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NEW BRUNSWICK,
(CANADA).

ITS RESOURCES AND
ADVANTAGES

BY

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TO THE READER.

The object of this book is to enable any person who has no previous knowledge of the subject to obtain a clear idea of the Province of New Brunswick, its resources and advantages, so that he may be able to judge how it would suit him as a place of residence.

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THE PROVINCE OF NEW BRUNSWICK.

CHAPTER I.

Where New Brunswick is Situated—Its History—Population—Form of Government—Municipal Institutions—Revenue—Expenditure—Railways—Roads—Water Communication—Telegraphs and Telephones—Mails—Express Companies.

New Brunswick, which is the largest of the three Maritime Provinces of the Dominion of Canada, lies mainly between the 45th and 48th parallels of latitude and the 64th and 68th degrees of longitude. It is almost square in shape and is surrounded on three sides by the ocean; on the north by the Bay Chaleur, on the east by the Gulf of St. Lawrence, and on the south by the Bay of Fundy. This gives it a larger coast line in proportion to its area than most continental countries possess, and for this reason its fisheries are extensive and valuable. The area of the province is 27,500 square miles or in round numbers 17,500,000 acres. This is about the area of Scotland without the islands, and is about one-sixth less than that of Ireland. The population of New Brunswick, however, is not one-tenth as great as that of either Scotland or Ireland, so that it contains immense possibilities of development and opens up a splendid field for the industrious settler.

HISTORY.

New Brunswick was first discovered by Jacques Cartier, a French explorer in the year 1534, but no attempt at a settlement was made until the year 1604 when DeMonts and Champlain wintered on an island in the St. Croix River. It was for more than a century after this a French possession, being a portion of the Province of Acadia, but when Acadia passed to Great Britain under the Treaty of Utrecht, it formed a part of the English Province of Nova Scotia. During the French occupation the settlements were inconsiderable, and it had been a long time in the possession of the English before much progress was made in settling it notwithstanding the remarkable fertility of much of its soil.

The first English settlement was established on the St. John River in the year 1762 at Mougerville, and about the same time, a settlement was also founded at the mouth of the river. The people who came to New Brunswick at that time were from the colony of Massachusetts. At the close of the war of the American Revolution, large numbers of loyalists came to New Brunswick, and the City of St. John was founded. New Brunswick was separated from Nova Scotia in the year 1784, and since then has enjoyed a government of its own. After that time large numbers of immigrants came to it from the United Kingdom. Its people therefore are mainly descended from the loyalists and from immigrants from Great Britain, but there is also a considerable French population in the counties along the Gulf of St. Lawrence and in Madawaska. These people are the descendants of the ancient Acadians who were settled here two centuries and a half ago. In 1867, New Brunswick, Nova Scotia, Quebec and

Ontario became united into a confederation known as the Dominion of Canada. Since then British Columbia, Prince Edward Island and the enormous possessions of the Hudson Bay Company have been added, so that the Dominion now embraces all the British possessions in the northern parts of America with the exception of Newfoundland. Canada has a population of 5,500,000 and an area of 3,600,000 square miles.

THE POPULATION OF NEW BRUNSWICK.

The first census of New Brunswick was taken in the year 1824, at which time it had 74,175 inhabitants. In 1834, the number of its people had increased to 119,457 and in 1840 to 156,662. At the last census, taken in the year 1901, the population was 331,121.

FORM OF GOVERNMENT.

Canada is governed under the same constitutional forms which exist in Great Britain, except that it is a federation of provinces. The government of Canada has jurisdiction over all the provinces with regard to certain matters such as the imposition of customs and excise duties, the regulation of the foreign commerce of the country, the maintenance of the militia, the control of the railways uniting the several provinces, the passing of criminal laws, the maintenance of penitentiaries and all subjects of a general nature. The parliament consists of a House of Commons elected by the people, and a Senate or Upper House nominated by the crown, while the authority of Great Britain is represented by the Governor General. Responsible government prevails throughout Canada. The House of Commons is the body which makes and unmakes ministries. As in

Great Britain no government can maintain itself in power which has not a majority in the assembly elected by the people.

PROVINCIAL GOVERNMENT.

The system of government in New Brunswick is similar to that which prevails in the Dominion except that there is but one legislative body, the House of Assembly, which is elected by the people. Responsible Government prevails to its fullest extent, and the existence of the government depends on the vote of the House of Assembly. In New Brunswick there is an executive council of seven members, five of whom are heads of departments and receive salaries. These are the Attorney-General, Provincial Secretary, Surveyor-General, Chief Commissioner of Public Works and Commissioner for Agriculture. The names of these officials sufficiently indicate their duties. The Provincial Secretary is also Receiver-General and handles all the revenues of the province. The Attorney-General attends to its law business and is the legal adviser of the government. The Surveyor-General is at the head of the Crown Land Department, which is the greatest revenue producing department of the government. This department deals with timber lands, mining, game, fish and immigration. The Chief Commissioner of Public Works has jurisdiction over the roads and bridges of the country and all provincial works of a similar character. The Commissioner of Agriculture attends to the wants of the farmers and all business for the promotion of the agricultural interests of the province. Every male resident is a voter for legislature and parliamentary elections.

MUNICIPAL GOVERNMENT.

New Brunswick is divided into fifteen counties, each of which is a municipality and is governed by a body

ected by the people, which is known as the municipal council, and which contains representatives from each parish. Each county is divided into parishes in the same fashion as in England, but these have no connection with any ecclesiastical matters, for there is no established church in the province.

New Brunswick contains three incorporated cities and a large number of incorporated towns, almost all the towns of the province having now a municipal government of their own. It will be seen from this statement that self-government prevails in New Brunswick to the fullest extent and that its people are the masters of its destiny. Every adult male resident is a voter, and women who are property owners have the right to vote in municipal elections.

REVENUE.

The revenue of the province is derived from various sources and amounts generally to \$750,000 a year. Under the terms of The British North America Act the province is entitled to the sum of eighty cents a head for each of its inhabitants. This sum is paid by the government of Canada half yearly in advance. From the government of Canada the province also derives a revenue of \$150,000 in lieu of an export duty which the province formerly levied on certain classes of lumber and which was abolished at the instance of the Canadian government. There is a revenue of about \$175,000 a year from the Crown Lands of the province and \$20,000 a year for the cost of legislation. The other sources of revenue are licenses, succession duties, fees of the Provincial Secretary's office, etc, etc. The legislature of the province possesses almost unlimited powers with respect to the imposition of taxes, but these powers have

been little used, the revenues from the sources named having proved sufficient for the ordinary purposes of the government,

EXPENDITURE.

The largest items of expenditure are for public works, which includes the maintenance of roads and bridges of the province and for education. The other principal items are the administration of justice, agriculture, executive government, legislature, the maintenance of the lunatic asylum, public printing, and the interest on the bonded debt of the province. This debt has been incurred mainly by the subsidizing of lines of railway, and the erection of permanent bridges and public works of a similar character.

RAILWAYS.

New Brunswick is well supplied with railways in proportion to its population there being at present upwards of 1,500 miles of railway in operation. Railways traverse every county in the province, and give facilities to the farmer for the sending of his products to market.

The Intercolonial Railway runs through the province from the boundary of Nova Scotia at the Missequash to the boundary of the province of Quebec at the Restigouche. It branches off to St. John on the west and to Shediac on the east, and there are also branches to Dalhousie and to Indiantown on the Miramachi. This railway was built by the government of Canada under the terms of The British North America Act. It was one of the features of the bargain made between the provinces which was sanctioned by that act, that Canada should have a railway from Quebec to Halifax. This railway now extends from Halifax to Montreal

and also to Sydney in Cape Breton, its entire length being upwards of one thousand miles. It is the great channel of communication between the Maritime Provinces and the West, although the Canadian Pacific Railway which has a shorter run to Montreal is now doing the larger part of the business of western New Brunswick.

The Canadian Pacific Railway has its terminus at St John and its line now extends to Vancouver in British Columbia. It has acquired or leased most of the lines of western New Brunswick, including the old St. John and Maine Railway with its branches to Fredericton, the New Brunswick and Canada Railway from St. Andrews to Woodstock with its branches to St. Stephen; and the New Brunswick Railway, from Fredericton to Woodstock on the east side of the river, and from Woodstock north to Edmunston, and the Tobique Valley Railway. The Canadian Pacific passes through nine counties in New Brunswick. In the winter season it carries immense quantities of freight from western Canada and the United States to St. John for shipment to Europe. This business is large and constantly growing. The passenger traffic of the railway is also very large and is rapidly increasing in consequence of the large number of tourists who come to the Maritime Provinces. The towns served by the Canadian Pacific Railway in addition to the cities of St. John and Fredericton are St. Andrews, St. Stephen, Woodstock, Hartland, McAdam, Andover, Grand Falls, St. Leonard's and Edmunston.

The Shore Line Railway is 82 miles in length and extends from West St. John to St. Stephen through the counties of St. John and Charlotte. It serves the business interests of Musquash, Lepreaux, Pennfield, St.

George and other centres of trade. The country which it traverses is one that is still in a state of development.

The Canada Eastern Railway runs from Fredericton to Chatham traversing the counties of York and Northumberland. It is 120 miles in length and serves a very fine district which is especially rich in lumber. It connects with the Intercolonial Railway at Chatham Junction and with the Canadian Pacific at Fredericton and these two make a short line from the north of New Brunswick to the United States.

The Albert Railway begins at Salisbury on the Intercolonial and extends to Hillsborough, Hopewell and Albert, in Albert county, a distance of 45 miles. The Albert Southern goes to Alma, 18 miles further.

The Central Railway of New Brunswick extends from Norton on the Intercolonial Railway to Chipman, a distance of 45 miles, but the New Brunswick Railway and Coal Co.'s line, 45 miles in length from Chipman to Fredericton is now just being completed. This line of railway connects with the splendid coal areas of Queens and Sunbury counties especially with the mines of the Newcastle coal fields, and brings them within easy reach of Fredericton. The St. Martins and Hampton Railway extends from Hampton on the Intercolonial to St. Martins on the Bay of Fundy in the County of St. John. This piece of railway is 30 miles in length.

The Elgin Railway extends from Petitcodiac on the Intercolonial to Elgin in Albert county a distance of 14 miles.

The York and Carleton Railway, 6 miles in length, extends from Stanley to the Canada Eastern.

The Kent Northern extends from the Intercolonial Railway at Kent Junction to Richibucto, the shiretown of Kent county, a distance of 27 miles. There is also

a branch to St. Louis in the same county, a distance of seven miles.

The Caraquet Railway runs from Bathurst on the Intercolonial to the Harbor of Shippegan, a distance of 66 miles. It has a branch known as the Gulf Shore Railway, which extends to Tracadie on the Gulf of St. Lawrence. This branch is 23 miles in length.

The Havelock, Elgin and Petitcodiac Railway connects Havelock in Kings county with the Intercolonial at Petitcodiac. It is 12 miles in length.

The New Brunswick and Prince Edward Island Railway is 30 miles in length and runs from Sackville on the Intercolonial to Cape Tormentine on the Straits of Northumberland.

