the colonist make their way to change the uncultivated soil into fields of yellow grain and perhaps into cities filled with the sounds of human enterprise. Such is the march of progress, such the result of labor in its attack upon primitive nature.

It is almost impossible to establish the exact superficial area of the forests and wood lands of Canada. It has been possible, it is true, lately to determine the exact extent of the Province of Quebec, from ancient calculations, the incorrectness of which, however, has been finally pointed out. In official books and statements made from them, the Province was only given a superficial area of 227,000 square miles, while in reality it enclosed 241,460 square miles within its limits.

Add to these figures the 105,468 miles of new territory to the north, admitted to form part of the Province of Quebec by an order of the Federal Parliament of the 8th of July, 1896, and we have the grand total of 346,928 square miles, almost as large as the entire superficial area of France and Prussia combined. Putting the wood lands of the Province down approximately and in round figures, at 225,000 square miles, it can be imagined upon what an almost unlimited scale the lumber business of the country may be carried on for a long period of years. There are about thirty-five kinds of trades or industrial pursuits which derive their material from the forests of the country.

A large portion of the annual production sold, comes from the crown lands, the forests of which divided into lots, called limits, are leased to the highest bidder. Besides the price of adjudication the latter must pay a small ground rent and a tax, which varies according to the nature of the tree cut down and which is called stumpage dues.

In 1903, about 66,860 square miles of forest lands were granted for lumbering. In 1868, over thirty years



LAURENTIDE PULP COMPANY, GRAND MERE



before, there were only 17,997 open to the work of the lumber man, which shows an increase in the extent of the limits, of two and one half times.

From this source alone the Province of Québec derives the best part of its revenue. In 1902 the crown lands yielded \$1,055,037.48.

Steam saw mills are frequently established in districts with railway facilities, and from these the lumber cut in their neighbourhood is sent forward in the shape of deals, boards and secondary products. This is a comparatively modern way of working, which enables the lumber man to make a profitable use of even those parts of his limits which are at a distance from water transport. The increasing demand for manufactured lumber has given an enormous value to timber limits wherever the transport of the wood is not too difficult.

The lease of these limits is adjudged by auction at the rate of a fixed sum for one square mile. The licences must be renewed every year and besides the rent, an annual ground rent, fixed at two dollars per mile, must be paid. Further, every kind of wood cut is subject to the payment of stumpage dues which vary in each Province. Every winter from 45,000 to 50,000 choppers spread themselves through the forest in the interest of the large lumber establishments. These men cut down the trees on the sections put up to auction by the Provincial Government. There are hardly any conditions for the preservation of the forest or the replanting of the trees upon the areas from which they have been cut.

Through the facility of transport afforded by the snow, and the frozen rivers, the square timber is brought together at different points to be formed into rafts of floating timber in the spring after the breaking up of the ice. These rafts are taken down the numerous tributaries of the large rivers to the immense coves at Québec, from whence the timber is exported to Europe.

Hundreds of ships manned by from fifteen to twenty thousand sailors are employed regularly every year in the transport of Canadian wool to the other side of the Atlantic.

Strict precautions have been taken by the government of the Province of Quebec to prevent waste, and the dimensions, under which trees can not be cut, are fixed by regulations.

Although year after year the lumber man makes further and further advances into the forest, he has not yet reached the head waters of the St. Maurice, of the Saguenay or their tributaries, nor those of the rivers of the vast Gaspesian Peninsula. Although lumbering may change the value of the forest, it has a very slight effect upon its appearance. The dealers in lumber do not clear the forest nearly to the extent one might be led to imagine; the cost of transportation being exceedingly heavy, they cut only a certain number of trees picked out over a large extent of ground. The rest remains intact and the eye at first fails to perceive any difference between the areas of the forest which have been worked over, and those where the chopper has never wielded his axe. The valley of the upper Ottawa is the richest of the Canadian forest regions. From that region alone, comes three fifths of the "timber cut" of the whole Province. In it more than ten thousand forest workers are employed in addition to an army of nearly thirty-five thousand choppers spread among the lumber camps.

"The appearance of the lower town of Ottawa and of the town of Hull, opposite to it on the other side of the river, is instructive; the banks of the river are occupied by immense lumber yards of square timber, while in the water float vast numbers of saw-logs awaiting their turns to be put through the saw-mill. These mills work night and day; they are splendidly lighted at night by electric light. The saw logs, floated to the mill are gripped by iron hooks and hauled into position in the mill, from which they only emerge when completely cut up (George Kaiser).

Forest Superintendence

Up to 1893 the Provincial Government had taken no steps to protect the forest against irregular or excessive working or against waste of every kind, to which it was continually subjected.

Even for statistics of forest work the Government was obliged to rely entirely on the good faith of the lumber merchant and on the indirect information derived from the counting of the logs, which took place when they were passing the slides, or in the booms or during other periods of the drive. The slides and booms have been constructed by the Federal Government on most of the large rivers.

But since the year 1893 there has been an organization of forest guardians in the employ of the administration. At first the organization did not give satisfactory results owing to its many defects, but the present Commissioner of Lands, Forests and Fisheries, the Honorable Mr. Parent, has made many alterations in the system and to a certain extent entirely remodeled it, the result of which is the collection of considerable sums of money by the public treasury which would otherwise have been infallibly lost.

By an act of the Provincial Legislature, sanctioned in 1883, a system was provided for the protection of our forest domain against the ravages of bush fires. Up to that time nothing had been done in that direction, in spite of the enormous losses which the country sustained through these conflagrations, which sometimes assumed the proportions of veritable calamities, started by the carelessness of a passer by, the spark of a locomotive, or the imprudence or impatience of a chopper, the fire spread without let or hindrance over hundreds of miles of forest. About a quarter of a century ago the whole region of the Saguenay, comprising close on to 20,000,000 acres, was devastated in this way. This scourge is, however, powerless in itself to diminish in a tangible way the immense forest domain of the Province. In the *brulés*, the name given by Canadians to

the spaces devastated by fire, the woods are renewed by degrees and in less than twenty years a new growth of thick and verdant vegetation covers the ground where a few years before nothing but the blackened skeletons of the burned trees were to be seen.

The Province of Quebec is the home of the sapin (fir-tree) and of the gray, red and black spruce, three varieties of equal value for modern uses. Spruce is much more plentiful than pine and covers a much larger area of the forest. Besides this, spruce forests have the further great advantage over pine in growing again much more rapidly after having been cut down. In twenty years a new spruce forest will have grown up, while a pine forest is finished for ever, once it has gone under the axe of the chopper.

The Province of Quebec not only possesses larger forests, than those of any other country in the world, Russia included, as will be seen further on by some comparisons between this Province and the greatest wood producing countries of Europe ; but its forests are further remarkable by the great variety of their trees. According to a list prepared with great care by the department of agriculture, there are more than one hundred varieties in the various Provinces of the Dominion. Among others, for its value and commercial importance, is the white pine, the chief article in the lumber markets of Ontario and Quebec, where there are whole forests of it alone, principally in the valley of the Ottawa. After pine, the various kinds of spruce, growing in profusion throughout the whole Province of Quebec, constitute the principal article of forest exportation. The superficial area of forest lands in the Province of Quebec comprises 150,000,000 acres. A comparison will give an idea of what such an extent of territory, covered with wood suitable to all purposes of trade and manufacture in its many varied forms, represents in the wealth of a country. In the United States, although for a number of years past public attention has been directed to sylviculture, the wooded

area is less than 500,000,000 acres, Russia in Europe contains also about 500 millions. The German Empire 50,000,000, Sweden 45,000,000, Austria 25,000,000, Hungary 19,000,000, Norway 20,000,000 and France 24,000,000. All these countries together, which are the greatest wood producing countries of Europe, do not contain an average of more than 35 p.c. of their total extent of territory in forest land, while perhaps eight tenths of the Province of Quebec are still covered by dense forests, although they contain less of the choice woods than they did at the beginning of the century.

Principal Kinds of Wood

The reader will find in the subjoined table the principal kinds of Canadian woods which are used for exportation as well as for home consumption. White pine (Weymouth pine, *pinus strobus*) is exported in the form of deals and boards or as square timber. Formerly this was the principal wood of commerce, but it has greatly fallen off in quantity, although still very plentiful about the head waters. Yellow pine, which is often confounded with the white, is a much hardier tree than the latter.

All the pines, especially the white, are difficult to treat chemically, but furnish a pulp with a fine and strong fibre. Owing to their high price, these woods are only used for the preparation of chemical paste which is sold much higher than mechanical.

Red pine (*pinus resinosa*) is less used than the preceding kinds; it contains more resin and lasts longer.

White spruce (*picea alba*) although smaller than the pine, is still a fine large tree, the wood from which is exported in deals, scantling, laths, rafters, etc. It is the best of all woods and is in the greatest demand for the manufacture of pulp. It produces a fine strong fibre, one of the easiest to bleach when worked chemically. In the mechanical process it grinds with facility and without the formation of lumps.

Black or gray spruce (*picea nigra*) is easily reduced by the bisulphite process to a strong pulp with a long fibre.

Tamarac (red spruce, *larix americana*) is the American larch ; it is used largely in ship building. It is difficult of treatment either by the chemical or mechanical process, it clogs the machinery and gives a gummy fibre almost impossible to clean.

Hemlock (*abies canadensis*) has a heavy bark which is rich in tan; the wood keeps sound for a long time either underground or in water. Large quantities of Railroad sleepers, made from it, are sold in Great Britain and in the United States. It gives a pulp some what similar to that of the spruce but is more difficult to treat by chemical process, and besides the paste becomes lumpy when it is mixed with spruce.

The Balsam *sapin* (*abies balsamea*) furnishes a valuable gum for the healing of wounds. the wood, which is very soft, is unfit for building purposes but turners employ it largely in their business.

The Red or American *sapin* (*abies americana*), which is somewhat similar to the Scandinavian spruce and grows in the silurios lands in the South Eastern parts of the Province, is a first class wood for the making of pulp. It is the same colour as white spruce and is not at all more gummy.

The white Cedar (*thuja occidentalis*) is a tree of good size and is found very generally throughout the country. It is a wonderfully durable wood. It is employed for piles for building purposes, for culverts, for fences, telegraph posts and for the construction of light boats etc.

The Maple, the leaf of which is the national emblem of Canada, is the best fire wood in the world.

The variety, known as the sugar maple, is largely cultivated and worked for the production of an excellent sugar, from which however all the best advantages have not yet been secured. Still all the sugar, produced in one section of the country, the county of

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MONTMORENCY FALLS



Beauce, was sold last year in the United States at a most remunerative price.

Another variety, with a curly grain, generally called bird's eye maple, is in great demand by cabinet makers.

The Plane, a kind of maple, is much employed as a shade tree for roads and gardens.

The White Oak and the Red Oak (*quercus alba* and *quercus rubra*) are large and hardy trees. The White Ash and the Black Ash are also large and handsome trees, reaching a height of thirty to forty feet.

So long as it retains any sap, the ash is the most pliant wood in the country; when dry it becomes lighter without losing its toughness. The wood of the ash tree is particularly useful for works requiring bent wood, for making furniture, pieces of ploughs, hoops for barrels and tubs, certain tool handles, farming implements and in turner's work, etc.

The White Walnut: the wood of this tree is close grained, tough and pliant and is largely used in carriage building, in making handles for tools, farming implements etc.

The Walnut "*à noix douce*" is very similar to the preceding.

The Soft Walnut gives good wood for cabinet makers.

The White Elm (*ulmus americana*) is a large tree with low bending branches which give it the appearance of a gigantic bouquet. The wood is good for carpenter's work, for the naves and fellows of wheels, the keels of vessels, mill wheels, etc.

The White Birch has a smooth trunk which grows to a height of about twenty feet; the bark is white and composed of very thin superimposed wrappers which roll off like sheets of paper. The wood is principally used for the manufacture of spindles and reels for the winding on of thread. With the bark the Indians of the country build themselves strong and light canoes, suitable for the navigation of rapid rivers, in which it would be almost impossible to manage any other kind of craft.

The White Birch gives a pulp as easy to bleach as that of the poplar. In the mechanical process, the wood is too hard to grind, to allow it to be profitably employed.

The Poplar is the wood which is most generally used in works where the soda process is followed. This wood is worked admirably by the mechanical process.

The Aspen (*populus tremuloides*) is a wood of the same quality as the poplar, but less used, on account of the veins and black knots often found in it and which discolour the paste, especially in the mechanical process. These drawbacks are but little felt when the aspen is treated by the soda process, as it has the effect of decomposing the colouring matters.

Bass Wood (*tilia americana*). This wood is becoming scarce. It is easily worked and gives a pulp similar to that of the poplar.

The Cypress (*pinus banksiana*). It is more difficult in treatment than spruce by the chemical process, but it yields as long a fibre. In the mechanical process it is equal to good sapin.

The White Birch tree is easily converted into a paste which is very similar to that of the poplar, it is heavier than boulean and is used in carpenter's work and in cabinet making.

The Black Birch (*mérisier*) makes an excellent fire-wood.

It is used in cabinet making.

The Beech (*fagus ferrugina*), is more difficult to work by the chemical process than other woods, but it gives a fine fibre and is easy to bleach. On account of its hardness it is impossible to work it by the mechanical process.

Practically speaking spruce, sapin, poplar and aspen are the only woods employed in the manufacture of pulp and it may be asserted that the future of this industry belongs to the countries where these fibrous trees are found in numbers and in positions of easy access.

Besides the above we may further mention the lime tree, the wavy maple, the walnut, the wavy ash, the red cedar and with these we have given a sufficiently complete list of the most valuable and best known trees of the Canadian forest.

The following returns of lumber, manufactured in Quebec, give an idea of the extent of lumbering operations carried out :

Pine (feet).....	193,722,428
Small red and white pine.....	48,992,295
Spruce.....	303,393,832
Birch (cubic feet).....	369,000
Cedar.....	294,000
Firewood (cords).....	2,350,000
Pulpwood (cords).....	260,194
Railway ties.....	467,080
Telegraph poles.....	10,000

About twelve million dollars worth of forest products are annually exported from the Province.

The following amounts were obtained from the exportation of products of the forest during one year :

ARTICLE.	VALUE
Bark for tanning.....	\$ 58,313
Firewood.....	20,747
Logs of all kinds.....	151,348
Deals, pine.....	3,280,126
Deals, other than pine.....	1,706,692
Deal ends.....	465,000
Planks & boards.....	2,310,480
Laths, pailings, pickets, joists and scantling.....	160,947
Staves and headings.....	38,288
Not elsewhere specified.....	154,261
Shingles.....	267,799
Sleepers and railway ties.....	135,739
Stave bolts.....	1,524
Shooks, box and other.....	54,193

Timber, square :	
Oak.....	539,088
White pine.....	1,348,655
All other.....	380,755
Wood for pulp.....	536,622
Wood and manufactures of :	
Household furniture.....	35,331
Doors, sashes and blinds.....	59,520
Matches and match splints.....	91,167
Wood pulp.....	270,136
Not elsewhere specified.....	204,349
	\$12,276,082

The Pulp Industry

At the present day more than 75 per cent of all paper manufactured in America, as well as in the most progressive countries of Europe, is made of wood pulp and its manufacture has been brought to such a state of perfection that paper made from wood is better than that made from any other vegetable fibre and better even than that made from linen rags. "Through the employment of wood as the basis of the manufacture of paper, the price of this article has been brought down to the lowest figure, to one third and even to one fourth of what it was fifteen years ago; and this is the secret of the cheap books and newspapers of the present time. When printing paper cost six, eight and even twelve cents a pound, the cost of the publication of the smallest daily paper was from five to six dollars a year, but this cost has fallen one-half since editors, through the employment of paper made from wood, can procure their paper at less than three cents a pound. The same may be said of books. When the paper, on which they were printed, sold as high as twelve cents a pound and even higher, the cost of a book, of 400 or 500 pages, soon amounted to 40 or 50 cents for the paper alone, but since the employment of wood pulp has enabled the printers to procure the article for four or

five cents, the prices of books have gone down to such an extent that a fair sized volume can to-day be sold by retail for about ten cents, especially if the edition is large." (J. C. LANGELIER).

The impulse, which this discovery has given to printing, as well as to the spread of newspapers and books, is perhaps one of the most remarkable events of the present epoch.

Introduced to the United States and Canada after it had been carried on in Europe, the pulp industry has made rapid progress in these two countries. New York is the chief manufacturing state of the American Union. After New York, in order of importance, come Maine, New Hampshire, Vermont, Connecticut, Michigan and Wisconsin, besides a few factories in Oregon Washington and other states.

In the Province of Quebec the number of pulp factories increases every year and this industry, unknown a few years ago, is now one of the most flourishing in the country.

The spruce forests of the Northern parts of the United States are rapidly becoming exhausted and already the American people are agitating for the restriction of the exportation of pulp wood as they soon will have no other resource than in the forests of Canada.

With perhaps the single exception of Siberia, the spruce forests of Canada are the largest in the world. They are found everywhere from the Atlantic to the Pacific, except upon the prairies. The cutting down of the pulp wood is rapidly effecting the destruction of the forests in Norway and Sweden and in the Northern parts of Russia. Norway has already imposed an export duty, the payment of which traders seek to elude. In Germany and Austria the forests are saved ; no more than the equivalent of the annual growth is allowed to be cut.