The Temiscouta Railway, which runs from Edmuntson to River du Loup in the Province of Quebec is 80 miles in length on the main line and has a branch two miles in length to Connors on the St. John River. This line forms a short road from the upper part of the province to Quebec and passes through a country of much promise.

The Restigouche and Western Railway which is to connect Campbellton on the Intercolonial with St. Leonard's on the Canadian Pacific is now under construction. Its length will be about 100 miles. This line will open up a fine section of splendid land and will promote settlement in the portion of the province which it traverses.

Another railway which is under construction is the St. John Valley Railway. This line extends from Fredericton to Woodstock on the western side of the St. John River, and also beyond Woodstock through a very fertile portion of Carleton county. It is now under contract.

MILES OF RAILWAY IN EACH COUNTY OF NEW
BRUNSWICK.

Counties.	Miles.
Albert,	68
Carleton,	73
Charlotte,	114
Gloucester,	134
Kent,	92
Kings,	106
Madawaska,	83
Northumberland,	140
Queens,	65
Restigouche,	63
Sunbury,	66
St. John,	56
Victoria,	66
Westmorland,	163
York,	175
Total,	<u>1464</u>

ROADS.

The Province of New Brunswick is well supplied with roads. These roads are divided into two classes, great roads and bye-roads. The great roads being the great lines of communication, while the bye-roads are such as exist between the settlements and connect with the great roads. There are about 1500 miles of great roads in the province and probably three or four times as many miles of bye-roads. The great roads are directly under the management of the Board of Works and are kept up by means of supervisors appointed for the purpose. The Province of New Brunswick expends

large sums on the maintenance of these roads and the bridges connected with them. The bye-roads are maintained partly by a grant which is given by the government annually for their support and partly by statute labor. The statute labor may be performed by the individual who is subject to it in person, or it may be commuted by the payment of so much a day for each day when the person so assessed would be required to work in connection with the roads of the province. The government maintains a great number of expensive bridges, many of the rivers of New Brunswick being large so that the work of bridging them is costly. In recent years it has been the policy of the government to erect permanent structures of steel rather than the ordinary wooden bridges which were common formerly. Some of the recently erected bridges are magnificent structures and bid fair for centuries to come to stand as monuments of the liberality and energy of the government which erected them.

WATER COMMUNICATION.

In the earlier history of the province the rivers of New Brunswick supplied a means of passing from one settlement to another, but since the development of railways and the construction of good roads, the river system has become less important. Steamboats ply regularly on the St. John River between St. John and Fredericton, and also between Fredericton and Woodstock. There are also steamboats plying in the lower stretches of the St. John to Grand Lake and the Washdemoak, Belleisle and Hampstead and to Hampton on the Kennebecasis. These boats supply admiral facilities for the farmers in reaching the market at St. John. Steamers also ply on the St. Croix between Eastport, St.

Andrews and St. Stephen and on the Miramichi between Chatham, Nelson and Newcastle, also to points above Nelson and below Chatham. The city of St. John is connected by steamer with Portland and Boston in the United States, with Yarmouth, Digby and other ports in Nova Scotia and with the island of Grand Manan. Steamers also run in the Bay Chaleur between Dalhousie and Gaspé and to Prince Edward Island from Point du Chêne.

TELEGRAPHS AND TELEPHONES.

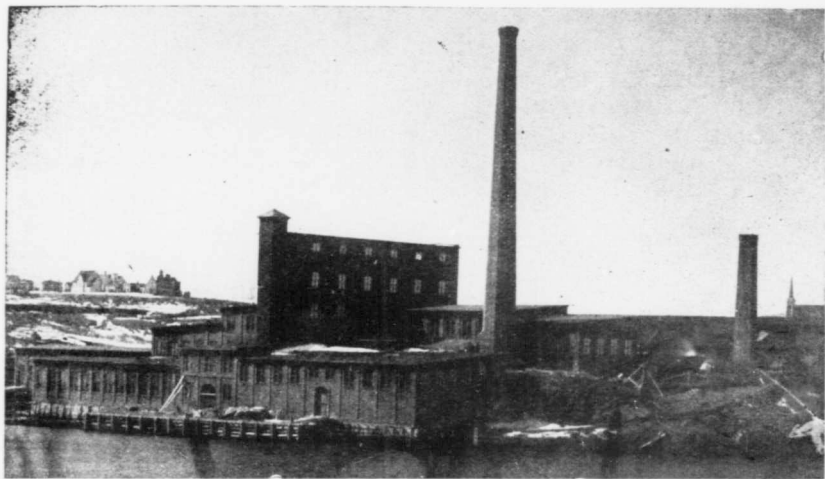
Nearly every town in New Brunswick has telegraphic communication with the outside world. The two lines which do the telegraphic business of the province are the Western Union and the Canadian Pacific. These lines connect with all parts of the United States and Canada. In addition to the telegraphic service there is telephone communication between the principal towns and settlements.

MAILS.

The mail service of the Province of New Brunswick is very efficient, there being a service twice a day with the cities of the United States and with most parts of Canada. In the cities the free delivery system prevails, and in most of the settlements there is a daily mail. In connection with the post office there is a very excellent savings bank system similar to that which exists in the United Kingdom.

EXPRESS COMPANIES.

Several express companies do business in the province, so that a parcel may be sent to any part of the continent without any difficulty at a comparatively low rate. These express companies also deal in money orders in competition with the post office.



Pulp Mill, St. John, N. B.



CHAPTER II.

Climate—Topographical Feature—The Soil of New Brunswick—Views of Professor Sheldon and Mr. Sparrow on the Province.

CLIMATE.

New Brunswick possesses a climate of exceptional healthfulness and there is no country in the world that is more free from epidemic diseases or where people live to a greater age than in this province. The most northerly portion of New Brunswick is two degrees south of the most southerly portion of England, and the northern line of New Brunswick is almost a degree south of the latitude of Paris. The city of St. John is in the same latitude as Milan and Venice. The climate, however, differs very considerably from that of western Europe and especially from that of the British Islands. It is what might be described as a continental climate, with characteristics similar to those of eastern Europe. The climate of the British Islands is tempered by the Gulf Stream, which flows across the Atlantic and spreads along the shores of Great Britain and Ireland and of northern Europe. This gives the British Islands a mildness of temperature which they would not otherwise possess, but it also gives them a degree of humidity, which causes vegetation to be of slow growth. The British Islands are less subject to heat and cold than New Brunswick, but they are also incapable of producing many kinds of fruits and vegetables which grow in New Brunswick. The climate of most of New Brunswick is free from humidity, so that the heat and cold are

less felt than they are in a damp climate. The people of the British Islands claim that the climate of Canada is more severe than that of Great Britain, but those who have lived in both countries are well aware that the climate of Canada is much more pleasant than that of the United Kingdom, although the thermometer occasionally registers a greater degree of cold.

The seasons in New Brunswick are different from those of England, Scotland or Ireland. The change from winter to summer is sudden and the autumn is protracted and long drawn out, and is the most delightful season of the year. The winter of New Brunswick, when the ground is covered with snow for from three to four months, serves a most useful purpose in the economy of nature, as well as for the business of man. It is during the winter that the lumberman gets his logs together and places them on the banks of the rivers ready for the spring freshet. Without this season the business of lumbering would be far more costly than it is. The snow and frost also have a beneficial effect on the soil, and enable the New Brunswick farmer to dispense with that frequent plowing, which involves so much labor in the British Islands. Under the frosts of winter the soil becomes loosened and in a fit condition to receive the seed. The winters of New Brunswick are healthful and much more favorable to delicate persons than the damp, chilly atmosphere of some European countries. The summers of New Brunswick are delightfully warm, although not excessively so. Vegetation advances with rapid strides and at a rate of growth unknown in Europe. Not only do wheat, oats, barley, buckwheat and all kinds of root crops grow to perfection in the climate of New Brunswick, but also maize or Indian corn, tomatoes and grapes. New Brunswick

also produces in abundance, apples, pears, plums and all kinds of small fruits, and there is no doubt that in certain districts peaches could also be grown with success.

TOPOGRAPHICAL FEATURES.

New Brunswick is what has been described as a rolling country, which means that it is not a dead level like the prairie regions, neither is it mountainous as some portions of this continent are. It is full of hills and valleys. Most of the hills are of no great height, although in some portions of the province they are high enough to be termed mountains. These mountains, however, are very inferior to the elevations which are known as mountains in Europe, and can hardly be classed as more than high hills. The province presents a considerable diversity of soil. At its southern boundary there is a belt about thirty miles wide along the coast of the Bay of Fundy composed of granite and crystalline rocks, which are much disturbed and thrown up into ridges. North of this belt lies a large triangular area of sandstone comprising a large part of Sunbury, Westmorland, Albert and Northumberland counties and the whole of the county of Kent. The western area of this limit is in York county west of Oromocto lake, while its southern boundary extends to near the mouth of the Petitcodiac river and the northern boundary goes as far as Bathurst. Northwest of this sandstone area, the rocks are principally slate and limestone with large deposits of granite appearing in different places. These rocks are much disturbed and are thrown up at various angles forming high ridges and lofty peaks. The sandstones, which occupy the middle and eastern part of the

province, are the newest rocks in New Brunswick. They belong to what is called by geologists, the carboniferous period, because deposits of coal are found in them. The rocks lie for the most part flat, or are spread out layer upon layer on the shores and bottoms of ponds and lakes in the form of clay, sand and gravel, carried down by streams and rivers and hardened, after the lapse of ages, into solid rock. The most marked feature of the eastern highlands of New Brunswick is a ridge of hills almost continuous from Maine to the St. John river in Queens county, and eastward through Kings county ending in Butternut Ridge. This ridge rises 800 or 900 feet above the surrounding country and includes some high peaks, Prospect mountain, and Eagle mountain near the Nerepis river, Mt. Pleasant, Mt. Porcupine and Red Rock mountain in Charlotte county and Ben Lomond in the county of St. John. This ridge runs parallel to the coast and is cut through in many places by rivers which flow into the Bay of Fundy east of the St. John river. There are also five parallel ridges running in an easterly direction and rising to an average height of a thousand feet with valleys between. The highest of these ridges skirts the Bay of Fundy and contains Bloomsbury mountain and the Quaco hills, It divides into two or more ridges in Albert county, in Caledonia mountain and Shepody mountain, the latter being 1,050 feet high. The triangular area of sandstone of the carboniferous period presents a comparatively level surface, nowhere rising above 800 feet, the general level especially in the eastern part of the province being below 300 feet. The highest land of the province is in the northern highlands. West of the St. John river in York and Carleton counties it rises into several peaks and ridges to a height of 800 or 900 feet,

while the general level is about 500 feet. East of the St. John river the land rises to the watershed dividing the Tobique and other tributaries of the St. John from the rivers which flow eastward. Mountains and broken ranges cross this tract of land in all directions and reach the St. John valley in the vicinity of Mars hill, which is 1,688 feet in height.

THE SOIL OF NEW BRUNSWICK.

Half a century ago the government of New Brunswick, imported Professor Johnston a distinguished authority on agriculture and honorary member of the Royal Agricultural Society of England and author of lectures on agricultural chemistry and geology, for the purpose of obtaining from him a report with respect to the agricultural capabilities of the province. This report, which was published in 1850, may be said to be the basis of all the agricultural information which exists with reference to New Brunswick, although it has been supplemented by additional information which was not available at the time Professor Johnston visited the country. As no man could go over the country within the limited period allowed him for the work, Professor Johnston's estimate of the agricultural value of certain districts has had to be extensively revised. He divided the soils of the province into five classes. First, the soils of the very best quality consisting of river intervals, islands and dyked marsh lands, of this he estimated the province to contain 50,000 acres. This estimate, however, is much too low as there is no doubt that there are at least 100,000 acres of this class of alluvial soil in the province, land of the highest fertility, which is practically inexhaustable. (The St. John inter-

vales alone are estimated at 60,000 acres.) The second class of land which he described consists of the best quality of upland and such portions of good intervale and marsh land as has not reached the highest point of productiveness. Professor Johnston estimated that the province contained a million acres of this land. This estimate, however, has been shown to be far too low. When Professor Johnston visited the province the splendid agricultural region in the northern portion of New Brunswick was quite inaccessible and its area was unknown. There is no doubt that the upland of the very first quality in New Brunswick can be safely estimated at 3,000,000 acres, a very large portion of which is still available for settlement. This land Professor Johnston estimated to be capable of producing two tons of hay or forty bushels of oats to the acre.

The third class of soil dealt with by Professor Johnston was what he described as second class upland, that is land capable of producing one and a half tons of hay or thirty bushels of oats to the acre. Of this he estimates that the province contains 7,000,000 acres. After this came third class upland inferior in quality to the others, consisting for the most part of light, sandy or gravelly soil, hungry but easily worked, and lands covered with hemlock and other soft woods, which, although difficult to clear, were very favorable for certain crops when cleared. Of this land Professor Johnston estimated there was 5,000,000 acres, but this estimate must be reduced to 3,000,000 for the reason already stated. Professor Johnston's estimate of the land as incapable of cultivation was 5,000,000 acres out of the 18,000,000 acres, which the province contains. This area includes bogs, heaths, barren caribou plains and tracts of swampy country. This land he said was

not to be considered as absolutely irreclaimable, but to be unfit for present cultivation or for settlement, until much greater progress had been made in the general improvement of the province. It appears therefore from Professor Johnston's estimate that about 27 per cent. of the area of New Brunswick is at present unfit for agricultural development. This will compare very favorably with the British Islands, and shows that New Brunswick is not inferior to the most highly favored portions of Great Britain in this respect. In Scotland upwards of 70 per cent. of the soil consists of mountains and heath, wholly unfit for agricultural purposes; 36 per cent. of the area of Wales and more than 26 per cent. of the area of Ireland consists of mountain, heath and bog, while England after a thousand years of cultivation still shows upwards of 18 per cent. of the same class of soil, unfitted for agricultural purposes. There is no doubt that the area of land in New Brunswick wholly unfit for agricultural purposes would be reduced to about 15 per cent. if the same efforts had been made with respect to it as have been made to reclaim the soil of England, Scotland and Ireland. The swamps which are now regarded as wholly unfitted for agricultural purposes, if properly drained would make the very best of soil. Indeed the only soils in the province which are wholly useless are the blueberry barrens which are covered with moss and stone. These soils however, produce large crops of berries, which are sent to market and place a good deal of money in the pockets of the people who live near them.

Some years ago New Brunswick was visited by Professor Sheldon, then of Downton College, and a very practical English farmer, Mr. J. Sparrow. These gentlemen went over a considerable portion of the pro-

vince including some of the new settlements such as New Denmark, and were highly impressed with the availability from an agricultural point of view. Their reports on this subject are extremely valuable as the views of persons wholly disinterested, and who were familiar with agriculture and agricultural methods as practised in the British Islands. In his report Professor Sheldon says :—

“Apart from its wealth of timber and minerals, the latter as yet in great part wanting developement, the Province of New Brunswick is for several reasons admirably adapted to the pursuits of agriculture; that its agriculture is still in the stage of infancy, so far, that is, as the ultimate capabilities and destiny of the province are concerned, is in some measure owing to its immense forests of lumber, and to the temptations which they have offered, and still do offer, to the strong and willing workers to neglect the less excitable pursuits of agriculture and go to the woods—a neglect which is more to be deplored because it has hindered that branch of national industry which must in the end be all important in the province.

“I have not a word to say against lumbering as a trade, and where such an immense growth of trees exists as we find in New Brunswick, it is a trade legitimate in all truth; nor do I object to farmers filling in some of their inforced “close time” in winter in a profitable way by cutting and hauling lumber for those who are regularly engaged in the business. But it is to be feared that many farmers have been tempted away by the hope of sudden wealth to the pursuit of a business which needs to be a specialty, neglecting more or less the one for which they were specially adapted, trying as it were “to kill two birds with one stone,” and the consequence

is that New Brunswick to-day is not in a position equal to that of some of the sister provinces to meet the demand of the Old World in the New for food.

“ This is a matter which will right itself in time no doubt, but it must be borne in mind that a stern chase is a long chase, and it should never be forgotten that of the real and permanent wealth of a country an index is found in the condition of its agriculture. In many parts of her beautiful country, New Brunswick has soils easy to cultivate, deep in staple and rich in the accumulated fertility of many centuries, many of the soils in the districts bordering on the St. John River, have every indication of being well adapted to stock raising, especially bovine stock, they are in many cases sandy or gravelly loams, seldom needing artificial draining, varying no doubt in depth and quality, but hardly anywhere good for nothing. It is probable, in fact, that with the exception of Prince Edward Island, New Brunswick has quite as large, if not a larger proportion of cultivable soils than any of the provinces east of the great lakes. This, however, is obviously a question to which I cannot pretend to give a definite opinion until I have had a better and longer opportunity of inspecting all of them with a view to that end—an opportunity, which I fear is not likely to arise. So far, however, the settled portions of the province are chiefly along or adjacent to the banks of the rivers, those mighty arteries of the country, or around the bays and inlets of the sea; but there are millions of broad upland acres not yet appropriated, as good in all probability for agricultural purposes as those that are, if we make exception of the dyke and intervale lands. Look, for instance at the youthful settlement of New Denmark. This locality seven years ago was covered with a dense forest of hardwood, intermingled

with pine and other softwood trees; now it is producing abundant crops of vegetables and grain, some of which are of superior quality, and it supports a happy and flourishing colony; here too the soil is a loam, enriched with the dead foliage of the forest primeval.

“Take Carleton County again, much of which consists of a light friable loam, well adapted for a variety of agricultural purposes, for mixed husbandry and the like. This is an older settled district, with pleasantly laid out farms, and a wealth of live stock; and wisely or unwisely, exporting large quantities of hay. If well-built houses and farmsteads are a safe criterion, it is clear in this district—on the way that is from Florenceville to Woodstock—the farmers are prosperous, and so contented. Or we may go to the Scotch settlement of Napan, on the Miramichi river and find a thrifty and well-to-do people with well laid out and cultivated farms and homesteads bespeaking prosperity. The soil here is not so friable as in the other settlements, but the farmers are not content with less than a ten-fold yield of oats. Away up the river again, we find farms, to-wit, that of Mr. Whitney, which promise to make a good return for all the skill and industry which are applied to them.

“Instances like these will, in time, be multiplied all over the province; the progress of the country and the march of events will bring them to pass ere long. In certain portions of the province there are soils which have certain very remarkable properties and features. The “intervale lands”—the term “intervale” by the way is an excellent one, accurately descriptive—the intervale lands of the St. John and other valleys, I make bold to say are among the most valuable to be found in the Dominion of Canada, and they are generally attrac-

tive in appearance, sometimes forming beautiful and extensive islands in mid-stream, but generally flanking the river on either side. These intervale lands are annually covered, more or less, and for a longer or shorter time by the spring freshets of the noble rivers by which they have been formed, and are as often enriched by the alluvial deposits of mineral and vegetable matter which is left by the subsiding waters. Generally speaking these intervalles are clothed by a thick sward of rich and varied grasses, forming a herbage unsurpassed, in all probability, by the natural grasses of any portion of the American Continent and equally valuable for pasturage or for meadow. To the upland farms adjoining, many of which have a frontage on the river, these intervale lands, as I should say, of great value; cutting year by year large crops of hay whose quality is good, and requiring no assistance beyond that which the freshets supply, they provide a large supply of forage for the winter use, and valuable aftermath for pasturage in the autumn. Thus it is that the river maintains the fertility of the uplands—by first of all covering the lowlands with a sediment which does away with the need of employing other fertilizers and so the whole of the barnyard manure may be used on the uplands. The river farms strike me as being excellently well adapted to the kindred pursuits of dairy farming, stock-raising and beef fattening, along with all the various cultivated crops, which are essential to the highest profits in these departments of husbandry. I allude to the roots of various kinds, green crops for soiling, clovers, rye, grasses, and the like. There can be no doubt that raising stock of a superior kind and fattening it for the British market, with dairy farming as a foundation, in conjunction also with sheep husbandry to some extent, and the raising of

a due proportion of cereals,—a general mixed husbandry in fact—will in the end prove highly profitable on such farms. Take next the “dyke land” in the neighborhood of Dorchester, Sackville, Amherst and other places adjacent to inlets on the Bay of Fundy, and we have soils at once singular in character and extraordinary in fertility. They yield, as in the case of intervals, without assistance other than that supplied by nature, large crops of grass, though it is, unlike the grass of the intervalles, very coarse in quality, yet better than it looks. It is at the same time true, however, that careful draining, generous cultivation, and discriminating manuring would somewhat increase the quantity, while they greatly improved the quality of the products of the soil.

“These dyke lands consist of deep deposits of marine mud and the wash of the sea, their texture and particles are unusually close and fine, and they are more or less impregnated by saline matter.

“By a well devised system of drainage, carried out in a workmanlike manner, and by the free percolation through them of rain water, the dyke land soil would gradually lose much of the saline element which at present is not favorable to the growth of the finer grasses. By such a system, in fact, the fitness of these soils for pasturage and for meadowing, by the growth of roots, by green crops and of grain would be greatly increased, and stock raising, dairy farming and the like, would be conducted as well to greater profit, simplicity and pleasure.

“In point of fact we find some of the higher portions of these lands carpeted with a thick sward of finer grasses, and bursting into clover. The thing to aim at is to place the whole of them in a position by draining,

re-seeding, and other improvements, to produce the whole excellent herbage of the knolls; for, however valuable may be the heavy burden of coarse marsh grass they yield at present, it cannot be denied that it is open to great improvement. Even at present, in this relatively unimproved condition, these dyke lands are, as far as they extend, among the finest and noblest tracts of soil to be found in any country, looking at them from a practical farmer's point of view; what then will they be in a thoroughly renovated and cultivated state.

"That the climate of New Brunswick is favorable to agriculture the quality of the natural grasses affords abundant testimony; while to its healthful character the rosy cheeks and clear complexions of its people are eloquent though silent witnesses.

"Then comes the geographical position of the province, which, by the reason of the improved access which it affords to the European markets, should in itself give to the farmers of New Brunswick a not inconsiderable advantage over some of the more western provinces in the shipment of produce.