The same rule exists in France.

In England to-day Canadian pulp is recognized as decidedly superior to that of Norway and Sweden ; the fibre is both finer and stronger and it therefore commands a higher price. Australia consumes a large amount of printers paper ; she purchases to the value of more than two millions of dollars annually in Great Britain and the United States.

Black or white spruce or sapin are the most valuable trees for the manufacture of pulp, as well from the special qualities of their fibre as from the colour. The fibre of these woods, comparatively soft, is easily separated in the mills ; the poplar and aspen have also this same property, but they almost always contain knots and black veins which spoil the colour of the paper. Pine wood is only used for the manufacture of chemical pulp. It gives a good paste, but the process required for its bleaching is expensive. Besides the wood is too high priced to be profitably used in the manufacture of paper.

At the low price to which paper has fallen, cheap wood is absolutely necessary to the manufacturer of pulp and this is one of the reasons why spruce and sapin are the most profitable and almost indispensable articles in the pulp industry.

Apart from the inherent qualities of the raw material, which determine the wood to be used, there are two other conditions which are indispensable to the success of the business, strong hydraulic power and cheap labour. To work machinery, capable of producing from 25 to 30 tons of ground pulp within the 24 hours, a motive power of from 2,000 to 3,000 horse power is necessary. The creation of this motive power by means of steam would be too expensive and practically it is admitted that pulp cannot be profitably produced except where there is water to furnish the motive power. The comparatively low price of labour is also an essential condition to the success of this industry, which requires a large number of workmen in proportion to the value of the article produced. These

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GASPE BASIN



three essential elements are found together in the Province of Quebec and under more favorable circumstances than they are to be found elsewhere. Quebec contains an unlimited quantity of the best wood, has the finest water powers and can furnish labour at as low a rate as it can be obtained in Norway or Sweden. Owing to the facility of transport, given by our many large rivers and water courses, the cost of the wood is as low if not lower than it is in the Scandinavian peninsula.

Hydraulic Powers

An idea of the number and of the hydraulic powers of the water courses, both small and large, of the Province of Quebec, may be obtained by consulting the very circumstantial report of Mr. J. C. Langelier, to the Minister of Lands, Forests and Fisheries on the subject of the motive power possible to be obtained from the rivers in the region of the Lake St. John.

First, there is the Perihonca, which may be ascended by steamer for fifteen miles from its outlet that is, to the foot of the Grandes Chutes. Before reaching here the river has come down some five or six miles by a succession of falls which, joined together, might develope au hydraulic power of 300,000 horse.

On the Mistassini the first falls are about 24 miles from its discharge into Lake St. John.

There are two falls at this point less than half a mile apart; together they are capable of furnishing a horse power of 40,000.

The Mistassibi, a large tributary of the Mistassini, has a succession of cascades, which are calculated to have a collective motive power equal to 75,000 horse power.

The river Aux Rats, another tributary of the Mistassini, descends over two cascades of 30 feet and a fall of 60 feet, which are supposed to be capable of producing 22,000 horse power.

An approximate value of the power, which might be furnished by the rapids and water falls of the Assi-

emska, perhaps the largest tributary of the Mistassini, might also be reached ; but leaving this aside, it is still quite certain that there are, on the Mistassini, Mistassibi and Aux Rats rivers within a circuit of fifteen miles, water powers the collective force of which would exceed that actually in use at Niagara.

The river Chamouchouane, which is considered to be the upper part of the Saguenay and which falls into Lake St. John about six miles south of the Mistassini, might give 100,000 horse power from its numerous water falls and particularly from the Chaudière fall, which is 120 feet high and is situate about 80 miles from its discharge.

The river Ouatouchouane is about 90 miles long and runs through a number of lakes, the largest of which, lake des Commissaires, has a spread of twenty one miles. At about three miles from its mouth the river takes an enormous fall of 236 feet which, at the same time, presents to the contemplation of the tourist one of the finest falls to be seen and to the manufacturer a 33,000 horse power, awaiting employment in the manufacture of his products. The river Metabetchouan, about 115 miles in length, has a fall of 225 feet, formed by water falls and rapids in a run of about four miles a short distance from its source.

But to continue, add together all the motive power which could be furnished by the various water courses of the Saguenay region alone and we obtain the extraordinary figure of 650,000 horse power. This is a much greater power than could be obtained from all the rivers together of Norway and Sweden, where the pulp business is more flourishing than in any other place in the world.

Wood—The Raw Material

Of the 19,000,000 of acres which constitute the territory of the Lake St. John region, less than 300,000 are cleared or under cultivation, the remainder, the rest of the land, is still in forest.

Seventy-five per cent of these forests are composed of white, black and red spruce, the wood particularly suitable for the manufacture of pulp. The other twenty-five per cent contains sapin, boulean, cypress and pine, trees also valuable for the same object, but in a smaller degree.

The quantity of pulp wood in the Lake St. John region is practically unlimited: allowing an average of five cords to the acre, a fabulous number will be reached, which simply proves that this immense territory can furnish an almost inexhaustible supply of raw material for the manufacture of pulp and paper.

By the above average to the acre, it is calculated that the valley of the Peribonca, which has an extent of 8,320,000 acres, contains 41,600,000 cords of black and white spruce.

The valley of the Mistassini, which comprises about 4,800,000 acres, would yield 24,000,000.

The territory, watered by the Chamouchouane, contains at least 3,200,000 acres of forest land, from which at least 10,000,000 of cords could be cut.

In the stretch of country, drained by the rivers Ouiatchouane, Metabetchouan and others, there exist equally large forests of cone bearing trees which would also furnish a yield of 16,000,000 cords of pulp wood.

The following table shows the addition of the above data.

Region	Area in acres	Cords of pulp wood
Peribonca.....	8,320,000....	41,600,000
Mistassini.....	4,800,000....	24,000,000
Chamouchouane.....	3,200,000....	16,000,000
Ouiatchouane.....	3,200,000....	16,000,000
	<hr/>	<hr/>
	19,520,000	97,600,000

Calculating that it will require a cord and a half of wood to make a ton of ground pulp, the 97,600,000 cords of wood, furnished from the Lake St. John region,

would yield over 65,000,000 tons of pulp, or 1,000,000 tons a year for 65 years, which means that the Lake St. John territory alone could furnish annually the wood necessary for the making of the paper of the United States for the next 65 years.

Besides wood, other material necessary in the manufacture of pulp, is found in abundance in the Lake St. John region. Lime, indispensable in the preparation of chemical pulp, is found in large quantities in many parts of the region.

Let us now take another direction and consider a part of the Province very different and far removed from the region of the Lake St. John.

Mr. Holland, an influential member of the Montreal board of trade, has made a study of the hydraulic power which could be derived from the C^otawa river and its tributaries within a radius of forty five miles of the City of Ottawa. The total figures up to 890,225 horse power, in which, small four or five horse powers are not included. The large powers are divided as follows: The river Ottawa, 664,000; its tributaries on the left bank: the Rideau river, 1,300; the Mississipi, 14,700; the Madawasca, 20,600; the Bonuechère, 3,400; the tributaries on the right bank; the Petite Nation, 2,000; the Blanche, 2,000; the Lièvre, 98,450; the Petite Blanche, 300; the Ouyon, 24,000; and the Gatineau river, 31,675.

The construction of the Great Northern Railway has opened a rich forest of cone bearing trees, traversed by the river Maskinongé, the picturesque river of the north, which has a fall of 180 feet in height, called the falls of Sainte Ursule, which are capable of producing motive power sufficient for the running of fifty factories.

Before the year 1897 the manufacture of pulp was almost unknown in the Province.

In 1897 the Chicoutimi Pulp Company came into existence and was organized with the object of exportation to England. It was the first enterprise of

the kind inaugurated, and has met with unqualified success. New companies were formed each year that followed, which added to the production for the English market, viz :

The Peribonca, producing 15 to 20 tons per day of dry pulp.

Ayers & Hamelin, Lachute, P. Q., 15 tons per day of dry pulp.

River du Loup Mills, production 15 to 20 tons per day of dry pulp.

Montmagny Pulp Company, 15 to 20 tons per day.

Oniatchouan Pulp Company, 25 to 28 tons per day.

Price, Parrit & Co. mills, Rimouski, about 30 tons per day.

McClaren Bros. mills, Buckingham, P. Q., 60 to 70 tons per day.

Belgo-Canadian Co. mills, Shawinigan Falls, 75 to 80 tons per day.

Chicoutimi Pulp Co., Chicoutimi, 150 tons per day.

Pulp manufactured for exportation to the United States :—

Lake Megantic Pulp Co., Lake Megantic, P. Q., 15 to 20 tons dry pulp per day.

Brompton Falls Pulp Co., Brompton Falls, 15 to 20 tons dry pulp per day.

Pulp manufactured and converted into paper and cardboard on the premises :—

Jonquieres Pulp Co., Jonquieres, P. Q., 25 tons per day.

Canada Paper Co., Windsor Mills, 50 tons per day.

MacFarlane Co., Mills, St. Raymond, 15 to 20 tons per day.

East Angus mills, 25 to 30 tons per day.

Laurentide Pulp Co., Grand'Mere, 80 tons ground wood pulp and 60 tons sulphite pulp daily.

Limits

The following are the limits owned by the different pulp companies in the Province of Quebec :

	MILES.
Laurentide Pulp Co.....	1,200
Belgo-Cauadian Co.....	600
Chicoutimi Pulp Co.....	700
Jouquieres Pulp Co.....	1,000
Rimouski Pulp Co.....	500
Montmagny Pulp Co.....	242
Ouiatchouan.....	150
Peribonca	70
Metabetchouan.....	60
Total.....	4,524

Less than five years ago Canadian pulp was almost unknown in England, and three years ago Great Britain imported six per cent of its pulp from Canada, and last year twenty per cent and this year the export of Canadian pulp will be much in advance. The percentage, however, cannot be given at the present time of writing, as the quantity is not yet estimated.

The market has been very low in England this year, partly on account of surplus of production from Canada and Scandinavia, but mostly on account of the expectation of the English consumers, calculating upon a much larger production, that kept prices at a low mark. But the latest reports from the Scandinavian market show that the pulp manufacturers have organized to reduce their production in order to maintain prices, consequently the English market for Canadian pulp production is looking much stronger.

The Chicoutimi Pulp Company have just completed their new mills with twenty-nine grinders, and employ 1,000 men in winter to cut and make the logs used to manufacture pulp, and give constant employment to 500 men at the mills. An average of 4,000 logs are used daily to manufacture pulp, each log measuring 12



CHATEAU FRONTENAC AND DUFFERIN TERRACE, QUEBEC



feet long. The Chicoutimi Pulp Co. have contracted for the cut of 1,200,000 this year to be used in their mills. The production of these mills is altogether for the British market, and it takes twenty steamers to carry the pulp exported to England, each steamship carrying from 3,000 to 3,500 tons of the production, or in all from 65,000 to 68,000 tons of pulp. The Chicoutimi Pulp mills own 250,000 horse power on the Chicoutimi river, 10,000 of same is now in use, and the company has contracted for the sale of its total production to English interests exclusively, up to the end of the year 1908.

All the other mills, engaged in the industry, are also making rapid strides towards success, but are not so fortunate as the Chicoutimi Pulp Company, which has solved the problem of manufacturing cheap pulp. The Metabetchouan Pulp Co. is awakening to the necessity of being ready for the prosperous turn of the pulp industry, which is destined to take place in the future and are building a line of railway in connection with their property thirteen miles long, eleven of which are already constructed.

One of the latest of the American firms to establish themselves in the province, is C. P. Easton & Co., of Albany, N. Y. This house started in the United States over fifty six years ago and had become one of the oldest and largest lumber distributing concerns in the East. Its operations consisted chiefly in white pine from Michigan, Wisconsin and Minnesota.

Last year they purchased about five hundred square miles of spruce and pine lumber at Hamilton Cove, on the Portneuf River, Saguenay County, and have erected a modern steam mill with a daily capacity of 100,000 feet. Their energies at present are directed exclusively to the manufacture of lumber for export.

The head office of the concern is in the Hochelaga Bank building, Quebec. A branch office is maintained at Albany, N. Y.

Three enterprising and progressive business men,

Messrs. William, Frederic and Irving B. Easton, comprise the firm, and although only recently established in Quebec, they have already enlisted the confidence and esteem of a large business circle in this district.



Mines



MR GEORGE KAISER, a professor at the University of Louvain, who visited Canada some years ago, declared that in no place had nature been more liberal than in the geological formations in Canada. The Province of Quebec has received a large share of this munificence.

Only a very small portion of this mineral wealth is being actually worked. Up to the present time, want of capital has kept back the development of mining industries. The capital at hand has been principally devoted to the purchase of mining lands; the actual mining of the ore has only been attempted in a few localities and then with the greatest care and circumspection. The field is therefore open to mining engineers and capitalists.

The following remarks, taken from the reports of the geological commission at Ottawa, give a mineralogical inventory of the Province of Quebec :—

The Laurentian region, which traverses the whole Province from Labrador, contains apatite or phosphate, magnetic and titanite iron, plumbago, mica, graphite, as well as granite, labradorite and marble, little worked up to the present time but very suitable for building material or for purposes of ornamentation. There are also curious mineralogical specimens in the crystalized state, such as garnets, beryl, olivine, fluor-spar, etc.

There are silver bearing lead mines in the lake Temiscamingue region.

In the Eastern Townships, copper, magnetic iron and oligist, antimony, nickel, silver and alluvial gold are found. Clay schist, such as slate, is plentiful in the same

locality. The various kinds of marble and granite are most valuable for building purposes. In the same formations are serpentines containing asbestos, stealite or soapstone and chrome iron.

The richness of the alluvial gold deposits of Beauce are well known and petroleum is found in Gaspesia.

There are deposits of bog iron, ocre, peat and marl, and springs of various kinds of mineral waters, to be seen in very many localities throughout the country. There are immense beds of gray (and white granite, especially in the counties of Compton and Staustead and granites and syuites are found throughout the whole of the Laurentian range, in the counties north of the St. Lawrence and along the lieue of the Lake St. John Railway. The mountains of Yamaska, Johnston, Rougemont, Montarville, Montreal, Rigaud, Brome and Shefford are largely composed of diorite, dolerite and trachyte. Brick clay is worked in many places along the shores of the St. Lawrence. Mica is abundant in the Ottawa and Saguenay regions.

According to a recent report of Mr. Obalski, the mining engineer of the Provincial Government, the principal mining work now being carried on, includes iron, asbestos, copper, gold, graphite, mica, and the lead, zinc and silver mines of the island of Calumet, ocre, malybdinite, feldspath and the phosphates of the Ottawa.

The simple alluvial washings at Beauce have yielded over \$2,000,000 worth of gold. There are now two companies carrying on operations in the region, with results sufficiently satisfactory to attract the attention of capitalists. The organization of powerful companies is necessary for the proper development of these mines, as expensive machinery is required, but, according to the opinion of mining experts, the results are certain to be most remunerative.

Iron is probably the metal which is most generally found throughout the Province. Magnetic, oligist, titanic, chrome and hematite, all varieties are abundant.

The principal iron works in the country are carried on at the Radnor Forges, on the St. Maurice, and at Drummondville, on the south of the St. Lawrence, where bog ore is worked and from six to seven thousand tons of iron are produced annually. The mines of chromic iron in the Eastern Townships have an annual production of 2000 tons, which find a profitable market in the United States.

The titanic iron of St. Urbain, of the Sept-Isles and of Lake St. John and the magnetic sands of the gulf of the St. Lawrence, although not worked up to the present time, are worthy of particular attention.

At Capleton, near Sherbrooke, two large companies take out annually over 30,000 tons of copper ore. Asbestos mining is operated on quite a large scale at Thetford, Black Lake and Danville as well as in the region of the Ottawa, with an annual output of over 12,000 tons. The Asbestos or chrysotile, of the Province of Quebec, is considered to be the best in the world. The known deposits of this mineral cover an area of over 10,000 acres in the townships of Thetford, Coleraine, Shipton and Ireland.

In the year 1896, \$80,000 worth of mica were exported from Ottawa. Ocre to the extent of about 1,200 tons is taken out annually in the district of Three Rivers. Zinc and lead mines at the island of Calumet and at Lake Temiscamingue and a graphite mine on the Ottawa are also being worked.

This very limited review, naturally, does not include the work done in prospecting in various parts of the Province or the quarries for building material, which exist in numbers throughout the country.

As stated at the opening of this subject, the Province of Quebec possesses a wealth of minerals as vast as it is varied, but the working of which has hardly yet been commenced. Capital and skilled labour are necessary for the profitable utilization of these treasures.

The following extract is from the last report of the mining operations of the Province :—

The two Companies, " The Canada Paint Co " and " The Champlain Oxyde Co," preparing ocre at St. Malo, in the County of Champlain, have carried on their operations as usual during the six months of summer, producing 1555 tons of burnt ocre, which has been either used in Canada or exported to the United States or Great Britain.

The Canada Paint Co. has also continued to work its mine of sulphate of barytes at Hull during the summer, producing 353 tons which it has used in the manufacture of paint at Montreal.