"In conclusion I may say that the New Brunswickers have every reason to be satisfied with the prospects which the future has in store for them, providing they make the best of their opportunities and every inducement to improve the breed of their cattle and to develop the resources of their soil."

Mr. Sparrow's report is as follows:—

"Taking into consideration its noble rivers, their navigable character, the rich intervalles of the St. John, the fine lands around Sussex, the rich marshes of Sackville, the fertile lands of many other parts, much richly timbered with hardwood, pine, hemlock, hackmatac,

spruce, etc., its valuable fisheries, healthy climate and pure water, and its excellent harbor for ships at St. John, I do not think that New Brunswick can be excelled in any part of the Dominion of Canada except by some of the choice parts of the province of Ontario.

“Now that New Brunswick and Nova Scotia have entered into a confederation with the other provinces of Canada, I think that the Dominion Government should give special attention to this fine province as regards promoting emigration from the Mother Country. I have a strong impression that many families are induced by the glowing accounts of Manitoba to settle there, and are continually passing by or near good farms and homesteads in the Province of New Brunswick and other provinces that would be much more suitable for them if they were to purchase them (especially at the low rate of interest on money) and allow the farmers of the older provinces to undertake the hardships of locating Manitoba. As regards the Crown Lands of New Brunswick, I admit that the free grants of 100 acres to the head of each family and adult is a great inducement to the laboring classes or to families of small means to leave the mother country and settle there, but I advise that your government assist these settlers at their commencement, by employing laborers who are well acquainted with the axe to help them to clear, at least the first ten acres.

“It cannot be denied that it is a laborous work for any man with a wife and young children to leave the mother country and undertake this, unaided, and if your government were to charge the immigrants for such work, to be paid for by instalments in such a way as might suit them, it would be a great encouragement to them.

"New Brunswick is principally suited for agricultural purposes, such as stock raising and producing large quantities of beef and mutton.

"It is well adapted for grain such as wheat and barley, and especially oats, buckwheat, etc. I believe that fall wheat may be successfully cultivated. It is a good country for producing root crops, such as Swedish turnips, beets, mangels, potatoes, etc., and nearly all kinds of vegetables to the greatest perfection. There are many parts of the province well suited for fruit growing, the apple grows to maturity almost as well as in the Province of Ontario, if the trees be planted in sheltered places, and with a southwest aspect and protected from the northeast winds. I recommend that you improve the breed of your horned cattle, I believe that the Shorthorn and Herefords will be well suited to your country, I think the former better for general purposes such as the production of beef, butter and cheese. I would not advise you to pay extravagant prices to improve your stock. Since good breeds of Shorthorns can now be obtained in England much more plentifully than formerly, you can purchase very good yearling bulls at from £25 to £30 each.

"I believe that some of our breeds of sheep would do well in your province, and be very profitable to you, such as the Hampshire, Oxfordshire or Shropshire Downs. I would advise you not to cross them with your own breeds, unless it be a few by way of experiment.

"There are many tables in the mother country which are scantily supplied with beef and mutton owing to high prices; and it will be for the welfare and interest of your province to pay attention first to stock raising and fattening of beef and then to ascertain the best mode of conveying it to the English market."

CHAPTER III.

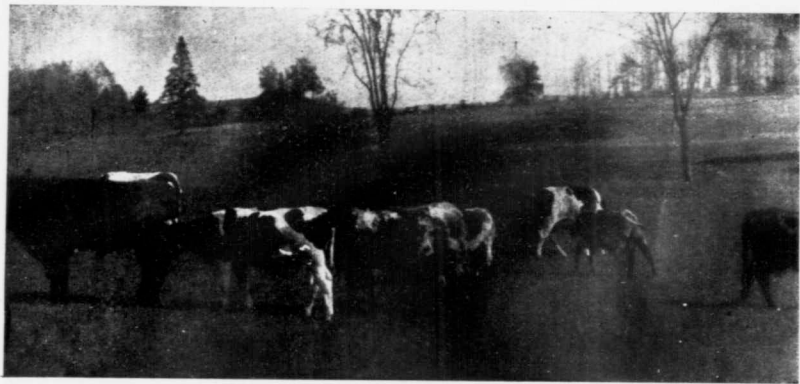
Agriculture in New Brunswick—Cattle Raising—Sheep Raising—
Professor Shaler's Opinion—The Fertile Belt—The Course of the
Seasons.

AGRICULTURE.

The leading industry in New Brunswick is agriculture, the greater proportion of the people who inhabit it being farmers. The principal crops grown in New Brunswick are wheat, oats, buckwheat, barley, potatoes, turnips, carrots, hay, beans and peas. The returns for the year 1900 show that the province produced the following quantities of the crops named :

	Acres.	Bushels.	Bushels per Acre.
Wheat,	26,867	504,301	18.8
Oats,	178,992	5,281,690	29.5
Buckwheat,	69,165	1,527,610	22
Barley,	5,053	120,222	23.7
Potatoes,	38,010	4,797,769	126
Turnips,	7,082	1,950,424	275

The figures are probably considerably below the actual amounts. The soil of most parts of New Brunswick is well adapted to the growth of wheat, although the cheapness with which wheat can be produced on the prairies of the West has had an effect in deterring the farmers of New Brunswick from growing that crop. For some years wheat growing was almost abandoned in the province, but recently the provincial government has taken up the matter. The government recognizes the fact that wheat growing, even though it may not be



On a Carleton County Farm in October.

so immediately profitable as some other crops, is a feature of good agriculture and that the province ought not to depend on other countries for its bread. There is no doubt that the growth of wheat is making steady progress in the province, under the encouragement given to it by the government, and especially in consequence of the facilities which now exist for grinding it properly. Wheat was formerly ground in old-fashioned mills, and when they became obsolete, wheat growing naturally diminished, but now New Brunswick possesses a considerable number of roller mills, for the grinding of wheat, of the most modern type. their aggregate capacity being about one thousand barrels a day or quite sufficient to supply the whole province with flour ground from native wheat.

Buckwheat is a grain which is extensively cultivated, a great deal of it being used by persons dwelling in the country for food as well as for their stock. Buckwheat grows well on light soils because it draws so much of its substance from the air, and the period between sowing it and cutting it is very short. The potato crop has always been a large one in the province and now more attention is being paid to other root crops such as turnips and beets and corn is grown to a considerable extent, but mainly for feeding purposes.

New Brunswick is particularly well suited for the production of butter and cheese, and a great deal of attention has been paid by the government to the development of these industries. A provincial dairy school has been established, which is proving itself to be of great importance to the butter and cheese makers of the Maritime Provinces. Although it is supported wholly by the agricultural department of New Brunswick, students from Nova Scotia and Prince Edward

Island have also been admitted. Under the teaching of this school a great deal of interest is being taken in dairying, and there is a very decided improvement in dairy work throughout the province. The sessions of the dairy school begin in February at a time when no other farming work has to be done, so that country boys can attend without interfering with their other avocations. Government dairy instructors are kept travelling around the butter and cheese factories, with a view to assisting the makers and giving suggestions. These instructors also keep in touch with the markets, and with the large exporters, and the information they receive is given to the students attending the school. The provincial dairy school is situated at Sussex and is presided over by a resident superintendent. The staff consists of an instructor in butter making, instructor in cheese making, instructor in separators and boilers, an instructor in milk tests and an instructor in animal husbandry.

In this school there is a factory course and a home dairy course. The former consists of instruction in cheese making, cream separation, butter making, milk testing, preparation and use of starters, factory records and accounts and the management and care of engines, boilers, etc. The home dairy course is intended especially for those who are engaged in the manufacture of butter in the private dairies. Instruction is given in the handling of cream separators and butter working and Babcock milk testers, etc. The school is free to all students in the Maritime Provinces.

There are about sixty cheese factories in New Brunswick which made in the year 1900 about 2,000,000 lbs. of cheese. There are about forty creameries and skimming stations in New Brunswick at which about 500,000

pounds of butter were made in the year 1900. The establishing of butter factories and creameries is going on steadily, and there is a large increase in the output every year. The greater part of the cheese made in the New Brunswick factories is exported to England, and the same is true of the butter production. The tendency is steadily in the direction of making cheese and butter in that way rather than at home dairies. There is a great deal of room for the development of both butter and cheese making in the province, because its climate and soil are particularly adapted to this business. In this respect it has a great advantage over the Western provinces in consequence of the pasturage remaining in good condition much longer, and there being less liability to drought. There is no doubt that there is a great future for butter and cheese making in the Province of New Brunswick.

The interest in agriculture in New Brunswick is greatly stimulated by the formation of agricultural societies of which there were 59 in the province in the year 1900 with a total membership of 4,539. These societies received in subscriptions from individual members \$6,361 and from the government \$7,545 in grants. The societies are doing an excellent work holding agricultural fairs, and stimulating an interest in general farming. They have been the means of introducing much good stock into the province. A recent act of the legislature authorized the formation of farmers' institutes for the purpose of disseminating information with regard to agriculture. These institutions may be established in each of the several districts of the province as prescribed by the government. Where agricultural societies now exist which will undertake to hold meetings for the advancement of agriculture, they shall be considered as

farmers' institutes for the purposes of the act. A great many of these farmers' institutes have been recently formed in the province, and the work they are doing is likely to prove of great value.

CATTLE RAISING.

New Brunswick is particularly well adapted to the raising of cattle, the climate being favorable and there being no epidemic diseases with which cattle are attacked. With respect to its breeds of cattle the province is not so far advanced as it ought to be, although great efforts have been made in recent years to improve the stock. The leading breeds in New Brunswick are the Shorthorns, the Herefords, the Polled Angus, the Ayrshire, the Devon and the Jersey. All these breeds have their advocates and supporters, but the breeds which have been found most generally useful are the Durhams and Herefords for beef purposes and the Ayrshires for milk and for general purposes. A New Brunswick farmer is always able to improve his stock in consequence of the frequent importations of high grade cattle that have been made by the Provincial Government. The Department of Agriculture maintains a herd book in which the pedigrees of all thoroughbred animals are entered, so that there is no difficulty in ascertaining their value from a breeder's standpoint.

The best lands for the raising of beef are the dyke lands of Westmorland and Albert, and the intervals along the St. John river. These lands produce in abundance large quantities of feed, but the first-class uplands of the Northern Counties are equally available for cattle raising purposes. Indeed there is no reason why beef cattle should not be produced in every county of the

province, for in all of them the necessary feed can be raised. The increase in the number of flour mills is likely to give a valuable stimulus to cattle breeding in the province, owing to the amount of rough feed which these mills will supply.

The facilities for shipping cattle to Europe are also excellent, and quite independent of the local market, which is large and growing. There is always an opportunity of sending fat cattle to Great Britain by the steamers which go from St. John. The terminal works of the Canadian Pacific Railway at west St. John are supplied with cattle sheds, and all other equipments for the comfortable housing and feeding of cattle, and as ships go from thence constantly during the winter, the farmers of New Brunswick are in a position to reach a ready market at all times,

FACILITIES FOR SHIPMENT.

In recent years New Brunswick has obtained admirable facilities for the shipment of all kinds of agricultural products to the United Kingdom and the West Indies through the port of St. John. At St. John there are now three magnificent elevators having a capacity of nearly 1,500,000 bushels of grain, one being on the east side of the harbor and two on the west. In connection with these elevators are deep water wharves at which steamships can lie and load at all times. Farmers therefore in New Brunswick who go largely into the growing of grain can always have their wheat and oats stored in the elevators for shipment. Every article that the farmer produces can be placed on the market with the greatest possible facility, whether it be cheese, butter, grain or live stock. This is an advant-

age which was not possessed by the farmers of this province until recently, but which now will be fully taken advantage of by them. Immense quantities of agricultural products from the west are shipped at St. John every year, and the quantity from New Brunswick is now large and is increasing under the stimulus which these facilities for shipment afford.

SHEEP RAISING.

The Province of New Brunswick is peculiarly adapted to the raising of sheep. This fact has been fully recognized by many competent authorities, among others by Professor Brown of the Ontario Agricultural College, who has made up the following estimate of the profits of sheep raising in New Brunswick. Speaking of New Brunswick he says:—

“British Columbia excepted, you hold now the only extensive and naturally suitable lands in the Dominion of Canada for the cheap production of wool and mutton. At a rough under estimate there are in New Brunswick and Nova Scotia some 2,000,000 acres of sheep runs, outside of all arable. bush, rock, water, meadow and the richer cattle grazing lands of the valleys. These should carry such a number as to produce annually, not maintain, but to sell off each year, 40,000,000 pounds of mutton and 20,000,000 pounds of wool, an annual gross revenue of, say, \$2,300,000. This is no wild speculative calculation, but one based upon my own handling of the same subject in Scotland and Ontario and upon the experience of other Canadian flock masters. The subject has two aspects—an inside one and an outside one; the system of breeding, rearing and furnishing all the flock, or the bringing from a distance

and furnishing of the runs during October. On the former there may not yet be sufficient arable area to produce fodder and grain for winter maintenance to give encouragement to large enterprise—that is, thousands in place of hundreds of sheep on one range. This would be the independent and, provincially, the most progressive and wealthy plan.

“But it is not the one for immediate speculation and greatest profits. If sufficient blocks of land of the right stamp can be had to rent or purchase at reasonable figures, I am satisfied the migration system would be best. From Scotch experience of a similar character as well as knowledge of what can be done with sheep in Ontario, and making allowance for all possible contingencies, a capital of \$12,000 properly handled would make the following annual history:—

SHEEP GRAZING IN NEW BRUNSWICK AND NOVA SCOTIA.
(Area required 6,000 acres.)

Cost of 2,000 shearlings in Ontario, averaging 100 lbs. last May, at \$5.....	\$10,000
Expense of purchasing and concentrating.....	500
Freights, 15 cars, Toronto to Moncton.....	1,200
Food by rail.....	100
	<hr/>
Capital required.....	\$11,800
Two shepherds, six months.....	400
Assistance shearing.....	150
Freight to seaboard, 1st November.....	300
Grazing, 50 cents per head.....	1,000
Interest on capital.....	500
Incidentals:.....	200
	<hr/>
Total debit.....	\$14,350

Clip of 2,000 head, 15th May, medium. wool, 7½ lbs., a 15 cents.	\$ 2,250
Value of 1,940 (60deaths) at seaboard averaging 140 lbs. at 5½ cents.	14,838
Total credit.	<u>\$17,088</u>

Balance being clear profit, per annum . . . \$ 2,738

Double the rent if you choose, and allow for greater loss than I have done, and there would still remain a large margin of profit—so large as to throw doubts on the whole character of the estimate.”

PROFESSOR SHALER'S OPINION.

Professor Nathaniel S. Shaler of Harvard University, who also farms to a large extent and who is regarded as a high authority in all agricultural matters, has a high opinion of the capabilities of New Brunswick from an agricultural point of view. In a recent interview with regard to the province he said :—

“ One of the best things that could happen to this province would be for the people who inhabit it to arrive at a thorough appreciation of what it is actually capable of doing. Its advantages are remarkably numerous. It is a splendid agricultural country, much finer than any section of the New England States.

“ Among the other advantages of the province are the following: First, it has an enormous length of coast; both the Gulf of St. Lawrence and the Bay of Fundy are what would be considered safe seas, as they are subject to no sudden storms. The province is so situated that it is free from the worst effects of the storms that travel from the west, as they either travel from the St. Lawrence Valley or reach the ocean across the

New England States. The climate is a fine one; the summers are cool and bracing and the winters are cold and healthful. You should be proud of your marsh land as well as your intervales. A great many crops that could be raised readily here are absolutely neglected. As an instance of this hops can be cited. Whoever heard of raising hops in New Brunswick? Still, they can be grown to advantage as far north as the Bay de Chaleur, in the extreme north of the province. Oats are here a magnificent crop, yielding up to sixty bushels to the acre or even more. The same thing is true of buckwheat. There are no drouths; practically every crop that can be raised in this latitude is a success in New Brunswick. The woods contain great quantities of small berries of many varieties, fuel is cheap, and nowhere can houses be built at less cost than here. In six years land can be brought to full cultivation from the absolute wilderness. Along the enormous tidal fronts, with safe landing, are to be found abundance of fish. The smelt fishing through the ice is a feature well worth noting. The large runs of salmon up the rivers, the quantities of herring, shad, cod and haddock and the large numbers of lobsters and oysters to be gotten on the Gulf coast, are all indicative of the ease with which food can be obtained throughout the province. The River St. John is another magnificent feature.

The climate may be compared with the climate of England north of Birmingham, being colder in winter and with a somewhat warmer summer. Spruce renews itself with extraordinary rapidity, and, in my opinion, a man who has five hundred acres and keeps three hundred in spruce, has in this latter a good crop."

THE FERTILE BELT.

While every locality in New Brunswick contains much good land suitable for settlement, there is no doubt that the largest body of good upland in the province is in the counties of Carleton, Victoria, Madawaska and Restigouche. This has been sometimes termed the fertile belt of New Brunswick, the rocks upon which it rests being of the Silurian formation. Some of this soil has been kept unavailable for settlement in consequence of the lack of facilities for reaching it, no small part of it being an unbroken wilderness, but the completion of a line of railway from Campbellton on Bay Chaleur to Grand Falls on the St. John river will bring a large portion of this territory into communication with the other parts of the province. The prosperous settlement of New Denmark is in this territory, and its rapid development is the best proof of the excellence of its soil. Referring to the northern portion of New Brunswick Mr. Robert Chalmers, in his report on the surface geology of the province, says:—"In that large tract in the north of the province occupied by silurian strata, which includes Restigouche and Madawaska counties and portions of Victoria, Carleton and Gloucester, the surface is undulating and the soil deep with clayey beds in places, but is more usually of a gravelly character with greater or less quantities of pebbles, and being largely derived from the limestone and slates beneath is highly calcarious. So much so indeed that only on the alluvial flats and peaty swamps would lime as a fertilizer be of any value to it. Intervales and terraces of greater or less width affording excellent soil, skirt all the larger rivers traversing it. The whole area is well watered by rivers and streams and is well drained. Limestone is abundant. The best lands in this district

are in the interior along the upper Restigouche and St. John waters, including the western portion of Restigouche, Madawaska, Carleton and Victoria counties."

Mr. R. W. Ellis of the Canadian Geological Survey in his report on this portion of northern New Brunswick, says:—"The breadth of country in the Restigouche valley occupied by rocks of silurian age from its southern margin on the Tobique to the Quebec boundary across the strike of the beds, is about 70 miles. As much of the finest farming land in the province is on rocks of this horizon, there will doubtless be found in this area, which comprises 4,000 square miles, a very large proportion of land suitable for settlement, which will be available as soon as the means of access can be provided."

The late Mr. Charles S. Lugin, Secretary of the New Brunswick Agricultural Board, in one of his reports to the legislature says of this territory:—"The 'ridges,' as the uplands are called by the people, are covered with a luxuriant growth of rock maple, yellow birch and other hard woods. Copious springs of water abound, and the open character of the forest renders it easily cleared. One cannot speak too highly of the fertility of the ridges and their value to the province. I have passed over some of them and have found for miles the same unbroken succession of luxuriant forest. The trees stand wide apart, very little underbrush obstructs the view, and the whole scene looks more like a beautiful park than an unclaimed wilderness."

The late Mr. Edward Jack, who was a recognized authority on soils, in a letter written to the New Brunswick Railway Co., says:—"For the largest body of good wilderness farming land in New Brunswick, I beg leave to point to the tract lying north of the Tobique, embracing nearly a million acres. By far the greater

part of it is agricultural land of excellent quality, free from stone, and well covered by a splendid forest of rock maple and other hard woods."

The late Wm. B. Mills, who resided for some years in this district and cultivated the soil with success said,—"I state as the result of my own observations, made in a series of explorations into this district that as an agricultural region the land north of the Tobique and a portion of the land south of the Tobique is unsurpassed by any land in the eastern part of Canada in its fertility and general adaptability to farming purposes. This land possesses the advantage of being well watered; it would scarcely be possible to lay off one hundred acres in any one block, which would not contain either a brook or a copious spring."

THE COURSE OF THE SEASONS.

The season for farm work in New Brunswick is shorter than it is in the damp climate of the United Kingdom, and the farmer therefore has to work harder while work is being done, but the rapid growth of vegetation enables him to accomplish as much in the shorter season as he could in a longer one in a more moist climate. For several months in the year the New Brunswick farmer, who attends to nothing else but his farm, has very little to do except to look after his cattle. Many good people in the British Islands are deterred from coming to any of the provinces of Canada by the belief that the climate is more severe, than it is in their own country. This, however, is altogether a delusion. The range of temperature is greater, the thermometer rises higher and falls lower, but the effect of the climate on the human system, or on the soil is not injurious but rather the reverse. In the climate of New Brunswick, ten degrees below zero would not be so much felt as ten

degrees above zero in England. In New Brunswick the farmer will usually do no farm work in December, January, February or March. In these months the ground is usually frozen and frequently covered with snow. In April he will begin his farming operations and, where the land is dry, do some planting and seeding as vegetation begins. In May, vegetation makes rapid strides and all the planting and sowing will be completed, except perhaps the sowing of buckwheat, which is usually put in later. Potatoes are sometimes planted in June and under favorable conditions will come to maturity in July. Haying begins throughout that month and the early part of August and towards the middle of August harvesting sets in. Early potatoes are dug about the 20th of July and the farmer who is fortunate enough to have a supply of them, will obtain a high price for them in the city markets. Harvesting is completed in September and the root crops are all gathered in before the end of October. September and October are usually beautiful months and there is seldom any frost until the second week of November. About the last week in November the rivers will become frozen and this state of things continues until April. The snow comes and enables the farmer to haul his produce to market in sleds and the lumberman to engage in his business with advantage. No one who has lived in New Brunswick and who has also lived in the United Kingdom would prefer the latter to the former as respects climate.

New Brunswick is entirely free from many diseases which exists in other countries. Its people live long and usually enjoy good health. Fever and ague which are so prevalent in some parts of North America are utterly unknown in this province. This is also true with regard to diseases affecting animals. There is no part of the world where cattle and other live stock are healthier than they are in New Brunswick.