Chrome

Chrome mines have been operated at Coleraine and similar mines have been worked near Lake St. Francis by the International Chrome Mining and Milling Co. and by the Montreal Chrome Co.

Copper

The Curtis and Nichols companies of Capleton were the only producers of copper ore during the year. There was also a small quantity taken from the development works of the Ascot mine and a few car loads of samples were exported from the mine at Memphremagog. The production amounted to 31,938 tons of 2,000 lbs, worth \$127,170 at the mines; 250 workmen having been employed during the whole year. Of this total 13,152 tons were exported to the United States and the rest was used at Capleton.

There is a new mine in operation in the county of Matane under the name of the Matane Gold Copper Mining Co. After a considerable amount of work done with the very best machinery the owners of the property are well satisfied with their work and with the results they have obtained.

Asbestos

The working of asbestos mines is always a profitable business, the asbestos of the Province of Quebec being considered of the very best quality.

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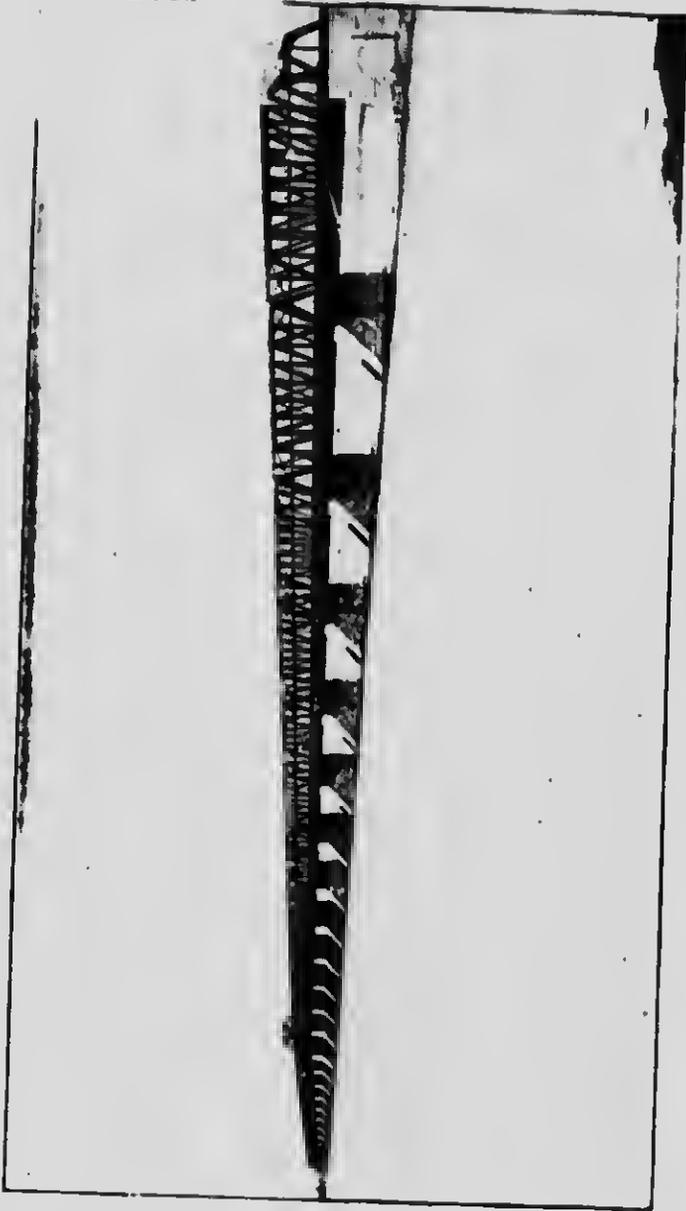
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From the reports of the various asbestos companies, the total export of asbestos from the Province figures up in tons of 2000 pounds and in value at the mine or mill as follows.

1st (crude)....	1,319 tons worth	\$ 240,401
2nd "	3,131 "	305,312
Fibre.....	15,502 "	412,388
Paper stock...	10,682 "	203,869
		<hr/>
	306,34	\$1,161,970
Asbestic	97,64 "	12,738
		<hr/>
		\$1,174,708

Mica

Mica, (thumb trimmed) exported during the year and representing about one third of the total production, amounted in pounds and value as follows :

1/3.....	64463 pounds worth.....	\$ 7,364
2/3.....	27861 " "	7,201
1/2.....	27296 " "	10,656
3/8.....	11772 " "	6,578
2/3.....	890 " "	820
5/8.....	540 " "	585
		<hr/>
Total...	132,822	\$34,304

Peat

The Province of Quebec contains a great number of peat fields, the working of which has been seriously considered, especially since the strike of the miners in the anthracite coal region.

The Seigniori of Milles Isles.—On the road leading to New Glasgow.

Seigniori of Lavaltrie and Lanoraie.—Two large peat fields parallel to one another.

Fief Saint Etienne.—On the river St. Maurice, with an average depth of 5 feet.

Seigniori of Champlain.—At 3 miles from the St. Lawrence between the church and the river Champlain.

At Lacolle.—West of the river Richelien, a large peat bog, of about twenty miles in superficies, extends over a part of the seigniories of Lacolle and de Lcry and the townships of Sherrington and Hemmingford and appears, in places, to be of great depth.

Seigniory of River Ouelle.—A peat bog covering 4000 acres.

Seigniory of River du Loup.—On the Temiscouata road, 6000 acres.

Seigniory of Isle Verte.—1st and 2nd concessions, etc.

Petroleum

Petroleum has long been known to exist in the Gaspé peninsula, and extensive boring operations have been carried on in that district during the last ten years to develop, if possible, supplies of mineral oil of commercial value; but the results of the recent work have not yet been publicly announced.

Building Material

Granite.—Granite has been worked in the regions already mentioned, that is at Rivière-à-Pierre, Stansstead, St. Samuel, St. Philippe d'Argenteuil, Mont Johnson etc. The work is being continued and the companies furnish a very fine granite for the construction of public buildings and bridges as well as for tombstones and monuments in the cemeteries.

Cement.—The company, known as the Crescent-Cement Works, which manufactures near Montreal, increased its output this year and intends to enlarge its works so as to still further develop its business. A Canadian Company "The National Portland Cement Co.," (Limited) Toronto, is now constructing cement works at Hull. They will use the lime stone and clay of the neighbourhood in their factory.

This company has already an establishment at Durham (Ontario) and intends to manufacture extensively this year at Hull. The cement business is a most important one for Canada, as its use increases with the

opening up of the country and if we can manufacture a cement as good as the imported article at the same price, there is every reason for us to encourage a home industry.

There are large deposits of calcareous marl in many localities of the Province, particularly in the counties of Rimouski and Bonaventure, which would furnish excellent material for the manufacture of Portland Cement.

Slate.—The quarry at New Rockland has been worked for the greater part of the year and produces a good quality of slate for roofing.

Paving stone.—Mr. Bishop continues to carry on his works at Dudswell with the same results as formerly.

Lime.—The manufacture of lime follows the general development of trade, but there is a regular and increasing demand for clean pure lime for the manufacture of chemical wood pulp. There are numerous calcareous deposits throughout the Province, but the purest, or white calcite, is particularly characteristic of the Laurentian formation and is found to the north of the St. Lawrence and the Ottawa.

Brick.—Brick making continues to expand. A new company "The Eastern Townships Brick and Manufacturing Co" of Sherbrooke has been in operation during the past year. This company can manufacture from 5 to 6 millions of ordinary brick each year.

Good building stone is found almost everywhere throughout the country.

Table showing the production of the mines of the Province of Quebec for the year 1902.

Nature of the mineral	Number of workmen	Gross value
Magnetic and hematite iron ore		\$ 510
Bog iron ore.....	80	54,742
Chrome iron.....	40	13,500
Copper ore.....	250	121,170
Galena.....	40	15,000
Asbestos.....	1773	1,161,970
Asbestic.....		12,738
Mica.....	106	34,304
Burnt ocre.....	53	18,175
Graphite prepared and natural.....		2,160
Feldspath.....		172
Sulphate of Barytes.....	7	2,471
Phosphate.....		5,401
Gold.....	30	5,400
Slate.....	38	19,200
Paving stone.....	7	2,550
Cement.....	75	61,000
Granite.....	220	160,000
Lime.....	350	140,000
Bricks.....	1200	625,000
Stone.....	700	530,000
	4969	\$ 2,985,463

The products of the mines and quarries of the Province in 1902, in raw material or prepared at the mine to render them salable, were valued at three million dollars; 5,000 men were employed in the work for periods of, from three to twelve months, having received in wages a sum of about \$1,400,000.

Besides the above, 7,971 tons of cast iron, worth \$181,500 prepared with charcoal and manufactured from the native ore in the Province and 83 tons of chrome iron, worth \$4,980, were exported. The copper ores also produced a certain quantity of sulphuric acid and matt of copper.



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value

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HULT RENFREW & COY'S ZOOLOGICAL GARDEN OF CANADIAN ANIMALS, MONTMORENCY FALLS.



Fishing and Hunting

30



HERE is a land which is justly known as the Angler's and Huntsman's Paradise — a Paradise twenty times greater than was the Eden of Mesopotamia, since it covers 330,000,000 acres of territory, watered by thousands of lakes, and by hundreds of streams larger than the largest rivers of Europe.

Its woods are prolific of game, so much so, in fact, that after centuries of relentless hunting in them, by white man and redskin, moose and caribou still abound, while the timid red deer has in some counties become a public nuisance.

Its lakes and rivers are still incomparably rich in the choicest of finny inhabitants, and when, through merciless netting and other illegal means, some have become less populous than formerly, a short period of protection serves to restore them to their wonted wealth of yield.

This land—this sportman's Paradise—is the Province of Quebec.

In disposing of the limits in its possession, the Department makes no invidious distinctions and there are no enquiries as to nationality or politics. When there are many bidders, the highest gets the lease.

Our American friends to the South of us, always on the look out for a good thing, notwithstanding the immense extent and resources of their own country, have been quick to see the advantages this Province offers them, and now hold many of its best waters at prices previously unheard of. This result is by no means astonishing, for in each foreign angler or hunter, who visits the Province, we find a fresh apostle, who will spread the gospel of Quebec's limitless sporting resources to the friends around his hearth or camp

fire. From this and other sources, the chief of the Department finds his correspondence daily augmenting with enquiries as to the location of hunting and fishing grounds, and requests for other information.

* * *

Salmon and trout fishing being the most highly prized, it follows that waters, rich in these warriors of the deep, are those for which there is the greatest demand.

A goodly number of rivers, affording excellent sea trout fishing, are still available.

Streams and lakes, yielding the most magnificent brook and lake trout (*Salvelinus* and *namaycush*), exist in an abundance which leaves little prospect of these fish ever becoming scarce.

All anglers are aware, or should be so, that the Province of Quebec possesses one of the finest salmon rivers in the world, the *Cascapedia*. American angling clubs, who live upon its banks in a state of luxury previously unheard of, have leased salmon pools for the season at fabulous prices, and this example has been followed by clubs upon a number of other rivers.

* * *

Big game hunting, a princely extravagance in Europe, is within the reach of every one in the Province of Quebec, since territories of 400 square miles in superficies may be leased at \$1.00 per mile.

The preference, as to hunting privileges on their territory, at an equal price, which is given to all angling clubs, is an opportunity which is readily appreciated, and almost all of them hasten to take advantage of it. This, of course, gives them the exclusive sporting privileges upon their respective tracts.

The Sea Fisheries of the Province of Quebec

Before any further allusion to the fishing in the lakes and rivers, let us say a few words with reference to the sea fisheries of the Province. The sea fisheries of the

Province of Quebec are comprised in those parts of Canadian waters, known as the Gulf division and the St. Lawrence division. The first includes the vast peninsula of Gaspé and the county of Bonaventure, besides the island of Anticosti and the Magdalen-Islands, which are separate subdivisions. The second embraces the whole of the north shore of the St. Lawrence for a distance of five hundred miles commencing at Pointe-des-Monts and reaching as far as Blanc-Sablon, at the entrance of the Straits of Belle-Isle, which open on the Atlantic ocean. The Great North or Canadian Labrador is the name given to that portion of the shore of the St. Lawrence which extends from Kegashka in longitude $61^{\circ}20'$ east to Blanc-Sablon in longitude $57^{\circ}7'$ east.

These large subdivisions are themselves divided for purposes of maritime administration into fishing districts which are also of very considerable extent.

There are in the St. Lawrence division the districts of :

1. " Moisie " : which extends from Bay Des-Rochers to Pointe-Saint-Charles ;
2. " Mingan " : from Sheldrake to Pointe-aux-Esquimaux.

The latter place is the headquarters of the seal hunters. It is the only locality on the whole coast having a municipal organization ; having been erected into a parish for civil and religious purposes. All the others are only missions or posts, where a few families are collected together, most generally for only a temporary residence.

3. " Natashquan " : from Pointe-aux-Esquimaux to the river Natashquan.
4. " Saint-Augustin " : from Cape Whittle to Chicatica.
5. " Bonne-Espérance " : from Chicatica to Blanc-Sablon.

The inhabitants of the Magdalen Islands devote themselves largely to the lobster fishery .

Besides the true sea fisheries, there are two other large divisions washed by the salt waters of the St. Lawrence and which extend, one on the north shore of the river, from Godbout to Quebec with a coast line of about 260 miles; and the other, on the south shore, from Cap Chat to Levis with nearly three hundred miles of coast.

The Fisheries of the Interior

The Provincial Government have only had control of the fishing in the interior of the country, comprising that of the lakes and rivers, since the year 1883. At that time the leasing of the lakes and rivers only gave a revenue of \$2,126. In 1895 the revenue had reached the sum of \$20,365, in 1898 it was \$35,155 and in 1902 it had increased to \$57,904.

The leasing of hunting rights has also come under the control of the Provincial Government within the last few years. The reforms which have been introduced into these two branches of the public service have thoroughly demonstrated the benefits obtained by an active protection of fish and game.

Hunting

The Province of Quebec has been long recognized as the paradise of amateur Nimrods and one of the most advantageous regions, in which the professional hunter or fisherman, may follow his occupation.

The lordly moose, the largest of the fauna of the American continent, standing from seven to eight feet in height, the giant quadruped of the forest, with his enormous horns and the strength and activity of the lion, has long been the object of the hunting exploits of the most daring sportsmen of the two continents. The noble caribou, graceful and elegant, who races through the glades of the forest, along lakes and precipices, with the skill and precision of a gymnast, who is never captured except with the greatest skill and pains, and who, when wounded, defends himself with the

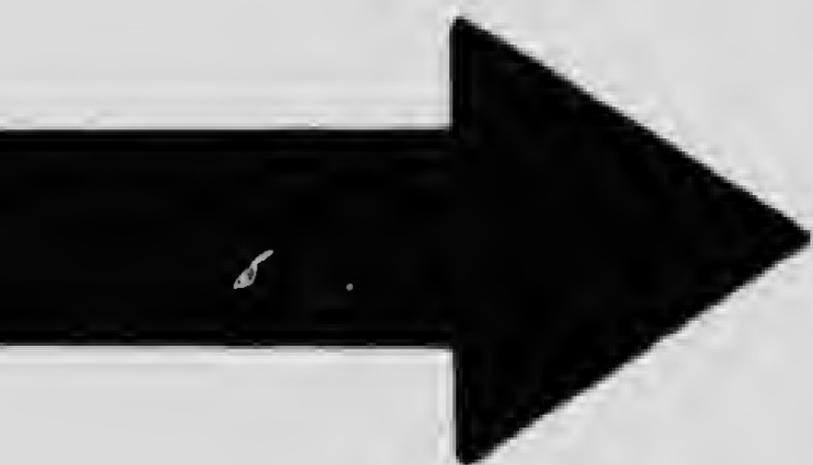
greatest fury, whose sense of hearing is so acute that to reach him the hunters are often obliged to drag themselves towards him full length upon the snow, shares with the moose the glory of being the most magnificent mark for the bullets of the hunter. To a lesser degree, the great stag, the red deer, the bear, the wolf, the otter, the carcajon, the lynx, and, lastly the beaver, a breathing model of sagacity and industry, the most valuable animal to the trappers in their long winter hunts through the forest, and still diminishing in size, although not in utility, the marten, the fox, the sable, the polecat, the mink, the ermine and the grey squirrel are now and will long continue to be in the highest request, as with their luxurions furs they give an indispensable air of well-being, comfort and elegance.

The Province of Quebec made a magnificent showing at the fish and game exposition of the American Sportsmen's Association held in New York in the month of February, 1899, and for which she prepared with the greatest care the finest specimens of Canadian game. The same thing occurred at the Paris Exposition of 1900, where the Province obtained the very highest awards.

A pamphlet, which was sent with the specimens, gave a description in detail of all the districts of the Province from a sporting point of view. It commenced in the neighbourhood of Quebec, giving Lake St. Charles, Lake Beauport, the river Montmorency, the river St. Anne, lakes Joachim and Philippe, the Laurentide National Park, the river Jacques Cartier and the neighbouring lakes, Lake des Neiges, Lake Vert and Lake des Roches, Lake à Noel, Lake Long, Lake à la Coupe, Lake Fraser, Lake Regis the great Lake à l'Épaulé, the great Lake Jacques-Cartier and the river Santauriski.