CHAPTER IV.

The Rivers of New Brunswick — The Fisheries — Minerals — Manufacturing

New Brunswick is a country of great rivers, its three principal rivers being the St. John, Miramichi and Restigouche all of which have many large tributaries. In addition to these there are the St. Croix, the Magaguadavic, the Lepreaux, the Petitcodiac, the Memramcook, the Scoudac, the Cocagne, the Buctouche, the Richibucto, the Kouchibouquasis, the Kouchibouquac, the Tracadie, the Caraquet and the Nepisiguit all of which flow into the sea, besides many others which are tributaries of the larger streams. There is no country in the world that is better watered than the Province of New Brunswick, and this is not the least of its advantages as a place for settlement.

The St. John is the largest river in the province and the largest stream which flows into the ocean on the eastern coast of America, between the St. Lawrence and the Chesapeake. It has a course of 500 miles for 230 of which it is navigable by steamboats. It drains an area of 30,000 square miles of territory, and some of its tributaries are as large as the largest rivers of the British Islands. All the streams of the United Kingdom would not make one St. John River. The St. John rises in the State of Maine and it flows in a northeasterly direction through the State of Maine to beyond the 47th parallel of latitude, where it becomes the boundary line between Maine and New Brunswick. Three miles

above Grand Falls it enters the province and from this point to the sea flows wholly through New Brunswick. In the whole of its course from the point where it touches New Brunswick to Grand Falls it flows in a wide, deep stream, which can be traversed by steamboats when the water is at its normal height. At Grand Falls it descends in one great cataract for 75 feet and for the next three-quarters of a mile below the fall it descends about an equal distance in a series of rapids. From that point to Fredericton, a distance of 140 miles, it is navigable by steamboats; flowing in a full even stream. At Fredericton the river is about three-quarters of a mile in width, and from there to St. John large steamboats sail every day during the season of open navigation. The value of this river in a commercial point of view and as a means of communicating with the different points of the province can hardly be over-estimated. Prior to the establishment of good roads it was almost the only means which the settlers had of getting to market.

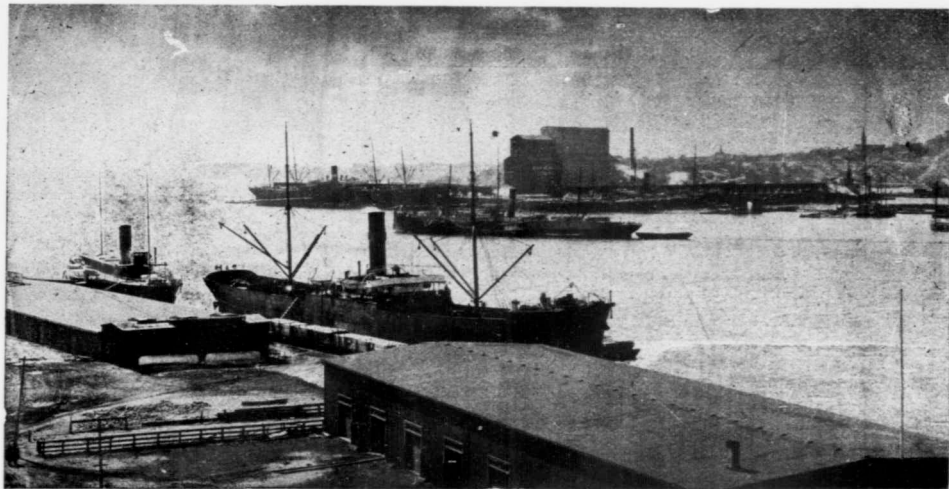
The St. John by means of its tributaries gives access to a very large portion of the province. The first large river which enters it after it reaches New Brunswick is the St. Francis which forms the boundary between New Brunswick and the Province of Quebec. The next large river is the Madawaska, which flows into the St. John from Lake Temiscouta. Below this there are numerous small streams, which flow into the St. John from the eastward, while from the westward comes the Aroostock, which flows mainly through the State of Maine. The Tobique, a large stream which will be described more fully hereafter comes in a little distance below the Aroostock. Among the other tributaries of the St. John are the Keswick, Nashwaak, Oromocto, Nerepis and the Kennebecasis, the latter

river, which is about 100 miles in length, flows in from the eastward traversing nearly the whole length of the County of Kings. The St. John receives also through the Jemseg, a short channel three miles in length, the waters of Grand Lake, which is 30 miles long and 10 miles wide in some places. The principal stream which flows into Grand Lake is Salmon River. South of Grand Lake the waters of the Washademoak Lake enter the St. John River.

The Miramichi flows into the Gulf of St. Lawrence a little north of latitude 47. It is a noble stream and navigable for a long distance. Below Newcastle and between there and Chatham it forms a harbor of great commercial importance. Above Newcastle it divides into two branches, the Northwest and Southwest, both of which have numerous tributaries and flow through extensive tracts of valuable land. The Miramichi is next to the St. John the greatest lumber river in the province.

The Restigouche is a large river which flows into Bay Chaleur, and which forms for a considerable distance the boundary line between New Brunswick and Quebec. At Campbellton and Dalhousie there are fine harbors from which lumber is exported largely. The Restigouche has large tributaries which traverse a country much of which has been little explored, but which is every year increasing in value and experience.

These three principal rivers, the St. John, the Miramichi and the Restigouche are intimately related to each other, because in many cases the head waters of their tributaries are almost in contact. The Indians by means of these rivers were able to reach any part of the province with their canoes having to carry them over but short distances to pass from one system of rivers to



Canadian Pacific Railway Terminus.

1875

1876

1877

1878

1879

1880

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1883

the other. This characteristic of the New Brunswick rivers was of great importance to the aborigines, and it now forms an important feature for the accommodation of hunters who are going through the province in search of game.

THE FISHERIES.

One of the greatest sources of wealth possessed by New Brunswick is its fisheries, which are very valuable and employ a large number of people. In the year 1899, the last year for which we have complete returns, the total value of all the fish caught in New Brunswick was put down at \$4,119,891. The leading fish caught are herring, codfish, haddock, pollock, halibut, salmon, smelts, shad, alewives, hake, sardines, lobsters, oysters, clams and sturgeon. The following are the values of the fish caught in New Brunswick in the year 1899 where the value exceeds the sum of \$20,000 :—

Herring,	\$1,195,979
Lobsters,	535,246
Sardines,	496,892
Smelt,	351,690
Codfish,	350,320
Salmon,	250,612
Haddock,	110,118
Tomcod,	85,670
Alewives,	82,436
Hake,	74,675
Oysters,	69,000
Shad,	65,985
Pollock,	46,080
Clams,	45,631
Mackerel,	39,654
Sea Bass,	33,740
Eels,	22,880

The two great fishing counties are Charlotte, which in 1899 produced \$1,216,259 worth of fish : and Gloucester, which the same year produced \$1,030,660 worth. Next to these great fishing centres comes Westmorland, which in 1899 is credited with \$562,238 worth of fish, Northumberland with \$465,775 worth, and Kent with \$452,066 worth following closely, and at a considerable distance behind, comes St. John, with \$238,625 worth of fish.

A very large amount of capital is invested in the fisheries of New Brunswick. The estimate of the Marine Department is \$2,181,808. There are 276 vessels aggregating 3,640 tons engaged in the fisheries of New Brunswick and manned by 1,131 men.

The number of boats employed is 6,743, manned by 11,843. These figures give a total of 12,974 employed in the fisheries of the province. In addition to these, there were in 1899, 5,171 employed in the lobster canneries. The fishing industry in New Brunswick is a growing one, the value of the fish caught in the province having risen from \$1,131,433 in 1870 to \$4,119,899 in 1899. The highest point reached was in 1896 when the value of the fisheries was \$4,799,433. New Brunswick is the third province in the Dominion in respect to fisheries coming close behind British Columbia. The aggregate value of the fisheries for the last ten years was \$38,650,000. One-fifth of the fish caught in Canada are taken in New Brunswick waters or by New Brunswick fishermen. A further detail of the fisheries is given in the description of the several counties.

MANUFACTURING.

New Brunswick does a considerable amount of manufacturing although not nearly as much as it ought

to do considering its varied products. It is not intended here to go into a detailed account of the various branches of manufacturing in the province, most of which are mentioned in the account which is given of the several counties.

The great manufacturing industry of the province is, of course, the turning of the forests into merchantable lumber, and the mills which are most numerous in the province are the saw mills, in which spruce and other logs are cut into deals, boards and planks. These mills employ many thousands of people, but most of them only run during the season of open navigation. In winter, in most cases, they are shut down and many of the men, who work in them, go to the woods and engage in lumbering. There is no doubt a great future for the lumber industry in New Brunswick when its people abandon their present crude methods and engage in the manufacture of the finer grades of lumber and the making of furniture. The province abounds in hardwood which has been very little dealt with in any shape, but which is available for making all sorts of utensils and which will supply the stock for large furniture factories, similar to those which exist in the Province of Ontario and Quebec. The nearness of the hardwood forests to the ports of shipment makes them much more valuable than they are in the provinces of Canada further west.

Another product of the forest, which is likely to be manufactured in the province on an extensive scale, is pulp. It is universally admitted that spruce is the best of all woods for paper pulp, and of this, New Brunswick possesses an abundant and almost inexhaustible supply. There are at present four pulp mills in New Brunswick of large capacity, two in Chatham, one at Mispec, near

St. John and one at St. John. These mills employ a large number of people and there is no doubt that this number will be largely increased. A scheme is now on foot for the erection of a mill at Grand Falls, on the St. John River, which is intended to be the largest in America.

New Brunswick possesses five cotton factories, two in St. John, one in Moncton, one in Marysville, near Fredericton, and one at St. Stephen. These factories are all of large capacity and usually employ a large number of persons. The atmospheric conditions in the Maritime Provinces are believed to be more favorable for the manufacture of cotton than in any other part of Canada, and there is no doubt that the cotton industry is one that is bound to increase and extend in the Maritime Provinces. One of the advantages which they possess is the fact that the raw material can be brought to the factories by water at a low price.

There are numerous iron foundries, large and small, in the Province of New Brunswick and also several brass foundries. The province is well adapted to the manufacture of iron, there being abundant deposits of that material in it or close to it, as well as unlimited supplies of coal from Grand Lake which would be available for smelting it. The time is, no doubt near at hand, when New Brunswick will be an iron producing country. Its advantages in this respect have already been pointed out by numerous experts. The opening of the railway in the Grand Lake coal district, which will be accomplished in the course of a few months, will no doubt be the means of attracting attention to the advantages of New Brunswick in the production of iron. A very important element in connection with this is the cheapness of freights to the port of St. John.

The manufacture of nails is carried on extensively at St. John and at other localities and there are also one or two rolling mills. Boots and shoes are made in a number of places and also larrigans, a form of footwear which is much used by lumbermen in the winter. Among the other manufactures which may be mentioned, are that of wrappers, paper boxes, etc., and woollen cloths are made in several places. There are also several breweries. Candy is made in large quantities in St. John and Charlotte counties. Soap is also manufactured extensively. There is a sugar refinery in Westmorland county although not now in operation. Furniture factories exist in St. John and other industrial centres, and there is no doubt that this business is destined to grow in consequence of the abundance of furniture wood which the province is able to supply. Capitalists will find openings for many lines of manufactured goods in New Brunswick.