Next comes the Lake St. John district. It is unnecessary to give a list of the innumerable lakes and rivers of this region, many of them already in the possession





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of the various fish and game clubs. The Triton Club has for example built a \$10,000 club house on its limits on Lake Batiscan. The Metabetchouan and the Boston clubs have their quarters near Lake Kiskisink. There is a club of wealthy Philadelphians on the river Metabetchouan.

The Grande and Petite-Décharge, the river des Annaies, which leads to Lake Ischotagama, the river Shipshaw, which falls into the Grande-Décharge, the Lake Pipmaukin, the head of the river Betsiamis, the head waters of the Péribonca, the Lake Manonan, the river and Lake des Aigles, the Mistassini, the interior of the valley of the Ashuapmouchouane as far as Lake Mistassini, all these far off regions are beginning to lose their stamp of mystery ; as hunting and fishing parties are now continually visiting them. To the south east of Lake St. John, the LaBelle Rivière, the Lake aux Ecorces and Lake Kenogami are all places well known for the fine quality of their fish.

Fish are plentiful everywhere, in one place, trout in all its varieties, in another, pike, perch, etc.

But let us move on to the rivers Ottawa and Gatineau. The whole region of the Gatineau is covered with lakes, the number of which is not even known, many of them awaiting their first visitor. The official register mentions more than sixty, which can now be reached by the Gatineau Railroad. In the county of Pontiac, celebrated for its large lakes Kippewa and Temiscamingue, not one lake in a hundred has been let, and there are large numbers of first class rivers. A round trip of 600 miles, full of adventures, may be made from Lake Abbitibi or by Lake des Quinze, the Épanse and le Grand Victoria. The attention of sportsmen is particularly directed towards lakes Kekabonga and des Allumettes, where moose, caribou and partridge abound. Phenominal quantities of game have been secured in the valley of the rivers Moine and Managaciki. To the north of Mattawa, the virgin forest is awaiting the rifle of the sportsmen. To the

south of the St. Lawrence, the river Richelieu with its pike, bass and maskinongé, Lakes Brome, Memphremagog and Lake aux Araignées, are, with their system of water courses, already well known centers of attraction.

Below Quebec, bar are caught at the mouth of the river du Sud and out in the St. Lawrence, opposite Madame Island, Marguerite Island and in other places. Lake Pohénégamock, famous for its trout, is near the American frontier.

Few people know the country about Lakes Temiscouata and des Squatteck. Lake Temiscouata is a splendid sheet of water of twenty-eight miles in length. There are also the rivers Touladi, which is very deep, and des Aigles and, lastly, the celebrated Lake Squatteck, the country about which abounds in moose. Then, behind Rimouski, the lakes of the same name, some of which have been let; they may be reached from the stations of the Intercolonial Railway, in the valley of the Métapédia. We would also mention the head waters of the river Rimouski, of the river Metis and of the river Métapédia, as well as the Lakes Supérieur, de la Croix, Hamqui, Taché, du Milieu and Mistigouèche. This is a caribou country.

Lastly there is the Gaspé Peninsula with its water system, its Caspédia, one of the finest salmon rivers in the world, and its forests in the interior, stocked with moose. To the north of the St. Lawrence lies the immense region, known as the Montaignais country, with its rivers St. Paul, St. Augustin, the little and grand Mecatina, the Coacochoo, the Musquarro, the Washeecotai, the St. Jean, the Moisie, the Ste. Marguerite, the Trinity, many of which are visited every summer by fishing clubs. That portion of the Saguenay, celebrated for the jardins de caribou of Charlevoix, is also in this region.

There are still 46 rivers to be let in the Saguenay region, a large number in the counties of Chicoutimi and of Lake St. John, some hundreds of lakes in the

Charlevoix region, a multitude of lakes and rivers in rear of the counties of Champlain, St. Maurice, Maskinongé, Berthier and Joliette as well as in Ottawa and Pontiac.

Is the list exhausted? Most certainly not for the whole of North America, and particularly the Province of Quebec, is the land of lakes of all sizes and shapes and we had almost said of all colours. These everlasting reservoirs of freshness, of production and of life to the countless varieties of fish, and at the same time of pleasure and advantage to man, contain a precious fortune in food products, which, worked systematically and at proper times, will become an appreciable element of the public wealth.

The Laurentides National Park

The Laurentides National Park is one of the largest and grandest fish and game preserves in the world. In the lakes, which are enclosed within its limits, are probably the finest specimens of *salmo fontinalis* to be found anywhere. Many have already been taken, exceeding nine pounds in weight, and it is certain that many larger ones are to be found there, which will dwarf the fish of the Rangeleys and the far famed Nepigon. Roughly speaking, this Park includes the central portion of the territory enclosed between the townships bordering on Lake St. John to the north and along the St. Lawrence to the south, that skirt the Saguenay on the east and St. Lawrence on the west to the limits leased to various fish and game clubs on the eastern side of the Quebec and Lake St. John Railway. It has a superficies of 2,640 square miles or 1,689,400 acres, and its limits are officially described as follows:

“All that part of the vacant and unlicensed Crown Lands of the Province of Quebec, situate in the counties of Montmorenci, Quebec and Charlevoix, bounded as follows: towards the North, by the Southern line of timber berth S- $\frac{1}{2}$ 144, lying between Cedar Lake and the Metabetchouan River; partly by the Southern line

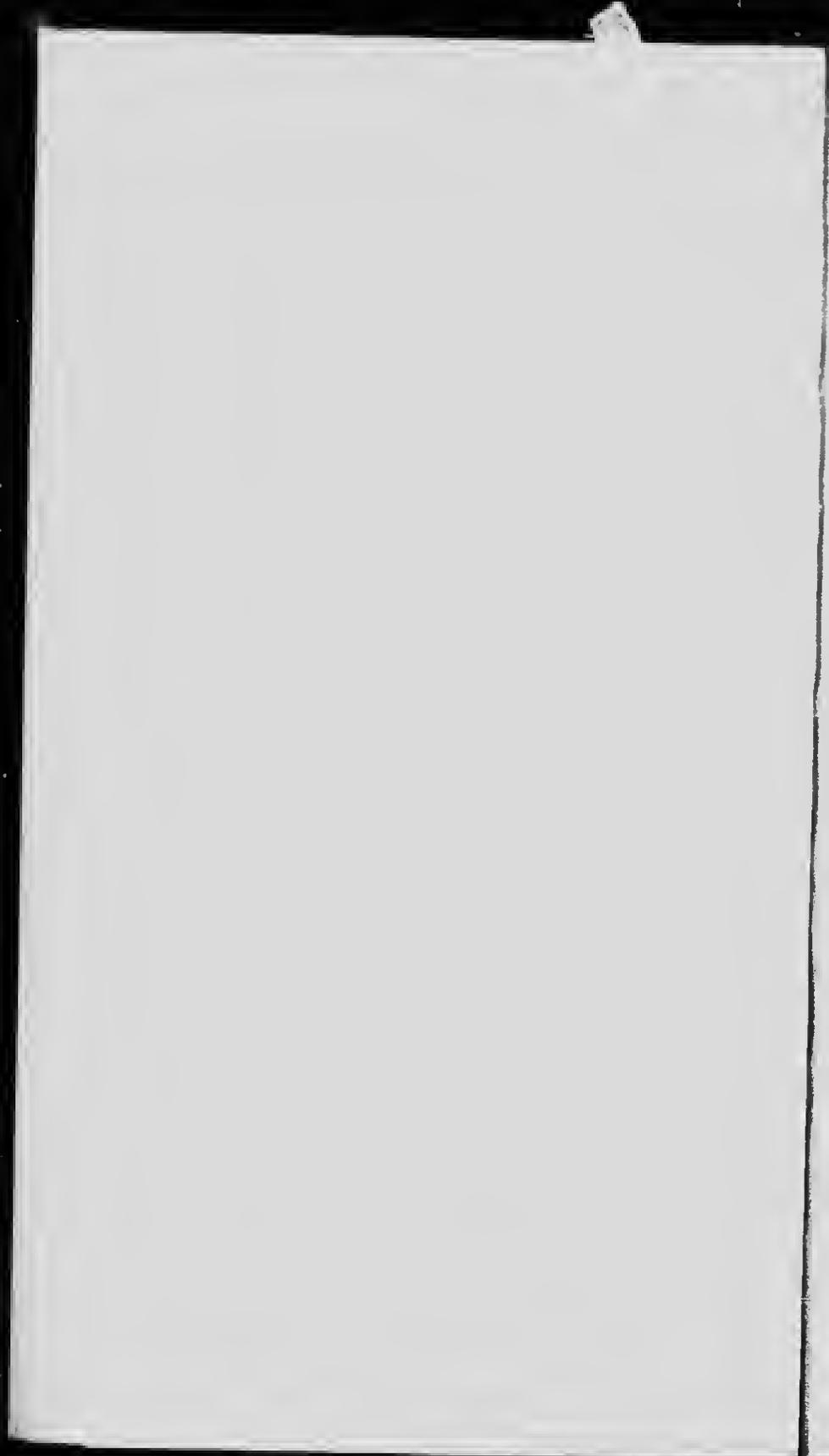
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BEAVER DAM,
HOLT RENFREW & COY'S ZOO, MONTMORENCY FALLS



of the counties of Lake St. John and Chicoutimi, comprised between the East bank of the Metabetchouan to the West, and the St. Urbain and Grande Baie road to the East, and partly by the Southern, Western and Eastern boundaries of timber berths lying on the rivers tributaries of Lake St. John and Kenogami and of the Saguenay River; to the East, by the St. Urbain and Grande Baie road, from the forty-eighth parallel of North latitude, to its intersection with the rear line of the Seigniory of Côte Beaupré; to the Southeast, by the rear line of the seigniory just named, and by the rear line of Stoneham and Tewkesbury townships; to the west, by the easterly line of Tewkesbury township, and by the north-easterly outline of *sic* Hubert and prolongation thereof, to its intersection with the south-easterly outlines of Rivers à Pierre and Batisseau timber berths, and thence by the easterly boundaries of said berths to the northern line of number seven east rear Batisseau; thence, again to the west, by the east bank of the Metabetchouan river, to the forty-eighth parallel of north latitude aforesaid." The objects, for which this Park has been set apart by special legislation, are the preservation of forests, fish and game, the maintenance of an even water supply, and the encouragement of the study and culture of forest trees.

In accordance with the provisions of the regulations, the subjoined schedule of charges for parties visiting the Park for angling and hunting purposes, &c., has been approved.

Tourists and sportsmen (angling) per diem.....	\$1 00
do do (hunting) do.....	1 00
do do (angling and hunting) per diem..	1 50

A nominal charge of \$1 per diem will be made to parties for the use of canoes, and camp equipment. Tourists merely desirous of making a visit to the Park (and not intending to fish or hunt), may, at the discretion of the Commissioner, be granted a permit for that purpose without charge; if camp equipment be used the usual charge for same will, of course, be made.

The Park encloses the head waters of the rivers Montmorency, Jacques Cartier, Ste. Anne de la Pérade, Batiseau, Metabetchouan, Upikauba, Chicoutimi, Boisvert, à Mars, Ha ! Ha !, Murray and Ste. Anne which are, beyond any question, amongst the finest trout streams in the world. No doubt an increasing number of sportsmen, both from abroad and from Canada, will avail themselves of the privilege of fishing in this Park. Its north east portion, and the upper part of the basin of the Jacques Cartier river, are now open for this purpose upon the conditions already given.

Unleased Fishing Waters

The following, amongst many other fishing waters, are yet unleased, but application for their lease may be made to the Department of Lands, Forests and Fisheries :

In the County of Saguenay—Rivers : Salmon, St. Augustin, Etamamiou, Coacochoo, Musquaro, Olo-monashoboo, Kegaska, Nabisipi, Mecatina (Little), Mecatina (Great), Kercaponi, Natagamion, Derby, Little Natashquan, Goynish (less six miles of the west shore), Nabisipi, Romaine, Magpie (the five last named to begin six miles from the gulf shore), Pigou, Trout, Eau Dorée, Moisie Rouge, Moisie, Nepeesis, Des Rapides, aux Foins, Marguerite, Baie des Rochers, Calumet, Pentecôte, Aux Anglais, Amédée, à la Chasse, Maniconagau, Tondnoostock, Outarde, Papinachois, Boucher, Laliberté, Ahnépi (part of), Colombier, Blanche, Sault-au-Cochon, Petit Escoumains, Portneuf (from the rear line of the seigniory Sault-au-Mouton), Des Rochers.

In Chicoutimi and Lake St. John counties—Lakes in townships St. Germain, Simard, Bourget ; Rivers : Valin (east, west and central), Shipshaw, Au Sable, Lac aux Brochets, Tikouapic (upper part), Chicou-biche, Du Chef, A l'Ours, Des Grandes, Oreilles, Boisvert and many others.

In Charlevoix—St. Anne, and hundred of lakes at the rear of the Seigniory of the Côte Beaupré and in all parts of this district.

In Champlain—St. Maurice, Maskinongé, Berthier and Joliette counties—The lakes in the townships of Lejeune, Casgrain, Boucher, Polette (tributaries of the Wessoueau excluded) ; Rivière aux Rats, lakes in Turcotte, Latuque, Creek à Tom, A Bastien ; lakes in township of Langelier, river Mattawin, Castor Noir, Antikauak, A la Chienne, Des Aigles, Aux Senelles, Caonsaquota, Au Poste or A l'Eau Claire, rivers and Lake Ignace, St. Grégoire, Cyprès, Servais, Oboupsawin, etc., etc.

In Ottawa, Montcalm, and Terrebonne — Upper Rouge River, Du Diable and lakes, North Nation River and lakes, east and west branch ; lakes in Montigny, Addington, and Loranger townships ; rivers Brochets, du Lièvre ; lakes in Wells, Bowman, Wabasse, Boutillier, Robinson, Campbell, Rochon, Boyer, Kiamika, Rivière à l'Ours and lakes, Lake Cerf, river Gatineau ; lakes in Kensinton, Aumond, Sicotte, Égan, Lytton, Baksatong ; Eagle River and lakes, river Desert and lakes, Hibou, Jean de Terre, Des Seize Lake Wapitagamaey and river, etc.

Pontiac—Lakes in townships Clapham, Huddersfield, Pontefract, Bryson River, Coullogne (upper part), with countless numbers of lakes ; Black River and lakes, du Moine and lakes, Keepewa, comprising three groups of very large lakes ; Otter-tail River, etc. Besides these, all the lakes and rivers of the Upper Ottawa, Upper Gatineau, Upper Lièvre and Upper St. Maurice, comprising many hundreds in each of the above named districts.



Colonization



COLONIZATION, conducted as we understand it to-day, with a definite object in view and by regular and effectual methods and a collection of ways known as the best to lead to the desired end, only dates back about a quarter of a century.

It was the Curé Labelle, the apostle of the North, who, by his herculean labors and his homeric strife against nature, against prejudice, against political opposition and the coalition of hostile interests, first freed colonization from its heaviest fetters and gave it its present true character, causing it to enter the course along which it is advancing to-day, by casting aside all remaining obstacles and making the conditions of life more and more easy and acceptable to the settler. One of the chief causes which so long kept back Lower Canadian Colonization was the statement, obstinately repeated, which represented the climate as too rigorous for the inhabitants of European countries. Owing to such statements and assertions, the Province of Quebec was overlooked, while the Province of Ontario, which, at the commencement of the last century, had only a few thousand inhabitants, became so rapidly filled up with people, that in fifty years it had numerically passed its neighbouring province, which was then called Lower Canada, and to which it was politically united, before the formation of the Canadian Confederation.

The conditions of the establishment of the country have changed very materially since the passing of the Duhamel act in 1888, which put an end to a number of abuses, corrected others and introduced a new, larger and more liberal policy into the legislation of the country.

Since 1888 every thing humanly possible has been done to improve the condition of the settler; he has received every assistance, and his toil has been lightened by all the means at the disposal of the Government. A kind of privileged legislation has been passed in his favor; he has been protected from annoyances of all kinds, from evictions, from judicial executions which would have rendered him helpless and destitute; finally his resources have been considerably enlarged by making him the owner of all the lumber he cuts on the lot he has bought, as fast as he clears it, provided he pays to the Government the same stumpage dues as the lumberman is bound to pay on the forest limits which he works. But this latter condition is often an illusion, as the payment of the stumpage dues is allowed to the settler in deduction of the price of his lot, and that, in many cases, to assist poor and needy colonists, the Government voluntarily abandons these dues.

We will pass briefly in review the principal regions open to colonization in the province.

The Lake St. John Region

The region, bearing the above name, is one celebrated among all those forming together the Province of Quebec. It is celebrated by tradition and story, by its geological formation, by its incomparable fertility and lastly by the picturesque grandeur of its scenery. This region encloses a superficies of 31,000 square miles, or about 19,840,000 acres, between the 48th and 50th degrees of latitude north and between the 71st and 73d degrees of longitude west, but the portion actually inhabited is all included, from the south to the north between the 48th and 49th degrees.

It is evident, what a vast field is open to the labor and energy of the colonist, since the population, actually spread over this region, does not count more than fifty thousand souls, in spite of the great progress made during the last decade.