These manufactures are more fully dealt with in the detailed description of the counties.

MINERALS.

Although New Brunswick has not usually been regarded as a great mining country, still it possesses some valuable resources in that direction. There seems to be no doubt that the province has a future as a mineral producing country, especially with respect to coal, oil and copper.

COAL.

About one-third of the province belongs to what is called the carboniferous formation. This embraces the eastern half of Gloucester, a considerable part of North-

umberland, the larger part of Westmorland and Albert and considerable portions of Kent, Queens, Kings, Sunbury and York. Over the whole of this district there is a prospect of discovering bituminous coal. The bituminous coal of the province early attracted attention, the existence of the Grand Lake mines being known to the French in the 17th century. Governor Winthrop in his diary in the year 1643, mentions that a small vessel from Boston went up the St. John River to a distance of about 20 leagues and took on board a load of coal. This statement must refer to the Grand Lake mines, which evidently had then been discovered, and which are still in operation. The Grand Lake coal field is a very extensive one and is estimated to contain 150,000,000 tons of coal. The present coal mines are at Newcastle, but the mining has never been done on a large scale. Last year about 20,000 tons of coal were shipped from Newcastle and this is the largest output on record. The New Brunswick Coal and Railway Company's line which is now being constructed between Chipman, Newcastle and Fredericton, is intended to develop these mines and under it an output of 150,000 tons of coal a year has been provided for.

Coal has been found in other parts of Queens county besides Grand Lake, at Clones Settlement, Otnabog and Mesereau Brook.

In Sunbury county, coal has been found near Tracey on the northwest branch of the Oromocto river, and at points along the line of the railway now under construction between Newcastle and Fredericton. In York county, coal has been found on the Nashwaaksis and Taxis rivers, at Cork Settlement and in Prince William. In Kent county, it has been found at Coal Creek. In Gloucester county, at New Brandon there is

a seam of coal. In King's county, coal has been found at Dunsinane and at Long's Creek. There are many other parts of the province where coal has been found, but the working mines at present are those at Newcastle and the one in the vicinity of Chipman. There is no reason to doubt that there are other parts of the province where coal mines of equal value exist, but which have not been explored.

Anthracite coal has been found in small quantities in various places in St. John and Charlotte counties. The principal working of this coal has been at Lepreaux, where shafts have been sunk, one of them reaching a depth of 140 feet. At a depth of 125 feet a seam of mixed coal and shale was found having a total thickness of 15 feet, but the shale was irregularly distributed through the coal, of which not more than four feet could be found at any one point, and this, much mixed with earthy matter. An analysis of this coal gave 36 per cent. of ash, but two other analysis from selected samples from lower levels, reduced the proportion to 21 per cent. and 14 per cent. respectively. Being tested on a large scale for steam producing purposes, the coal is said to have ignited readily and to have had a great heating capacity. Work was carried on in this locality for four or five years and then abandoned.

ALBERTITE.

This mineral, which was discovered in the county of Albert more than half a century ago, has attracted a great deal of attention. It is soft, brittle, jet black and brilliantly lustrous. In its physical characteristics it bears much resemblance to asphaltum. It can readily be ignited in the flame of a spirit lamp and can also be melted. According to Professor Bailey "The con-

ditions of its occurrence and also its characteristics both physical and chemical, favor the idea that it is an oxidized hydro-carbon related to petroleum and wholly in a condition of partial or complete fluidity."

This mineral is used as an enricher in the manufacture of coal gas and also in the making of oil. In the manufacture of the latter it yielded about a hundred gallons to the ton, while it gave 14,500 cubic feet per ton of gas of a superior illuminating power. The mine of this mineral which was situated about four miles from the town of Hillsborough was worked for about fourteen years, the total shipment from it being 155,000 tons and the price at which it was sold varied from \$15 to \$20 a ton. The mine became finally exhausted, the deposit being apparently a pocket. Other veins of albertite have since been discovered, but none of them are of sufficient size to warrant a large expenditure of capital in working them.

Other mineral substances are found in the province which are akin to albertite, namely oilite and bituminous shale. The following letter from Mr. Harold B. Goodrich, geologist, describes the development of oilite, albertite and shale in New Brunswick.

"No recent prospecting for albertite has been carried on. The mineral occurs, as noted by Dr. L. W. Bailey, in small quantities in all of the sedimentary formations represented in southern New Brunswick. Its geographical distribution is through Westmorland, Albert and into Kings county along the northern flanks of the coastal range of hills. It is generally found closely associated with a belt of bituminous shales known as the Albert shale formation which outcrop at intervals from Memramcook southwardly to the vicinity of Norton, Kings county. Two occurrences may be noted

where its intimate connection with the Albert shales is not so marked. These are at Peck's Brook, Albert county, and again at Mechanics' Settlement, Kings county, at both of which places albertite is found in small quantities in the older rocks. The mineral is now generally recognized as a solidified oxidized petroleum, originally derived from the Albert shale formation, and secondarily deposited in fissures or veins in that and the later formations. All stages of the transition from the fluid to the solid state may be noted in the field. Among the remarkable occurrences may be mentioned one on the east side of the Petitcodiac River just above Pre D'en Haut. We have at our office, specimens of partially and wholly solidified albertite found there in outcropping bituminous shales. Outside of the classic occurrence of albertite at the Albert Mines, the deposit appears to be very irregular and of small quantity. However, it is highly probable that large deposits as yet undiscovered exist in the region above mentioned.

"Oilite is a word coined by Professor N. S. Shaler to describe a certain kind of deposit which is more familiarly known as oil shale, Baltimore shale or cannelite. Geologically, it is a clay shale saturated with petroleum to such an extent that it is valuable as a fuel. Also the petroleum produced from it by retorting is valuable for all manufacturing purposes to which crude oil is applied. It occurs in beds often seven feet thick, which are part of the Albert shale formation. The contained petroleum, often as much as sixty gallons to the ton, is derived from the immediately surrounding bituminous shales. The cannelites or shales are found in Westmorland county at Taylorville, where some 2,000 tons were mined and shipped about forty years

ago. Other localities are at Albert Mines, and at Baltimore, Albert county. At the latter place mining was carried on quite extensively several years ago, and works for retorting and distilling were established. Within the last two years a certain amount of prospecting has been done at Baltimore. The oil shales are known to exist also four miles west of Baltimore and in the vicinity of Elgin. These, as well as localities in Kings county, have not yet received any mining development.

"With reference to petroleum, the N. B. Petroleum Co., Ltd. has been at work for the last two years. Five wells have been completed in the St. Joseph's College field, Westmorland county and in four out of the five, oil has been found. One well, No. 4, is pumping an excellent grade of oil, while the last one which came in on October 31st. is now in good condition for producing. We have proven an oil bearing territory, and in this territory which it is intended to still further extend by many shallow well borings, we have a fine oil sand within 200 to 400 feet from the surface. It now seems certain that many pumpers can be discovered there, and that their product can be most profitably put out. We are not, however, confining our operations to Westmorland county. We are already at work on two borings in Albert County on the bank of the Petitcodiac river. The surface indications found there of oil bearing sandstones are the finest in the province and it is almost certain that one or both of these wells will become good producers. We propose to test all parts of the province thoroughly by deep well borings, believing that by tapping the lower level oils, we may get even better production than we have had thus far. We feel encouraged by our success up to

date, and believe that by careful working we can develop an extensive oil district.

Iron has been found in many portions of the province, indeed iron ores were observed in the rocks at West Beach near Mispec in St. John county by Champlain when he first visited this country in the year 1604. This ore is mainly a dark reddish brown haematite. Another deposit of ore is found at Black River two or three miles to the eastward of West Beach. Iron also occurs in the vicinity of the village of Lepreaux near the boundary between St. John and Charlotte counties. Iron ore is also found at New River, on the south shore of Deer Island and near Cranberry Head on the coast of Charlotte county. Bog iron ores are found in many localities throughout the province and phosphate of iron has been observed in Madawaska county. The localities in which iron are found are more fully detailed in the description of the counties. The only deposit of iron that has been worked is that near Woodstock, Carleton county, where iron has been manufactured for several years. There is no doubt that some of these numerous deposits of iron in the province will in time become valuable. The fact that coal in unlimited quantities can be obtained for smelting purposes at the Grand Lake coal fields points out New Brunswick as a suitable locality for the erection of great iron works at no very distant period.

Copper ore has been found in many localities in Charlotte, St. John, Westmorland, Albert, Kings, Carleton and Gloucester counties. This metal is widely diffused throughout the province and the Dorchester copper deposits are now being operated by a company with a large capital on an extensive scale. If these works are successful and there seems to be little doubt

that they will be, we may expect to see other companies engage in the smelting of copper in this province.

Deposits of nickel are found in the County of Charlotte in several places and explorations are now being carried on for the purpose of ascertaining their extent and value.

Antimony is found in York and Kings counties. The principal deposits are at Prince William and they were operated for several years by a company and a considerable quantity of antimony produced. The deposit of this metal in Prince William is large and the quality of the ore is excellent.

One or two specimens of oxide of tin have been found in York county, but as yet no large deposit of that metal has been located.

Galena is found in a number of places in Charlotte, St. John, Kings and Gloucester Counties. The localities are more fully described in the description of these counties.

Gold has been found in the washings of the rivers in a number of localities in New Brunswick ; in Charlotte, Albert, Gloucester, Restigouche, Victoria, Kings, Carleton and York counties, but so far no effort has been made to mine this metal. As the rocks in many places in the province are similar to the gold bearing rocks in British Columbia, expert miners think that the discovery of gold in paying quantities in New Brunswick is only a question of time.

Manganese is found in Kings, St. John and Albert counties and was worked for many years with profit at Markhamville, in the first named county. The manganese deposits of New Brunswick are valuable and there is no doubt that the metal can be had in abundance. The further development of these manganese deposits

will probably result in the opening up of a profitable business.

Graphite exists in St. John county near the city of St. John, and a considerable amount of it has been mined there and shipped to the United States. There is no doubt that the deposit of graphite at this place is a large one, and that the quality is good, but there has been some difficulty in operating in consequence of the water getting into the shaft.

There are extensive deposits of peat in various parts of New Brunswick, especially in St. John, Gloucester, Northumberland and Kent counties. These peat deposits are valuable for fuel, and the moss in them can also be used for bedding for horses and for sanitary purposes, for which its antiseptic quality and great absorptive power make it especially adapted. This peat moss will absorb twenty times its own dry weight of water, and in stables will absorb all liquid matter; allowing the water to evaporate it retains the nitrogenous matter and thus becomes a valuable fertilizer. A considerable quantity of peat moss of the same kind is sent by Germany to the United States. These extensive peat bogs in New Brunswick will no doubt in time become valuable for fuel and for other uses.