The colonization of the basin of the Lake St. John only commenced about the years 1851-52; at which time Chicoutimi and Grande-Baie, now important

centers of the Saguenay country, were themselves only in their infancy. In the interior, apart from these two embryo parishes, in ascending the Saguenay river to Lake St. John, there was absolutely nothing but the virgin forest, not even the lines of a township.

At the present time the number of townships, laid out and all more or less open to colonization in the basin of the lake, reaches to more than thirty, of which the most fertile, to the east and west of the lake, may be truly called the granary of the Province.

The Lake St. John drains an immense basin which bears its name and many large rivers flow into it.

The longest portion of the lake is 28 miles, and its greatest width is calculated to be 25 miles. An exact measurement places the superficies of the lake at 365 miles, and its circumference at 85 miles. The whole way round the lake, there is a vast system of water communication formed by the numerous rivers which fall into it.

The principal of these rivers are, to the south of the lake, the Metabetchouan and the Oniatouchouane; to the east, the La Belle Rivière; to the west, the Chamouchouane; to the north-west, the Ticouapee and the Mistassini; and to the north and north-east, the Grand and the Little Péribonca.

The rivers, together with a few necessary roads, were, up to a few years ago, the sole means of communication for the settlers from one part of the country to the other. But since then bridges have been built over many of them and a large number of roads opened up in the interior.

These rivers, the greater number of which are navigable for vessels of light draught for twenty or twenty-five miles from their mouths, water lands of such large extent and fertility, that it has been said, and with good reason, too, that the basin of the Lake St. John will, one day, become the granary of the Province of Quebec. The fact is the Lake St. John country is large enough in itself to form an entire province, and it has already become a vast field of supplies for the

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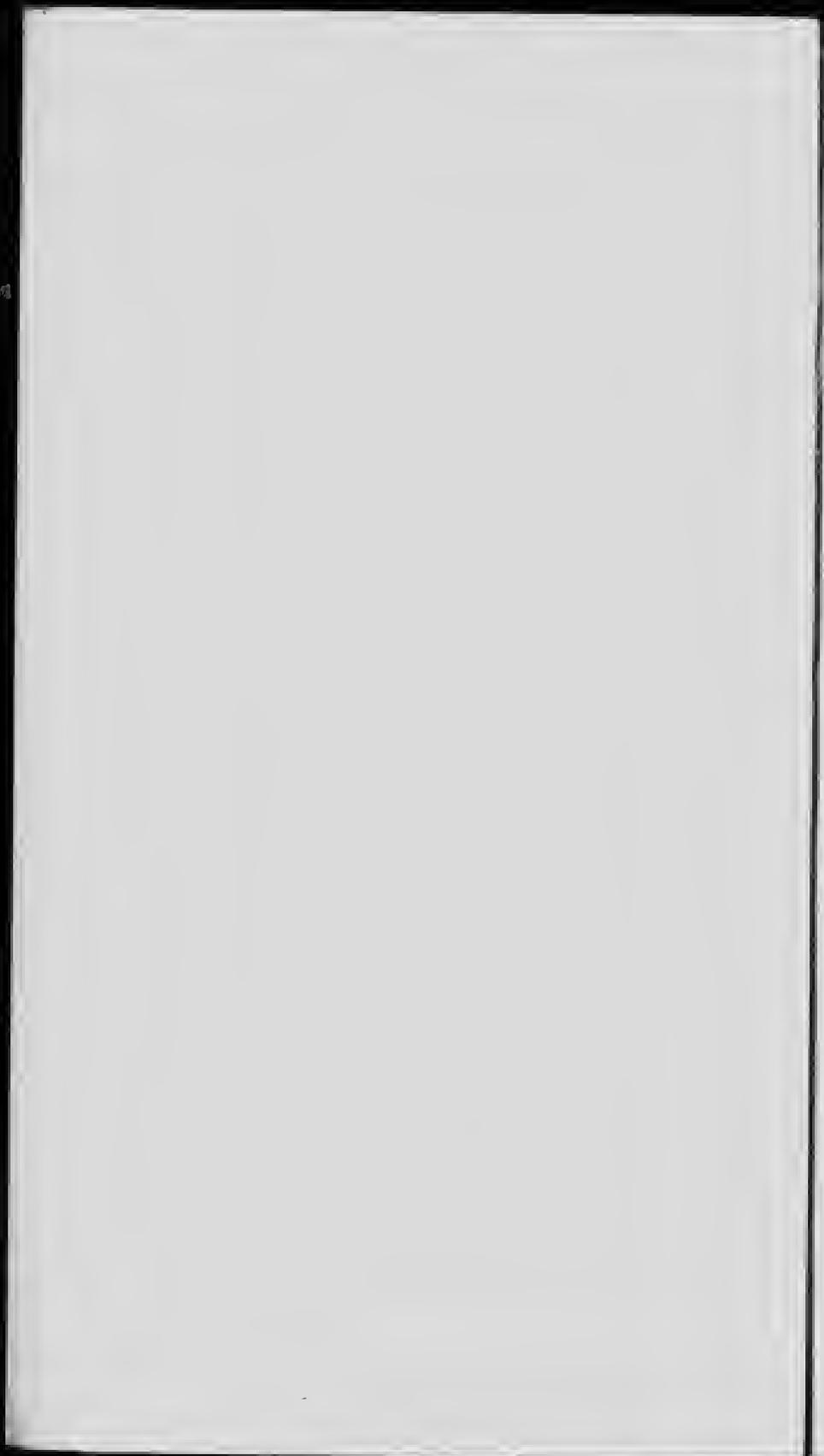
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CHICOUTIMI PULP COMPANY.



capital, and at the same time a locality to which the most earnest and active advocates of colonization and industry have turned their attention. Settlers, with some capital, can purchase farms already under cultivation and more or less advanced, either in the old parishes or in the the new townships.

According to statements of farmers of the place, the greater number of those who took up lands in the early days were without a cent; now a good number of them are worth from one to ten thousand dollars, every thing they own having been acquired by agriculture, although they had to contend with various obstacles and disadvantages which to-day no longer exist. When a farmer had many sons, one or two of these would leave, to work in the United States, while the others remained with their parents and took charge of the farm. In almost every case, those who went to the States are still laboring men, while those who remained at home and took charge of the farms of their parents, are now well-to-do, on good farms well stocked with cattle.

The lesson to be learned from this is clear. Colonization, continually on the increase, has now made the whole tour of the lake. For several years past it has been advancing rapidly towards the west, by the townships of Normandin and Albanel ; to-day it is extending to the north, and the fertile valleys of the Mistassini and the Péribonca are opened up for the benefit of the human race. It is worthy of note that the Lake St. John region is favorable to the growth of the cereals, it is no less so for the dairy industry. Figures are the best proof of the development of trade. In 1898, butter and cheese, to the value of \$220,000, were exported from the region, while in 1903 the exportation of the same articles reached \$600,000, that is to say that in five years the production had almost trebled.

In this region further new agricultural and industrial developments have advanced together, as shown by the following tables :

SAW MILLS.	SITUATION.	Distance from Quebec (in miles).	Annual output (in feet).	PULP FACTORIES	Annual output (in tons).
Heidritter.....	St. Gabriel.....	16	8,000,000		
Kennedy.....	Lac St. Joseph.....	24	6,000,000		
Julien.....	".....	21	2,000,000		
	Lac Sergent.....	28	2,000,000		
	Bourg Louis.....	30	Sissons.....	1,500
	St. Raymond.....	34	St. Raymond Co., Limited..	6,000
	".....	34	3,000,000		
	".....	34	10,000,000		
	St. Léonard.....	39	4,000,000		
	Rondeau.....	39	2,000,000		
	Kennedy.....	42	2,000,000		
	Allen's Mill.....	42	2,000,000		
	Lac Long.....	48	4,000,000		
	Kennedy.....	50	7,000,000		
	Perthuis.....	57	2,000,000		
	Riv. à Pierre.....	57	2,000,000		
	".....	57	2,000,000		
	Pearl Lake.....	101	10,000,000		
	Lac Édouard.....	112	8,000,000		
	Lac Bouchette.....	160	4,000,000		
	Lac des Commissaires.....	150	2,000,000		

Below is a statement of the crops :

CROPS	1901	1891	Augmentation
Grain, bushels.....	1,532,075 ¹ / ₂	714,938	787,137
Potatoes, bushels.....	457,845	287,238	170,607
Hay, tons.....	48,273	16,347	31,926
Butter, pounds.....	444,612	393,127	50,885
Heads of cattle.....	114,100	59,795	54,305
Population.....	49,765	38,281	11,484

The following table, taken from the census of 1891 and of 1901, shows the capital invested in the dairy business :

NUMBER OF CHEESE FACTORIES		CAPITAL INVESTED		VALUE OF THE OUTPUT	
1891	1901	1891	1901	1891	1901
32	81	\$49,431	\$375,986	\$76,832	\$323,784

The Lake St. John Railway and the means of communication.

The Lake St. John Railway and its Chicoutimi extension, by placing the finest parts of this immense territory in communication with the great business centers within the last few years, has at once destroyed all fear and removed all the principal difficulties. The colonist, in this part of the country, can now face the future with full confidence since the railroad has brought him closer to the markets of the world and has placed him in a position to dispose with equal advantage of the agricultural products of his farm and of the lumber which it furnishes so lavishly.

Further the Lake St. John Railway Company, which has at heart the opening up of this part of the Province, offers certain privileges to all farmers who will settle

in the region of the Lake, of which they are always welcome to take advantage.

The company offers free transport, from Quebec to Lake St. John, to all *bona fide* settlers and their families with their household effects to a weight of 300 lbs. for each adult and 150 lbs. for every child.

The charge for every thing over, being 9 cents per 100 lbs., but not beyond the load of a rail-car, 20,000 lbs. per family.

Intending colonists or settlers, who desire first to go out and examine the lands, can obtain a half fare rate from Quebec to Lake St. John and return, which comes to \$3.35 for a ticket. These privileges are granted to all colonists on presentation of certificates from the department of colonization and mines, and from their parish priest as a proof of good faith and these certificates must be countersigned by Mr. René Dupont, the colonization agent for the Quebec and Lake St. John Railway Company. During the summer or fine season, the river Saguenay is also a convenient way of communication with the east of the Province. During all seasons of the year the trains of the Lake St. John Railway run regularly between Quebec, Roberval and Chicoutimi, the rest of the journey, between the various centers of colonization is performed by land and water routes.

The Lake St. John Railway, which serves the whole region between Quebec and Lake St. John, has a length of 190 miles.

The trains which run from Quebec to Chambord and from the latter place to Chicoutimi, by the Chicoutimi extension, cross several fine flourishing parishes on their way, such as St. Jérôme, St. Gédéon, St. Bruno, Hébertville, Jonquière, etc.

Communication by Boat.

Lake St. John, which measures 28 miles in length by 25 in width, drains the immense valley which bears its name.

There is around Lake St. John a vast system of water communication, which is naturally of the greatest advantage to colonization and offers the greatest facilities to the trade of the valley.

The principal of these rivers are, to the south of the Lake, the Métabetchouan and the Ouatichouane ; to the east, the La Belle Rivière ; to the west, the Ashuapmouchouane ; to the north-west, the Ticouabé and the Mistassini ; and to the north and north-east, the Grand and the Little Péribonca :

1. The river Métabetchouan runs out of a small lake near the head waters of the river Ste. Anne de la Pérade and falls into Lake St. John, six miles west of St. Jérôme, after a course of about 130 miles. One of the falls on this river is more than 200 feet high.

2. The River Ouatichouane has its origin in the vicinity of Lake Quaquakamaksis, follows a course of some sixty miles and at two miles from its outlet forms a fall of 236 feet in height.

3. The LaBelle Rivière has a length of about 45 miles, receives the waters of Lake Kenogamichiehe and takes its rise in the lakes of LaBelle Rivière.

4. The Ashuapmouchouane falls into the lake one mile and a half to the north-west of St. Prime, measures three quarters of a mile in width at its mouth, and 400 feet, one hundred miles further up.

5. The river Ticouabé is navigable for nearly thirty miles.

6. The Mistassini is more than three hundred miles long, being three miles wide at its mouth and is navigable for vessels of light draught for twenty-five miles up. It has several large tributary streams, such as the Mistassibi, the river aux Rats and the river Ouassienska.

7. The grand Péribonca measures 450 miles in length. It is navigable for 20 miles from its outlet by steamers of ordinary size.

It has been often stated that the valley of Lake St. John would one day become the granary of the Province of Quebec. The fact is it could form an entire

Province in itself, and in any case it is destined to become in a short time, a vast field of supplies for the ancient capital, while at the same time the most active and earnest efforts of colonization will be made in that direction.

There is now a whole fleet of vessels, worked by electricity, steam or gazoline, which perform the service between the various settlements on the Lake St. John. This fleet consists of 17 vessels which renders communication easy between them.

The Ottawa and Temiscamingue Region.

This valley is bounded to the east by the tributaries of the right bank of the St. Maurice, and to the south by the St. Lawrence, as far as the mouth of the Ottawa, and by the Ottawa itself to the south and west, as far as above Lake Témiscamingue.

This region comprises 45,000 square miles and includes within its limits the forests of the counties of Joliette, Montcalm, Terrebonne, Ottawa, l'Assomption, Pontiac, Argenteuil and Berthier.

The lower part of the valley of the Ottawa as we know, already opened up, occupied and cultivated, but there still remains an important portion for colonization. It is the portion which comprises the middle of the valleys of the Gatineau, of the Lièvre and of the river Ronge, the waters of which flow into the Ottawa and the upper part of the basin of the Mattawa, which falls into the St. Maurice.

The country is undulating, that is, it presents a consecutive series of plains and highlands. But these highlands are in no way mountainous, they are hillocks and small declivities, sloping gently and with large, well rounded tops which can be generally reached with the plough even to their highest points. Between these heights the plains sometimes extend over a space of several miles.

The forest contains the finest trees, magnificent groves of pine, which have been for many years the

object of commercial activity, and which really constitute the principal wealth of the territory, maple, black and white birch, lime trees, ash, elm, walnut, white wood, &c.

The mining industry and particularly the mining of phosphates, large beds of which are found in a number of townships in the valley of the Ottawa, has in the past and still continues to contribute largely to the colonization of this part of the country.

The whole of this immense territory of the Ottawa is literally surrounded with large rivers, the principal of which are :

NAMES.	LENGTH.
The Du Moine.....	120 miles.
The Noire.....	130 "
The Coulonge.....	160 "
The Gatineau.....	250 "
The Du Lièvre.....	200 "
The Petite Nation.....	50 "
The Rouge.....	100 "
The Du Nord.....	45 "
The L'Assomption.....	50 "

These rivers furnish valuable water-power, and are most useful in floating out the timber cut in the region.

The basin of the Lièvre is watered by the river of the same name, which traverses the counties of Maskinongé, Berthier, Joliette, Montcalm and the center of the county of Ottawa, and after a course of several hundred miles, mingles its waters with those of the Ottawa. In the single valley at the sources of the rivers Rouge, Du Lièvre, Petite Nation, and of the Gatineau there are more than 250,000 acres of cultivable lands, equal if not superior in quality to the best farms in the valley of the St. Lawrence.

Some of the townships are particularly fine : Amherst, Arundel and Clyde on the river Rouge, Joly, Marchand, Mousseau, Lynch, Minerve and Loranger, all townships situated on the Lièvre, etc. The "Nominigüe" or township of Loranger merits particular mention. It is the center of the region, generally

called the "Labelle region," which measures thirty miles square. This township is surrounded by the townships of Marchand, Joly, Minerve, Lesage, de Montigny, Boyer, Turgeon, and Mousseau. It is covered by magnificent lakes, among others the grand and little Nominigüe. There are fifteen of these lakes which are all navigable and alive with fish. The grand Lake Nominigüe is surrounded by the greatest variety of trees.

An equal degree of progress is seen in another part of the region, which is commonly called the valley of the Gatineau.

It is equal to the best parts of the valley of the Ottawa.

Aumond, Kensington, Maniwaki, Egan, and Litton are a few of the townships which contain land of the finest quality in every respect.

The whole of this valley of the Gatineau, which contains 10,000 square miles, is traversed by the river Gatineau, a grand river of about 250 miles in length.

The valley of lake Temiscamingue is also sufficiently extensive to divide into many townships, and furnishes facilities for colonization which cannot be too strongly recommended. The valley of lake Temingue, its correct name, is 100 miles long and 120 miles wide. The borders of the lake, for a distance of from two to three miles inland, are broken and mountainous; beyond that, are immense plateaux and valleys from which the timber has been cut and through which in consequence the roads are all made.

As in the valley of the Ottawa, the soil is almost everywhere of great fertility.

The climate is almost the same as that of Ottawa, with the difference however that the atmosphere is less humid; it is most favorable for the cultivation of every kind of grain. Besides this the whole territory is covered with valuable forests, the source of an extensive lumber business which is most lucrative to the region.

The soil is largely composed of clay, and, in the low grounds, is covered with a bed of mould from 4 to 6 inches in thickness.

The Temiscamingue region is also one of the very best for sport in fishing and shooting, as the country abounds with game of all kinds, both feathered and four-footed, and the lakes and rivers are full of the finest fish, among which are to be found sturgeon, white-fish, pike, fresh water herrings, bass, eels and particularly the doré, which is very plentiful.

There are already several flourishing townships in this region.

Means of Communication

The valley of the Upper Ottawa is no longer isolated. Ways of communication, which ten years ago were very scarce, are increasing every year in number and importance. The net-work of railways enables the most important posts in the north to be reached, where there are townships to colonize.

One of the railways, the Pontiac and Pacific Junction, starting from Aylmer, traverses the townships of Aylmer, Hardley, Ouslow, Bristol, Clarendon, Litchfield, Mansfield, etc. Its length is seventy-one miles.

The Montreal and Occidental Railway leaves the flourishing parish of St. Jérôme and reaches as far as La-Chute-aux-Iroquois or Labelle in the township of Joly.

From Labelle the upper regions of the river Rouge may be reached by the ordinary colonization roads which go as far as L'Ascension.

The Gatineau valley railway is already constructed to a distance of 54½ miles. It starts from Hull, where it forms a junction with the Canadian Pacific, and among the townships along its line are Hull, Wakefield, Low, Aylwin, Wright, Bouchette and Manewaki.

The intention of the promoters of this line is to join it later on to the Montreal and Occidental, at Notre-Dame du Desert. Its total length will then be 75 miles.

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SHORT-HORN HERD, COUNTY OF PONTIAC



The Montfort Colonization Railway, only recently constructed, starts from a junction with the Montreal and Occidental between Shawbridge and the station at Piedmont, and runs west for twenty-one miles from its point of departure.

It traverses Morrin Flats, Les Milles Isles, passes the Orphan Asylum of Montfort in the township of Wentworth, and continues across the township of Howard, and part of the township of Montcalm, where it ends for the present, but the intended terminus is Arundel. Up to the last few years the difficulty of communication between Matawan and Lake Temiscamingue was always the principal obstacle to the colonization of the region bordering on the lake.

This obstacle fortunately no longer exists.

To-day Matawan is reached from Montreal by the Canadian Pacific Railway, and from Matawan to Lake Temiscamingue and Lake Kippewa there is a branch line which the same company have just constructed.

The Canadian Pacific Railway Company intends to prolong the line from Matawan to the head of Lake Temiscamingue. Colonists going to Temiscamingue by the Canadian Pacific Railway may obtain a passage from Quebec to Matawan for \$8.20 and from Montreal to Matawan for \$5.30; or to go and return \$12.30 from Quebec and \$7.95 from Montreal.

The effects of *bona fide* colonists are carried from Montreal to Matawan at the rate of 48 cents one hundred pounds or \$39.00 for a car.

Children from 6 to 12 years of age are carried at half price.

From Montreal to Temiscamingue the Railway further carries free 150 lbs. of baggage for each adult colonist and 75 lbs. for each child of the family travelling on a half-fare ticket.

Region of the Lower St. Lawrence

This region comprises all the land and forest to be found in rear of the Seigneuries on the south shore of the River St. Lawrence from Quebec going downward

towards the gulf and forming part of the counties of Bellechasse, Montmagny, L'Islet, Kamouraska, Temiscouata, Rimouski and Matane.

The whole of this territory is divided into townships, except in the counties of Rimouski and Matane, which still contain a large extent of undivided land.

It is estimated that, in the part of the county of Rimouski, to the south of Mount Notre-Dame, between the Intercolonial Railway and the county of Temiscouata, there are about 800,000 acres of good farming land easy of cultivation and well drained.

The general level of the land is only broken by slight undulations, useful to facilitate drainage, but offering no impediment to cultivation or to the opening of roads throughout the region. The soil is almost every where composed of a rich yellow earth, and in the valleys of many of the rivers there is a gray earth of the very highest fertility, similar to the farming lands of the counties of Matane and Rimouski, the land in the county of Temiscouata is of superior quality.

The land continues fine to the west of Lake Temiscouata, as far as Lake Pohenegamook and beyond it, the only interruption being in the hilly parts bordering on Lake Temiscouata.

The whole of this region is well timbered with wood of every kind ; there are lakes without number containing every species of fish : trout, touladi, white-fish, doré, &c.

In the forests of Rimouski and Temiscouata, the timber most generally met with, consists of maple, birch, bouleau, elm and pine trees, but white pine, the various kinds of spruce ; black, red and white, cedar and sapin trees are also found. The Temiscouata valley is abundantly provided with splendid trees.

This part of the country being traversed in every direction by rivers and water courses, the business of bringing out the lumber is carried on under particularly favorable circumstances. In fact these rivers and

water courses become large enough, at the rise of the waters, to float the logs, throughout the greater part of their length.

MEANS OF COMMUNICATION

The Intercolonial Railway traverses this region throughout its whole extent. There is, besides, the Temiscouata Railway which starts from Fraserville and runs as far as the New Brunswick frontier, a distance of about 70 miles.

This Railway runs along the beautiful Lake Temiscouata and traverses almost the whole of the valley of the same name.

The Region of the Metapedia

Public opinion is now fully convinced of the value of this region for colonization. It is one of the finest and most valuable parts of the country. Besides, the opinions of explorers and surveyors, who have travelled over the country, are unanimous upon the point.

This region, destined for a brilliant future, is formed of the immense territory which extends from the environs of lake Temiscouata to the boundary line between the Provinces of Quebec and New Brunswick on one side and to the limits of the Baie des Chaleurs and lake Metapédia on the other.

The extent of territory, watered by the noble river Metapédia and its tributaries, is alone about 1,300 square miles or 832,000 acres.

The soil, almost throughout the whole of the region, is composed of argillaceous sand and is exceptionally productive. There is excellent pasturage. Besides, in quite a number of townships, there is almost a total absence of rocks and boulders.

The land is naturally drained by a bed of stones in the sub-soil at a depth of two and a half to three feet. It is therefore rarely necessary to make ditches or to do any other drainage work.

In some parts of the region, clearing the land is made easy by the large extent which has been burned over.

The forest trees are of the finest, and in the greatest variety. In rear of the townships of Nemtayé, Humqui, Matalik and Melniké as far as the seigneurie of Metis and the river Patapédia, or an extent of about 330 miles, spruce, bouleau, maple, birch, hazel, the cormier and particularly cedar trees are found on the heights as well as in the low lands.

In the townships of Metapédia and Restigouche the birch trees grow to an enormous size and are sound and plentiful. All the other kinds of wood are equally good.

The whole of the rich valley of the Metapédia is abundantly watered by rivers and streams. In the spring at the rise of the waters these rivers swell to a sufficient extent to float the logs, throughout almost their whole length. The rivers Caribon, Sifrois, Mistigongèche, Metis, Assemétnagan and Humqui are floatable up to their head waters. Excellent water powers, capable of working numbers of mills and factories, exist almost everywhere. The lakes in the region are numerous and much frequented by sportsmen who delight in the splendid trout fishing there to be had.

Fur bearing animals are very plentiful ; moose, caribon, marten, otter, mink and even beaver are found in quantities. Since a part of the territory of the Metapédia has been divided into farm lots and especially since the fertility of the soil has become known, colonization is likely to progress rapidly in that direction.

Many new settlements, such as Humqui, Cansapséal, Matalik, Beauvillage, are already prosperous and each year sees the starting of new establishments, filled with promise for the future.

MEANS OF COMMUNICATION

All the townships of the valley of the Metapédia are easily accessible by the Intercolonial railway.

For nearly forty miles this railway runs along the very banks of the Metapédia river and gives the set-

tlers direct communication with the great centers such as Quebec, Montreal, St. John, New-Brunswick, and Halifax, Nova-Scotia.

Region of Gaspesia

Up to a very few years ago the public had but little knowledge of the Gaspesian peninsula and it is undoubtedly due to this cause that the colonization movement has made such slow progress in this part of the country.

But happily, since the last twelve or fifteen years, this ignorance no longer exists. The greater facilities of communication and the many studies which have been made of the region have thrown full light upon the resources and inexhaustible richness of this vast and important home of colonization.

With the assistance of reports from exploring parties, the people have become convinced that, in this region also, there is a large field for colonization operations in no way inferior to other centers, to which for various causes, settlers have given the preference.

The country in question is composed of two large electoral colleges, Gaspé and Bonaventure. It forms the southern extremity of our Province and covers a surface of about 10,000 square miles.

From the Sea, the shores of Gaspésia present a continuous view of magnificent landscapes, in which beauty and grandeur combine.

In 1881, the population of the two counties combined amounted to 43,909 souls, and in 1891 to 47,710.

In speaking of Gaspésia it is impossible to pass over her fisheries in silence. They are in fact the richest in North America and probably the richest in the entire world.

Worked for over two centuries, these fisheries have yielded commercial products to the value of many millions of dollars and have been the means of livelihood of hundreds and hundreds of families.

The working of the fisheries has even caused us to forget that Gaspésia contained within her limits other

elements of wealth ; that here was land of superior quality which, cultivated with intelligence, would secure for the settler, who should take possession, a competence not always obtained from the fisheries.

Of the value of the soil of Gaspésia, the evidence of explorers and of all who have travelled this attractive country is unanimous. All agree that there are large quantities of fertile land.

One explorer writes that all, who have devoted themselves earnestly to agriculture in this region, have succeeded beyond their expectation. It is not unworthy of remark that the fisheries of Gaspésia furnish the raw material or the basis of most important industry from every point of view and one already highly appreciated : the preparation of artificial fertilizers.

These strong fertilizers, which include the waste of fish and sea weed, and which the settler can easily procure, are of the greatest benefit to him in his farming operations. He uses them for enriching his fields and experience has shown that they assist in increasing the returns and in improving the quality of his crops.

Gaspésia is as celebrated for the value of its forests as it is for that of its soil and fisheries.

The finest trees for making lumber are to be found everywhere : pine, spruce, poplar, cedar, etc.

Mr. J. Burean reports that pine is generally good, but that the spruce of commerce is much superior to that found anywhere else.

For all information respecting the Colonist, a letter to the Crown Lands department will bring a pamphlet called " the settler's guide ".

The following is a statement indicating by fiscal years, since 1892, the number of letters-patents issued for land grants of 100 to 500 acres, and total area therein contained.

REGION OF GASPEZIA

Year.	100 acres and under.		100 acres and under 500.		Total Grants.
	Grants.	Acres.	Grants.	Acres.	
1892.	343	24,958	125	23,003	468
1893.	380	26,037	207	39,417	587
1894.	322	24,683	161	24,652	483
1895.	322	22,329	140	23,777	462
1896.	328	24,211	149	25,547	477
1897.	410	29,404	185	36,477	595
1898.	418	30,559	231	39,025	646
1899.	434	30,587	226	38,159	660
1900.	489	25,294	258	42,774	747
1901.	543	39,433	307	50,495	850
1902.	694	50,703	351	57,369	1,045
Total....	4,683	328,258	2,340	400,697	7,023



Trade, Manufactures and Navigation



THE Province of Quebec, as well as the other Provinces of the Dominion, has profited from the era of prosperity under which the whole country has flourished during the last 7 or 8 years and the growth of its trade and manufactures has increased from year to year.

The limits of this small volume will not permit of a detailed statement of the advances in every direction ; but, by the consideration of a few figures, the reader will be able at a glance to appreciate the progress which has been made.

Official statistics give the following figures for the exportation and importation of the Province of Quebec during the five years mentioned :

	Importations.	Exportsations.
1898.....	\$62,650,000.....	\$73,327,000
1899.....	72,230,000.....	70,311,000
1900.....	79,308,000.....	76,791,000
1901.....	76,716,000.....	93,540,000
1902.....	82,014,000.....	91,057,000

From statistics of the trade of Montreal, which is the principal port of the Dominion of Canada, and is situated in the heart of the Province of Quebec, an idea may be formed of the growth of the commerce of the country.

From the opening of navigation till December 1, last year, 302 sea-going vessels with a total tonnage of 1,890,904 tons entered the port, showing an increase of 45 vessels over 1902, 60 vessels over 1901, and 76 vessels over 1900. The increase of tonnage, however, is slightly greater in proportion. The decrease in sailing

vessels proves conclusively that this mode of transport is, owing to the increased pressure of business, too slow, and that notwithstanding the supposed difficulty of the St. Lawrence route, business is rapidly developing. Following are the comparisons of the last four years :

Year.	Steamships.	Tonnage.	Sailing ships.	Tonnage.	Total No. Vessels.	Total Tonnage.
1900.....	692	1,382,675	34	11,211	726	1,393,886
1901.....	707	1,438,081	35	14,967	742	1,453,048
1902.....	728	1,530,023	29	9,381	757	1,539,404
1903.....	780	1,883,838	22	7,066	802	1,890,904

Canada's waterways and canals have this year carried into Montreal, over half a million tons more than last season. Statistics for the last four years show the following large development :—

Year.	Vessels.	Tonnage.
1900.....	8,310	1,659,616
1901.....	8,435	1,680,182
1902.....	9,358	1,875,668
1903.....	14,408	2,410,907

Another sign of the prosperity of the port is the substantial increase in the revenue of the Harbour Commissioners. The Trinity dues this year were \$4,949.93 as against \$4,399.66 in 1902. Revenue received from the Collector of Customs on the imports and exports, and from the Wharfinger for local traffic, shows an increase of \$35,077.70 over last season. The totals are :—

	1902.	1903.
Imports.....	\$176,500.00	\$190,000.00
Exports.....	78,000.00	94,000.00
Local Traffic.....	25,672.07	31,249.77
	<hr/>	<hr/>
	\$280,172.07	\$315,249.77
Increase.....		\$35,077.70

Now let us glance at the advance made in the exportation of our chief products :

Cheese

Year.	Quantity. Boxes.	Price. Per box.	Value.
1903.....	2,395,932	\$9.00	\$21,563,388
1902.....	2,109,171	8.50	17,927,000
1901.....	1,791,613	7.00	12,541,291
1900.....	2,077,000	8.00	16,560,000
1899.....	1,896,496	7.75	14,698,000
1898.....	1,900,000	6.35	12,065,000
1897.....	2,102,985	6.75	14,195,000
1896.....	1,726,237	6.75	11,605,000

The big Montreal operators still retain control of the great bulk of the trade, for as will be noted in the following table, eighty per cent. of the cheese exported from this port were local shipments, and of the remaining twenty per cent., a good portion consisted of direct through shipments on account of local firms.

Butter

The results of the season, with comparisons for a series of years back, are as follows :—

Year.	Quantity. Boxes.	Price. Per box.	Value.
1903.....	338,277	\$14.25	\$4,803,533
1902.....	539,845	14.70	7,936,121
1901.....	410,000	14.70	6,027,000
1900.....	256,000	14.00	3,640,000
1899.....	451,050	13.30	5,998,000
1898.....	270,000	12.25	3,307,500
1897.....	200,000	12.00	2,697,000
1896.....	157,321	12.25	1,890,000

Eggs

Although the close of the Canadian export egg trade, for the season of 1903 via the Port of Montreal, shows

a small decrease in the volume of business done, when compared with 1902, yet it is acknowledged by the Canadian producers and shippers, as well as by the English receivers, to be the most successful in the history of the Canadian egg trade.

154,322 boxes of eggs were exported in 1903 against 160,344 boxes in 1902.

The summary of export of timber, deals and lumber from the St. Lawrence—season, 1903—in feet board measure, shows :—from

Montreal	231,228,695
Quebec... :	109,688,817
Three Rivers and Pierreville.....	44,601,070
Other ports.....	60,163,378
Total.....	445,681,960

The following table shows the total shipments of live stock from the Port of Montreal for the last eight years :—

Year.	Cattle.	Sheep.	Horses.
1903.....	147,216	61,017	373
1902.....	77,193	45,831	548
1901.....	73,791	54,538	7,386
1900.....	92,180	34,838	6,582
1899.....	81,804	58,277	4,739
1898.....	99,049	34,991	5,827
1897.....	117,237	60,638	10,051
1896.....	96,448	76,520	10,421

The Port of Montreal in 1903 also exported 1,550,419 bags of flour, 126,205 barrels of flour, 459,107 bales of hay, 716,233 barrels of apples and 106,842 boxes of apples, while only 123,737 barrels were exported in 1901 and 433,496 barrels in 1902.

The exports of lard and meats have been as follows :—

	1903.	1902.
Lard.....	236,206 Tcs.	212,376 Tcs.
Meats.....	146,664 Bxs.	136,697 Bxs.

Canned Goods.

The exports of canned goods for 1903-1902 were as follows:—

1903.....	102,058 cases.
1902.....	95,564 "

Manufactures

Admitting as an established fact that manufactures have increased in the same proportion as all other branches of the business of the country during the past years, the following table from the census of 1901 will show the condition of progress attained:—

Manufactures of the Province of Quebe

MANUFACTURES	No. of Establishments.	Value of Products.
Mineral and aerated waters.....	23	369,760
Farming implements.....	41	1,162,245
Ammunition.....	3	414,906
Shelters, tents and sails.....	8	135,360
Axes and tools.....	5	102,594
Cotton bags.....	3	662,000
Baking powder and essences.....	4	95,654
Rubber and leather piping.....	4	408,715
Forges.....	4	29,070
Engines and boilers.....	14	917,537
Boots and shoes.....	114	14,052,632
Shoe furnishings.....	6	211,127
Cigar boxes.....	4	127,900
Wooden boxes.....	30	957,235
Paper bags and boxes.....	10	481,597
Copper castings.....	4	295,000
Bread, biscuits and confectionary.....	103	3,566,535
Bricks, tiles and pottery.....	90	793,953
Brushes and brooms.....	4	55,200
Butter and cheese.....	902	12,814,377
Pasteboard.....	3	147,000
Coach building.....	126	1,367,659
Material for repairing rail cars.....	9	3,968,122
Church ornaments.....	3	39,381
Men's clothing.....	161	2,433,682
Men's clothing (ready made).....	38	4,253,...
Women's clothing.....	89	1,055,36
Women's clothing (ready made).....	7	773,000

MANUFACTURES OF THE PROVINCE

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MANUFACTURES	No. of Establishments,	Value of Products.
Coffee and spices.....	10	679,663
Coffins.....	8	119,313
Cooperage.....	6	100,900
Corsets.....	4	180,700
Cottons.....	5	6,149,680
Cutlery and edged tools.....	4	72,900
Drugs.....	6	422,077
Dyes.....	3	60,000
Electrical machinery.....	9	1,814,738
Electric light and power.....	17	619,563
Fish in boxes.....	121	565,527
Flour mills, products of.....	35	3,195,911
Foundries, products of.....	81	4,112,398
Preserved food products, in boxes.....	9	318,744
Toilet articles (for men).....	22	2,969,420
Furniture.....	12	1,311,235
Gas for heating and lighting.....	1	922,777
Gloves and mitts.....	6	224,500
Saddlery.....	26	1,120,542
Hats and furs.....	58	3,813,661
Pressed hay.....	4	484,000
Hosiery.....	9	397,480
House decorations.....	5	125,250
Products in iron and steel.....	10	3,455,578
Jewellery.....	9	380,317
Lasts and pegs for shoemaking.....	5	45,431
Leather, tanned, curried and finished.....	55	4,531,978
Linne.....	53	96,268
Liquors, malt.....	13	1,511,753
Liquors, wine.....	5	106,150
Saw logs.....	622	10,391,638
Lumber for building.....	106	2,334,366
Matches.....	4	293,655
Mattresses and spring beds.....	5	300,300
Mica.....	4	95,226
Monuments and tombstones.....	17	319,065
Musical instruments.....	9	212,750
Painting and glazing.....	3	103,000
Paints and varnish.....	8	2,021,592
Patent medicines.....	11	582,119
Paper.....	12	2,621,071
Photography.....	4	69,858
Photographic material.....	4	69,300
Pictures frames.....	5	84,625
Plumbing and tinware.....	103	2,786,243
Printing and binding.....	15	434,897
Printing and publishing.....	91	3,074,677
Railroad material.....	6	516,600
Roofing and material for.....	3	306,590
Rubber clothing.....	6	401,000
Scales.....	3	37,000

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MANUFACTURES	No. of Establishments.	Value of Products.
Ships, building and repairs of.....	7	591,654
Silver ware.....	4	68,760
Slaughtering, and salting meat.....	9	3,079,410
Soap making.....	7	422,361
Tobacco, cigars and cigarettes.....	39	2,480,430
Tobacco for smoking and chewing and snuff.....	14	5,750,522
Vinegar and pickles.....	6	221,500
Wall paper.....	3	717,200
Washing compounds.....	3	20,500
Wax works.....	3	71,250
Iron wire.....	6	1,213,230
Wood pulp (chemical and mechanical).....	14	2,421,068
Wood working and turning.....	8	96,282
Woolen goods.....	22	2,327,382
Various other manufactures.....	113	20,003,933
Totals.....	4,845	158,287,994



591,651
68,760
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Quebec



QUEBEC, the capital of the Province, is one of the oldest and most interesting cities of America, while in the grandeur of its site and surroundings, the strength of its fortifications and the extent and romance of its history, it far surpasses them all. Its geographical situation gives it special importance in the military and commercial strategy of North America. Quebec is really at the beginning of river navigation. In her magnificent harbour the depth of water is almost 200 feet.

The scenic beauties of the Ancient Capital are famed far and wide. It has been surnamed the "Gibraltar of America," with this difference, that it is not only a fortified promontory, but an inhabited mountain with palaces and suburbs and surmounted with cupolas and minarets which give it an oriental aspect; a city of stairways, of terraces, and gardens. It has consequently become the Mecca of tourists and the affluence of its visitors so increases from year to year, that its grand hotel, the "Chateau Frontenac," and the several other first class, although somewhat smaller hotels which have been opened within the last few years, can no longer give them accommodation and more hotels are being provided.

The Chateau Frontenac, which is one of the most extensive and princely hostelrys of America, is truly magnificent both in situation and design. It is built alongside of the Dufferin Terrace and commands a view of the harbour and the whole surrounding country with its mountains and valleys, islands and rivers which together form a scenery of almost unequalled beauty.

The Dufferin Terrace is one of the most magnificent promenades in the world, the view from which is inexpressibly grand. The city is built partly on the top and on one of the less abrupt slopes of the promontory, and partly on the low shores of the Rivers St. Lawrence and St. Charles, whence its division into Upper and Lower Town. Quebec is one of the great seaports of the St. Lawrence and of the Canadian Atlantic, being at the head of navigation in the deep water channel.

Its harbour is ten miles in length, with a width ranging from 2,000 to 6,000 feet. In its immediate vicinity, are some of the most magnificent water falls; the Montmorency and the Chaudière falls, which are actually in the harbour, and the falls of the Ste. Anne and the Jacques Cartier rivers, a short distance from it, are all being utilized as water-powers for the creation of electric power and the working of machinery and factories of various kinds. Quebec's "back country" is one of the best watered regions on the American continent and comprises the valleys of the Lake St. John, of the St. Maurice river and lastly that of the far-famed river Saguenay. In 1535, Jacques Cartier landed on the banks of the river St. Charles, but the foundation of the first settlement at Quebec only dates back to 1608, when Samuel de Champlain took possession, for and in the name of the King of France. Taken by Kirke in 1629, it was restored to the French in 1633. It was again threatened by Phipps in 1690, and Walkem in 1711 and capitulated to the English in 1759, after the celebrated battle of the Plains of Abraham. In 1775, Quebec was besieged by the Americans under Arnold and Montgomery, but the attack was unsuccessful and the city remained British.

In religious, educational and charitable institutions Quebec holds a very high position. The first Canadian Cardinal of the Roman Catholic church was appointed for this city. It has also a bishop of the Anglican church. It contains twenty Roman Catholic and

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HARBOUR OF QUEBEC, SHOWING OUTER BASIN



twelve Protestant Churches and Chapels, all of which are attended by large and devout congregations. Besides the above, which are devoted exclusively to public worship, it contains a very large number of religious institutions, devoted to educational and charitable purposes, which do a vast amount of good in furnishing an excellent education to the children of the poor, for little more than a nominal charge and relieve and assist the needy and the suffering at, to them, no expense at all. The Young Men's Christian Association is another institution established in the city which does a large amount of good in the cause of religion and charity.

The educational establishments of the city are of a very high standard. The Laval University is one of the foremost seats of learning in the Dominion, where the very highest education, in the professions and in the arts and sciences, may be obtained. Morrin college, affiliated to the McGill college of Montreal, is another institution for higher education. Secondary and elementary education are well attended to by the minor Seminary, the High School, the Normal School, the school of arts and designs, the Government night schools and a host of others. There are also numbers of convents and public schools where the young girls of the city receive careful instruction and education. There are some fifteen hospitals, refuges and asylums in the city, where the needy and the suffering obtain the assistance and relief, which their circumstances may require. The Hotel Dieu of Quebec, a Catholic religious institution, the "General Hospital," established in 1693 by Monseigneur de St. Valier, the second bishop of Quebec, and the Jeffery Hale hospital, a Protestant institution, established and supported by large charitable bequests and donations, are the three principal hospitals of the city. The Beauport Insane Asylum, established and maintained by the Government, is also a Quebec institution.

Quebec is now making rapid strides in advance in the matter of commerce and industry.

Four local banks have their head offices in the city and a large number of outside banks have opened agencies and built magnificent banking houses. The local banks are the Quebec, the Union, the Nationale and the Caisse d'Économie, and all of these, as well as the agencies of the outside banks, are doing large and profitable business. Towards the middle of the last century, wooden ship-building was one of the principal local industries and the export of square timber was carried on upon a very large scale, but the multiplication of saw-mills in the interior and the decentralization of the export trade did great damage to the port of Quebec. But, although the ship building business no longer exists, the same thing cannot be said of the export of lumber, which is still carried on most extensively by many large firms, some of them prominent among the leading commercial establishments of the Dominion.

It is true the business is not precisely the same as it was in former times; then the lumber was shipped in the form of square timber, now it is forwarded in the shape of deals, boards and other kinds of manufactured lumber, which still find a ready sale in the markets of Great Britain and elsewhere. In fact the export of lumber has increased in a very marked way at Quebec during late years and amounts to many millions of dollars annually.

Since the complete collapse of the ship building business, another great local industry has arisen. It is the shoe trade, or the manufacture and sale of boots and shoes.

Recent statistics show that there are actually 32 shoe factories in the city, without reckoning those at Levis and Lorette, to the number of 7, and that their annual output is about 9,000,000 pairs, or nearly one half of the total Canadian consumption, which is estimated at \$20,000,000 per annum. These factories give employment to many thousands of the working class. Much of the work to be done require skilled labor,

for which very remunerative wages are paid and all the hands employed receive steady work and good pay for it.

There are many other important local industries and manufactories successfully carried on at Quebec, such as cotton mills, fur manufactories, breweries, clothing, tobacco and cigar factories, etc. Among these, special mention might be made of the principal warehouses and establishments where the magnificent fur goods, for which Quebec is celebrated, made up in winter garments for men and women, sleigh and carriage robes and articles for purposes of decoration, are manufactured and exhibited for sale. There are three of these establishments particularly well known, not only to the citizens, but to all tourists and visitors to the city, through the high reputation obtained by the beauty and richness of their goods. These establishments are conducted by Messrs. Holt, Renfrew & Co., on Buade street, in the Upper Town, and by Messrs. J. B. Laliberté and Z. Paquet, on St. Joseph street, in the lower part of the city. In these establishments the most superb and expensive furs, prizes for millionaires, as well as the cheaper class, suited to people of moderate incomes, are to be seen, but all are so carefully selected and skilfully prepared that even the cheaper class of furs are almost equal in appearance to those of the very highest prices. Mr. Paquet alone gives employment to nearly one thousand people in his immense factory and warehouses. Among other successful local institutions may be mentioned the Gas Company, the Ferry Company, the Quebec Steamship Company, the Megantic and Lotbinière Railway Company. The Quebec Harbor Commission is also doing a large amount of work in improving the harbour and in extending the magnificent system of wharves and docks which are under their management and control, so as to meet the increase in the shipping trade. The export of pulp to Europe, for paper making, has also set in from Quebec and has already reached very large proportions.

Quebec is the terminus of four railways : The Canadian Pacific, The Great Northern, The Quebec and Lake St. John and the Quebec, Montmorency and Charlevoix which leads to the world famed shrine at Ste. Anne de Beaupré. Besides these there are several others, the Intercolonial, the Grand Trunk, the Quebec Central, etc., which now reach Levis, opposite the city, but which will soon all run in to the city itself on the completion of the magnificent new bridge across the River St. Lawrence. Another important railway system is that of the Quebec District Electric Railway, which is one of the best equipped and managed electric roads in the Dominion. It is operated by the Quebec Electric Light and Power Company. There is also another electric company doing business in Quebec called the Jacques-Cartier Company, after the falls on the Jacques-Cartier River, where their works are situated, about twenty miles from the city. This is a very powerful company, with an almost unlimited capital to employ in the expansion of their already extensive operations. This company has contracts for the lighting of the streets, public buildings and of many of the private residences in the city.

The idea of connecting the network of railways in the neighborhood of Quebec by means of a bridge over the St. Lawrence at its narrowest point in the vicinity, is now likely to be soon realized, a strong company having been formed to carry out the project, and they are now actively pushing forward the work to completion at the earliest date possible.

The Quebec Bridge is one of the most wonderful engineering enterprises of the age. It is now in course of construction and will, it is expected, be finished in the year 1906. It is being built about five miles above Quebec, over the St. Lawrence River, at its narrowest point. It will serve as a connection between the numerous railways running into Quebec on one side and into Levis on the other side of the St. Lawrence. It will be the largest cantilever span in the world. The

total length of the bridge will be 3,300 feet, the length of the channel span 1,800 feet, ship clear headway 150 feet above highest tide ; height of cantilever towers 360 feet above the river, total width of floor, 63 feet for double track railway with electric track and highway on each side. The amount expended up to 1903 exceeded \$1,500,000, and the necessary money to complete the bridge, approaches and terminals, amounting to \$6,678,200, is secured. The building of this bridge is essentially a Quebec undertaking and is being carried out by a strong Company of Quebec capitalists.

The population of Quebec, which was almost stationary for a long time, numbered 63,000 at the census of 1891, but is now over 70,000, an increase over eleven per cent. This, however, only reckons the population of the city proper ; it does not include the teeming population of the suburbs and villages immediately adjoining and actually forming part thereof, although not yet legally incorporated with it.

It becomes clear to the most superficial observer that the city of Quebec is rapidly acquiring a commercial position commensurate with her importance historically and her commanding situation as an outlet of trade. She has not only a great past, but a brilliant future before her. It is possible that some of the conservative minds of the old Province may view, with a certain amount of alarm, the commercial growth of a city, hallowed by the traditions of past ages, but in a young country the wheels of progress must continue to revolve. The rapid strides Quebec has made in recent years must be largely attributed to her present chief magistrate, the Honorable Mr. Parent, who represents the very best type of French Canadian. In several successive terms, as mayor at the head of her municipal administration, he has stood for progress and development. As a result the city has been spreading out on all sides, until it seems likely that before long the historic battlefields in her vicinity will have to be sacrificed to her need of expansion. The exceptional

advantages she has to offer as an industrial city with a good working population to draw upon, are being realized all over Canada and outside capital and enterprise are continually seeking opportunities to share in these advantages.



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City of Montreal



MONTREAL, the largest city in Britain's possessions in the western world, is the commercial metropolis of the Dominion of Canada, the home of her strongest financial institutions, the scene of her greatest industrial activity, the door through which passes the larger part of her external trade. Situated well inland, nearly one thousand miles from the Atlantic, Montreal is still an ocean port; belonging to the eastern group of Canadian cities, she is the gateway to the Canadian west; filled with the New World spirit and taking the New World view of life, she has a past behind her that reaches back to the early colonial days, when the country was a wilderness and its masters savage red men; the chief city of Britain's premier colony, her population is largely composed of the descendants of France's pioneers in the western world, men who first planted the seeds of civilization in the valley of the St. Lawrence and who left their mark on the history of the continent. The visitor, coming to study the conditions of life in the Dominion of Canada, her industrial and intellectual development, the aspirations of her people, and the promises of her future, will find in the city of Montreal much that will interest him and aid him in his task. One thing he will not fail to receive, and that is a hearty welcome from all classes.

The city of Montreal is situated upon the southeastern side of a triangular island formed by the mouths of the Ottawa river, which, after a course of 600 miles, pours its waters into the St. Lawrence. The length of the island is 30 miles and its greatest breadth about 7 miles. Along the southern and eastern sides of the

island flows the St. Lawrence and part of the waters received from the Ottawa, and on the bank of this mighty stream is built the city of Montreal. From this stretch of river-front the land rises in a succession of terraces until the elevation terminates in Mount Royal, 900 feet above sea level. The mountain stands directly behind and in close proximity to the city to which it has given both its name and the finest natural park on this continent. Between the base of the mountain and the river, and spread out to the right and left, stands Montreal and her suburbs. To the north and west of the mountain the country is generally level, sloping gradually away to the "back" branches of the Ottawa, which on this side separate the Island from the main land.

From the mountain-top a view of varied and matchless beauty greets the eye. At one's feet lies the busy city, and beyond are the glimmering waters of the St. Lawrence, whose broad expanse is spread out to view almost as far as the eye can see.

Accessible to sea-going ships and situated at the confluence of two great rivers, Nature intended Montreal to be a busy mart. From the west flows the Ottawa, the outlet of the great pine region of Canada, whose timber areas, although worked for years, have still stored in their sombre forests millions of wealth. From the southwest rolls the mighty St. Lawrence, bearing to the Atlantic the surplus waters of the Great Lakes, which extend westward to the very center of the continent. Meeting at Montreal, the united volume of these two rivers forms a waterway navigable by ocean steamships of the first class. No other seaport on this continent is so near the wheat fields, the cattle ranches and the lumber forests as Montreal. The early French fur traders realized the natural advantages of the site, and long before a permanent settlement was effected on the island, it was their practice to pitch their tents here each season and await the coming of the Indians from the south and west with their canoes laden with the

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Board of Trade - Montreal



spoils of the chase. From that time to the present day the trade has flowed in increasing volume through these natural channels.

Montreal of To-Day

Montreal is surrounded by a number of suburbs so closely built to the city that they practically form part of one industrial and commercial center, and they should be taken into account in studying the life of Canada's business metropolis.

The population of Montreal and her principal suburbs according to the census of 1901, compared with the census of 1891, is as follows :—

	1901	1891
Montreal.....	267,730	219,616
Ste. Cnnegonde.....	10,912	9,291
St. Henri.....	21,192	13,413
St. Louis.....	10,933	3,587
Westmount.....	8,856	3,076
Maisonneuve.....	3,958	1,226
Outremont.....	1,148	408
De Lorimier.....	1,279	450
Verdun.....	1,898	296
	327,906	251,363

Montreal has 180 miles of streets, and in these streets 666,900 square yards of permanent paving. Her annual consumption of water amounts to about eight billion gallons. The total annual civic revenue is three and a half million dollars, and, according to the last annual report of the City Treasurer, it was derived principally from the following sources : Assessments on real estate, being one per cent. on value for municipal purposes and one-fourth of one per cent. for school taxes ; water-rates being seven and one-half per cent. on rentals of dwellings ; from business duty and personal tax, vehicle licenses and other special licenses.

In 1902 the revenue amounted to \$3,379,219, and the expenditure on revenue account amounted to \$3,305,867.

The value of the real estate in the city, according to the assessment roll, is \$190,000,000, of which \$38,500,000 is exempt from taxation.

The Great Waterway

The waterway, of which Montreal is the most western port accessible to ordinary ocean-going vessels, extends from Port Arthur on Lake Superior in the west to the Straits of Belle Isle on the east, the northern outlet of the Gulf of St. Lawrence into the Atlantic ocean—a distance of 2,260 miles. From the Straits of Belle Isle to Liverpool the distance is 2,234 miles, making a total water route of 4,494 miles from the heart of North America to the shores of Great Britain.

The nationality and tonnage of the ocean-going vessels in 1903, were as follows :

Nationality.	Vessels	Tonnage.
British.....	556	1,200,274
Norwegian.....	165	285,991
German.....	14	28,665
American.....	20	21,369
Danish.....	2	4,453
Austrian....	1	520

Railway Facilities

Montreal is abundantly supplied with excellent railways, which put the city in touch with all parts of Canada, and through their American connections with the industrial and commercial centers of the United States. Four great trunk systems converge here, and these practically control the overland carrying trade of Canada. They are the Grand Trunk Railway, the Canadian Pacific Railway, the Intercolonial Railway and the Canada Atlantic Railway.

The main line of the Grand Trunk system begins at Portland, on the Atlantic ocean, in the State of Maine, and extends westward through the Province of Quebec and the Province of Ontario, thence across the International Boundary through American territory to Chicago, on Lake Michigan. Its branch lines form a network over central Canada, and connections are made with the principal systems of the northern and western States. Below Montreal the St. Lawrence river is touched at two points—at Levis, opposite Quebec city, and at the foot of Lake St. Peter. The northeastern frontier of the United States, which, at its nearest point, is only 50 miles due south from Montreal, is crossed at five places, and these lines, passing through the most thickly settled and productive parts of the Province of Quebec, meet at Montreal. From here southwestward extends a double-tracked main-line through the Province of Ontario by way of Kingston, Toronto, Hamilton and London, and extending to Buffalo, Detroit and Chicago in the United States. From this main line reach out the branches which practically cover all the older portions of Ontario. By means of the Central Vermont Railroad, controlled by the Grand Trunk, and its New England connections, the Canadian road extends to Boston and New London on the Atlantic. The heart of these arteries of trade is Montreal, where the chief executive offices and the workshops of the system are situated. The head office of the corporation is in London, England.

The Canadian Pacific Railway is the great transcontinental system of the Dominion, and binds together the Provinces of the Confederation. Its main line extends in the east from St. John, an Atlantic port in the Province of New Brunswick, to Vancouver in British Columbia, on the Pacific coast, passing through Montreal, Ottawa and Winnipeg, across the great western prairies, through the Rocky Mountains, and then on to Vancouver. From here its system of transportation is continued by a line of steamships to Japan and China. From Montreal a branch reaches along the

north shore of the St. Lawrence to the city of Quebec ; another through the southeastern part of the Province of Quebec into New England, where connections are made which give a through service between Montreal and Boston and other American centers. Southwest of Montreal the system extends through Ontario by way of Toronto and London, to Detroit, in the State of Michigan, with through train service over American connections to Chicago. Branches extend throughout Ontario, one of the principal being that from the trans-continental line through the northern part of the Province and thence westward to St. Paul and Minneapolis, in the State of Minnesota. In Manitoba and the North-West Territories branches tap the more important grain-producing districts, thus giving overland connection with the port of Montreal. The head office and the main workshops of the Canadian Pacific Railway are in Montreal.

The Intercolonial Railway, together with the Prince Edward Island Railway, belongs to the Government of Canada ; and it was primarily built for the purpose of uniting the Maritime Provinces with Central Canada. Its eastern terminus is the Atlantic port of Halifax, Nova Scotia. From there it proceeds in a northwesterly direction across Nova Scotia and New Brunswick until it reaches the St. Lawrence river, in eastern Quebec. Thence it proceeds up the valley of the St. Lawrence to Montreal, entering the city over the tracks of the Grand Trunk Railway, whose terminal facilities it uses and with which system it makes connection. The Intercolonial Railway and the Canadian Pacific Railway give Montreal two through lines to the most eastern portion of Canada and to St. John and Halifax, Canada's two winter Atlantic ports.

In addition to the railway connections which Montreal enjoys by means of the Grand Trunk and the Canadian Pacific systems, the city has another through line to the Great Lakes. This is the Canada Atlantic Railway. Its present western terminus is Parry Sound,

an excellent harbour on Georgian Bay. From there the line extends due east through the great pine region of Northern Ontario, passes through Ottawa and then on to a point on the main line of the Grand Trunk 40 miles west of Montreal. It then enters the city by means of the Grand Trunk.

Railway Statistics

Three electric railways operate on the Island of Montreal, intersecting the city in all directions and connecting it with numerous suburban points. The total mileage of the three is 103 miles; car mileage, 11,554,791 miles; passengers carried last year, 50,622,967; gross earnings, \$2,041,197; net earnings, \$913,183.

Montreal as a Financial Center

Montreal is the financial center of Canada, the home of the leading banks, insurance companies and other moneyed institutions which safeguard the capital of the general public and supply the country with the sinews of commercial and industrial life. In Canada there are 35 chartered banks, and 19 of them have either a head office or a branch in Montreal. The paid-up capital of the 35 banks amounts to \$74,883,880; note circulation, \$58,283,484; assets, \$627,976,830; liabilities, \$497,750,512.

The 19 banks doing business in Montreal have a total paid-up capital of \$64,740,000; note circulation, \$49,940,000; assets, \$544,142,000; liabilities, \$432,368,000.

The volume of banking business done in Montreal is indicated by the following statement of the Montreal Clearing House for the last three years:—

	1900.	1901.	1902
January. . . .	\$62,853,000	\$71,115,000	\$76,995,000
February. . .	54,250,000	51,138,000	74,009,000
March.	54,882,000	69,580,000	79,989,000

April.....	55,915,000	69,132,000	106,427,000
May.....	62,332,000	84,507,000	101,028,000
June.....	65,543,000	79,746,000	90,827,000
July.....	61,293,000	80,198,000	89,071,000
August....	58,229,000	71,723,000	91,712,000
September..	57,686,000	73,368,000	100,015,000
October....	65,983,000	78,250,000	107,848,000
November..	68,656,000	85,581,000	92,701,000
December...	63,311,000	75,141,000	88,348,000

\$730,933,000 \$889,479,000 \$1,098,970,000

The volume of business done on the Montreal Stock Exchange is shown by the following returns for 1901 and 1902 :

Transfer of shares in	1901	1902
Transportation corporations... \$	809,270	\$ 875,555
Industrial corporations.....	435,525	1,138,169
Banks.....	11,914	11,404
	<u>\$1,256,709</u>	<u>\$2,025,128</u>
Mining shares.....	\$1,470,329	\$ 494,036
Bonds to the value of.....	1,889,400	7,322,950

As a Manufacturing Center

Montreal is the greatest manufacturing center of Canada. In comparison with other Canadian cities her industries represent the largest investment of capital and their annual output possesses the greatest value. This output covers a wide range, but a notable feature of Montreal's manufactures is the large proportion of staple goods produced. This, to a certain extent, indicates that the industries of the city rest upon a solid, permanent basis. In the production of metal goods there is a large investment of capital, and very successful manufacturing is carried on in a variety of lines in which iron and steel is the essential raw material. The two great railway companies have their workshops in Montreal, where their locomotives and

cars are built. Several of the largest steam-engine works are also located here, besides a number of general machine shops, electrical machine works and other industries of a similar kind. The city also contains rolling mills, nail factories, axe, scythe and saw works, tin works, brass and iron foundries, bridge works and structural material works and many other kindred metal industries.

Montreal also holds a prominent place in the manufacturing of textiles, practically controlling the Canadian production of cottons. There are four cotton mills in the city, and one company alone, in its Montreal factory, employs eighteen hundred hands. The cotton industry is in a flourishing condition, and Canadian mills to-day largely supply the Canadian market.

Montreal was the first place in Canada to manufacture table and floor oil-cloths, and the industry is now in a flourishing condition. Woollens are also manufactured, knitted goods, clothing, hats and caps and a great variety of similar articles. The silk industry, too, is well established here and its products hold their own in the Canadian market. There is also a large production of shirts and gentlemen's furnishings, waterproof clothing, wadding, cordage, and other goods of hemp and jute. Several of the largest boot and shoe factories in Canada are here, also factories engaged in the production of rubber footwear and other rubber goods.

Sugar refining is also another very large industry. More than one-half the total Canadian importation of raw sugar finds its way to the Montreal refineries and is here turned into the finished product.

There is also a large production of biscuits, confectionery, flavoring extracts, baking powders and similar goods, which enter into the general grocery trade of the country.

The manufacturing of paints, oils and varnishes is also an important industry, and the same may be said

of the production of carriages and winter vehicles, harnesses and belting and various other leather goods. Furniture is manufactured, also marble for interior decorations, builders' supplies, roofings, etc.

There is a large production of tobacco, cigars and malt liquors, chemicals, drugs, dye-stuffs, proprietary medicines, etc.

Perhaps the importance of Montreal as a manufacturing center is best indicated by a brief summary of the census returns respecting industrial establishments. In 1891 the city contained 1,604 such establishments. The value of land occupied was \$4,277,475 ; capital in buildings, \$6,926,583 ; capital in machinery and tools, \$8,429,496 ; working capital, \$25,406,845 ; number of employes, 35,749 ; wages paid in a year, \$12,217,399 ; value of raw material used in a year, \$40,089,091 ; value of articles produced, \$65,868,857.

The industrial returns according to the census of 1901 have not yet been published. They would show as great an increase over the returns just given as is shown by the returns respecting population to which reference was made in another part of this sketch. An important addition to the productive forces of the city has been made in recent years by the employment of electricity generated by means of the gigantic water powers situated in comparative close proximity to the city. The Lachine Rapids, in the St. Lawrence River, two miles above Montreal, and the Chambly Rapids, in the Richelieu River, about sixteen miles distant, have been harnessed and the electric current thereby generated is used to light the buildings and streets of Montreal, to propel the street cars and to turn the wheels of industry in general. The possible development of these great natural forces is practically unlimited, assuring to industrial Montreal a motive power whose equal is possessed by but few manufacturing centers on this continent.

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Smaller Cities and Towns

Besides the two leading cities of Quebec and Montreal, there are many other cities and towns in the Province which, although of smaller proportions, contain thriving and industrious populations of from ten to fifteen thousand inhabitants, in which industries and manufactures of various kinds are successfully carried on. Among these may be mentioned Sherbrooke and St. Hyacinthe in the Eastern Townships, Levis, Three Rivers and Sorel on the St. Lawrence, and Hull on the River Ottawa.

The city of Sherbrooke is one of the most enterprising and flourishing cities of the Province. It contains a mixed English and French population of about 12,000 souls. It is situated near the United States boundary line, on the River Magog, about 100 miles southeast of Montreal. It is the business center of the populous and fertile region known as the Eastern Townships. Its industries include extensive manufactories of woollen and cotton goods, machinery, axes, pails &c., besides mills, breweries &c. There are a number of large and comfortable hotels in the city. It has its electric street railway, banks, and all other public and private institutions found in the most prosperous communities. The Eastern Townships Bank has its home office in Sherbrooke.

The city of St. Hyacinthe is also an important and progressive industrial center, with a population of about 14,000 souls, largely French Canadian. It is situated on the River Yamaska, in a fertile and well cultivated farming district but it is, as a manufacturing city that it is chiefly reputed. Among its principal industries are boot and shoe making, leather tanning, the manufacture of agricultural implements, organs, woollen goods, steam engines, doors and sashes, carriages, corsets, etc. Owing to the great fertility of the country round, its market for agricultural produce is well supplied with the best and people attend it from far and near.

The city of Three Rivers, situated midway between Quebec and Montreal on the north shore of the river St. Lawrence, at the mouth of the St. Maurice, is one of the oldest and most interesting cities in Canada. Founded in 1634, it was, under the French régime, one of the chief fur-trading posts of the country. At the present it is one of the great centers of the Provincial lumber industry and has also many manufactories. A prosperous local industry is the manufacture of pig iron at the Radnor forges. The general aspect of the city is agreeable. Its port is spacious and accessible to ocean steamships.

The city of Hull, with its population of over 13,000, is another of the great manufacturing and lumbering centers of the Province and is famed for its large saw mills, paper mills, match and pail factories, etc. It is situated on the River Ottawa and one of its great natural attractions is the Chaudiere Falls, considered by many to rank next in importance and beauty to the Falls of Niagara itself.

The limited space of this small volume will not permit of further descriptions of the many busy centers of industry and manufacture which are rapidly growing up throughout the land and assisting in the increase of the wealth and prosperity of the country.



Public Instruction



IN the matter of public instruction in the Province of Quebec, the elementary schools are either catholic or protestant according to the denomination to which the majority of the children belong. The result of this is an absolute division between the two classes of schools, a duality of administration and authority, divided equally between the catholic and protestant denominations, managed by two distinct committees, acting entirely independently of one another.

The Council of Public Instruction is at the head of the school system. Its duties consist, in making rules for the management of the schools, in choosing the inspectors, professors and principals of the Normal Schools and the examiners of the school boards, authorized to issue diplomas, in the approval of class books, &c.

The Superintendent of Public Instruction is named by the Lieutenant-Governor in Council. He is a member of the council of Public Instruction and the legal president of the same.

The School Municipality is a distinct institution; established for the working of schools and placed under the control of school commissioners or trustees. Their duties are numerous and important. School municipalities are erected by the Lieutenant-Governor in Council upon the request of the tax-payers.

School inspectors are appointed for the carrying out of the various duties which their name implies.

There is a central board of examiners for the examination of candidates as teachers. This board issues diplomas of fitness for elementary and model schools and for academic establishments.

The Division of Instruction.—As in all civilized countries, public instruction in the Province of Quebec comprises three principal divisions: 1, the universities; 2, the secondary school establishments; 3, the primary or elementary schools. Besides these there are special and Normal schools.

The elementary schools are conducted by religious or by lay teachers; all lay teachers must be holders of diplomas of capacity. The secondary instruction establishments include: 1, the classic schools; 2, industrial schools; 3, academies. Superior instruction is afforded in three universities: 1, the Laval University, which has two houses, the mother house at Quebec and a branch house at Montreal; 2, the McGill University at Montreal; and "Bishop's College" at Lennoxville.

The Laval University comprises the faculties of theology, law, medicine and the arts, besides a polytechnic school. The museums of the University and the library are celebrated.

The McGill University is a Protestant institution. In connection with and annexed to it, it has a high school, a school of applied sciences, a Normal school and a model school. Since its foundation the McGill has rendered grand service in the cause of superior education.

The University of Lennoxville or Bishop's College, like the two preceding, comprises the four faculties of theology, law, medicine and the arts. There is a high school, with a five years course of study, dependent on this University.

Special schools include commercial colleges, industrial schools, agricultural schools, academies, schools of arts and manufactures and the polytechnic school where the applied sciences are taught.

There are five normal schools in the Province: the Laval at Quebec and the Jacques-Cartier and McGill at Montreal. The two first are Catholic and French

and the third Protestant and English. In these normal schools a perfect education as teachers is obtained by those attending the classes.

The Dissident Schools.—The classes of the law, referring to dissentient schools, show above all the spirit of liberality and tolerance in which the laws governing public instruction have been conceived in this Province.

GENERAL TABLE OF THE SCHOOLS IN THE PROVINCE

1902-1903

	Number of Schools.	PUPILS.		
		Boys.	Girls.	Total.
Elementary schools.....	5,379	101,532	103,525	205,057
Model schools.....	555	40,587	41,205	81,792
Academies.....	178	16,868	22,466	39,334
Normal schools.....	5	138	322	460
Schools annexed to normal schools.....	6	404	584	988
R. Catholic classical colleges.....	19	6,174	6,174
Universities.....	4	2,169	152	2,321
Schools for deaf mutes and the blind.....	4	172	345	517
Schools of Art and Design....	9	2,217	2,217
Night schools.....	102	5,818	1,044	6,862
Totals.....	6,261	176,079	169,643	345,722



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