New Brunswick is abundantly supplied with limestone, the most valuable deposits being in the county of St. John. These limestones are of the very finest quality and the deposit is immense in extent. They belong to the Laurentian formation and are extensively worked in various parts of St. John county. Huronian limestones are also found in Charlotte, Kings and Albert counties and Silurian limestones in the counties of Carleton, Victoria, Madawaska and Gloucester. These last, although inferior to the Laurentian deposits,

are burnt in a number of districts for local use. The St. John limestone has been extensively exported to the United States.

There are large deposits of gypsum in New Brunswick, those which have been the most extensively worked being in Albert county. This gypsum is of a very high grade and commands a ready sale. It is exported both in the form of rock and of calcined plaster. There is a large deposit of gypsum in Victoria county on the Tobique. It is also found in St. John, Westmorland, and Kings counties. The Tobique deposit is of a darker color than that in Albert county but is used as a fertilizer for land.

There are large beds of granite in various parts of New Brunswick. This stone is quarried at Hampstead and on the Nerepis Valley in Kings county, and near St. George in the county of Charlotte. It occurs both in grey and red and is much used for monumental work. The New Brunswick granite is able to compete successfully with the Scotch article. Deposits of "Black Granite" are found in Charlotte and Queens counties. This so-called granite is in reality mica diorite. It is extremely hard and the difficulty of working it prevents it being used extensively.

Some small deposits of marble are found in the province and also some ornamental stones such as serpentine, which occur in St. John and Charlotte counties associated with the Laurentian limestone and porphyry, which is found in the hills around Passamaquoddy Bay.

New Brunswick contains large deposits of free-stones, stones suitable for building purposes and for the manufacture of grindstones and millstones. These occur all over the province, but especially in Westmor-

land, Albert, Gloucester, and Northumberland counties. Extensive quarrying operations are carried on in these counties and many fine buildings in the United States and in other provinces of Canada have been built of New Brunswick freestone .

Slate is found in Charlotte, Queens, Victoria, Madawaska, Gloucester and Restigouche counties, and stone suitable for flagging also exists in St. John county. Honestones have been found in Grand Manan and in one or two localities in Northumberland and Kings counties.

There is abundance of clay in New Brunswick for the manufacture of bricks, the principal deposits being in St. John, York, Northumberland and Westmorland counties in all of which places, brick is manufactured on an extensive scale.

Silica is found in Kings and St. John counties, and mineral paints in Albert, Northumberland and Charlotte counties.

Mineral springs are numerous, the principal ones being located in the county of Kings. In the same county, salt springs are found near Sussex and in other localities and are now being worked with profit. A great deal of mineral water is bottled annually in Kings county for table use.

CHAPTER V.

Description of the Province by Counties.—St. John City—St. John County — Charlotte — Kings — Queens — Sunbury — York — Carleton — Victoria — Madawaska — Albert — Westmorland — Northumberland — Gloucester — Restigouche.

ST. JOHN CITY.

The City of St. John lies at the mouth of the river of the same name on the shores of the Bay of Fundy. This river received its name from Champlain, who visited it in the year 1604, and it was at that time the site of an Indian town. The French held possession of the country until the year 1713, when Acadia was ceded to Great Britain, under the Treaty of Utrecht. A fort was built in 1630 by Charles La Tour on the west side of the harbour, which was the scene of many stirring events. The fort was afterwards, from time to time, occupied by garrisons until the year 1700, when it was allowed to fall into ruin for about half a century, when about the year 1758, it was taken possession of by the English and named Fort Frederick. The first English settlement at St. John was in 1762 when Messrs. Simonds, Hazen and White began business at what is now called Portland Point and engaged in the fisheries and in the manufacture of lime. In 1783, St. John received a large accession to its population by the coming of the Loyalists, who had been driven from their homes in the thirteen colonies, which had become independent. St. John received a charter and became a city in 1785.



Intercolonial Railway Terminus.



and is now a large and prospering community with a population of 40,711.

The harbor of St. John can be entered by ships of any size and has ample accommodation for a very large number. The port is becoming the great winter port of Canada, and there are now three elevators, and connected with them, berths, for seven large steamships, which can all be loading or discharging at the same time. Other wharves are to be built for the growing trade of the port, the exports of which now amount to \$15,000,000 annually and which are likely every year to increase. The development of the west is certain to make St. John a very large and important shipping port and the outlet for the larger proportion of the products of the great prairie region beyond Lake Superior. During the year 1900, 3,621 vessels, measuring 1,213,298 tons, entered or cleared at St. John, in the foreign trade, and 5,813 measuring 918,828 in the coasting trade.

St. John enjoys railway communication of the most ample description with the rest of the world. It is the terminus of the Canadian Pacific Railway, which goes to Vancouver in British Columbia and it is connected by the same railway with all the great cities of the United States. The Intercolonial railway also touches it and connects it with other towns and cities of the Maritime Provinces and with Quebec and Montreal. The Shore Line connects it with St. Stephen and St. George.

St. John has steamboat connection with Boston, Digby, Yarmouth, Grand Manan and other points on the sea coast, and with Fredericton and other points on the river St. John.

It has a splendid water and sewerage system, so

that it is one of the most healthy cities in the world. It has a large Public Hospital, beautiful school houses, exhibition buildings and other public buildings of a similar character. Its Custom House is said to be the finest in the world. Its merchants are enterprising and are pushing its business in all directions. There is no place in America where life can be enjoyed under better conditions than in the city of St. John, or where an immigrant from the British Isles will feel more at home.

St. John has become a considerable manufacturing centre and has cotton mills, iron and brass foundries, nail factories, rolling mills, a broom and brush factory, flour mills and many other industries which give employment to its people. The saw mills at St. John and vicinity employ about 2,000 persons and form its leading industry.

St. John is well supplied with churches, there being about 50 places of worship in the city, of which the Roman Catholic have five, the Church of England, nine; the Presbyterians, eight; the Methodists, seven; the Baptists, nine; while the Unitarians, Congregationists, Plymouth Brethern, Adventists, Christians and Salvation Army also have places of worship.

St. John is a handsome city and contains many beautiful buildings. Its shops are not surpassed by those of any city of its size in America. It has an electric railway system and electric lights, and is provided with all those conveniences and facilities which modern cities enjoy.

Six chartered banks do business in St. John and three or four private banks, so that its banking facilities are admirable. The excellence of its means of communication may be judged from the fact that Boston can be reached from St. John in fourteen hours, New

York in twenty-three, Montreal in sixteen and Halifax in eight hours.

ST. JOHN COUNTY.

The County of St. John is the smallest in the province, but the most populous. It has an area of 386,400 acres of which 351,103 acres have been granted, leaving 35,297 still the property of the crown. The county contains four parishes and the city of St. John. These parishes have 159,000 acres occupied and 36,000 acres improved. The population of the county including the city, was, at the last census, 51,756, the population of the city alone being 40,711.

St. John county contains some excellent land and a considerable area of land of poor quality. It is more rugged in its aspect than most portions of the province. One of its remarkable features is the great number of its lakes. The river St. John divides it into two nearly equal portions and the port of St. John is the great outlet and shipping port for all the principal business of the province. The soil in the vicinity of St. John is usually well cultivated and the people who live upon it have at all times an excellent market in the city.

Wheat is not grown to any extent and the same is true with regard to barley. The amount of buckwheat produced is also small, being only 8,772 bushels in the year 1900. In that year St. John county produced 71,994 bushels of oats, 106,572 bushels of potatoes and 17,452 bushels of turnips. The attention of the farmers is largely given to vegetables for the city markets, and also to dairying, these being the products for which there is the readiest sale at good prices.

The fisheries of St. John county are valuable and employ a large number of persons. The total value of

the fish caught in St. John county in the year 1899 was \$238,635. These fisheries employed ten fishing vessels and 450 boats manned by 954 men. The fish caught were 267,110 pounds of salmon, 19,025 barrels of herring, besides 126,000 pounds of herring which were smoked, 598,000 pounds of lobsters, 55,000 pounds of codfish, 8,600 barrels of alewives, besides large quantities of other fish.

St. John is a great centre for the lumbering industry. Although the amount of lumber cut in the county is comparatively small, the saw-mills at St. John, which are large and well equipped, cut a great many logs which are produced on the St. John River and its tributaries. The logs are brought down in enormous rafts which are towed by steam tugs. The saw-mills of St. John city and county employ upwards of 2,000 men.

St. John county is rich in mineral wealth. Iron ore is found at West Beach, 12 miles east of the city of St. John and at Black River, which is two or three miles to the eastward of West Beach, but these deposits have not been developed. Copper is also found in this county, the principal deposits being at Goose Creek. The mine, which was known as the Vernon Mine, was worked to some extent about thirty five years ago, but it was afterwards abandoned.

Graphite is found at the mouth of the St. John river on the eastern side near the Suspension Bridge. These deposits have been worked and a considerable amount of graphite exported to the United States. There is no doubt that the deposits at this place are large and that the quality is good.

Limestone exists in enormous quantities in the county of St. John, indeed it is the most widely distributed of any mineral. The lime deposits of St. John

attracted the attention of the French inhabitants nearly three centuries ago, and the splendid quality of the limestone was also recognized. The limestone quarries are on both sides of the river, a short distance above the city, and they are so easy of access that lime can be produced at them at a much cheaper price than almost anywhere else. The leading mills have lime-kilns in connection with them, so that the lime is burned by the refuse wood of the mills, which would otherwise have to be got rid of in a more expensive way. It is said that if the lime of New Brunswick had free entry into the United States, 4000 men would be employed in manufacturing lime in St. John. There is no business which gives a larger amount of employment to men in proportion to the money obtained from it, everything which goes to the making of a barrel of lime being produced at or near the mills as the result of labor. There is no doubt that at some future period when better views of economic questions prevail in the United States, the lime industry in St. John will assume vast proportions. Even with a high tariff made on purpose to keep out St. John lime, it still goes to the United States. There are 34 draw-kilns in St. John county for the manufacture of lime.

There is a small deposit of gypsum at Martin's Head in the county, but the quality is not good, perhaps further researches may have a better result. There is abundance of excellent clay in St. John county for the manufacture of bricks. Bricks are extensively made both on the east and the west side of the river. A large proportion of the bricks used in the province for building are made in St. John county.

There is a deposit of silica at Fitzgerald Lake, seven or eight miles from the city of St. John.

The parish of Musquash, population 741, lies at the western end of the county. It has an area of 55,000 acres, all of which are occupied and 4,000 of which are improved. The three leading industries of this parish are lumbering, farming and fishing. There is a fine area of marsh on the Musquash river, some 2,500 acres, and the upland soil is good.

The fisheries of Musquash in 1899 reached a total value of \$59,260 and employed six vessels and 125 boats, manned by 280 men. The principal fish caught were salmon, lobsters, haddock, hake and sardines. Musquash is an outport of St. John and exports every year lumber to Great Britain and the United States. It also does a considerable coasting trade. There is a large ham and bacon curing establishment at Musquash.

The parish of Lancaster, population 5,277, has an area of 29,000 acres, of which 16,000 are occupied and 5,000 are improved. Lumbering is the leading industry of this parish although it contains many excellent farms. Its proximity to the city of St. John gives its farmers the advantages of an excellent market. Several of the principal saw mills of St. John county are in the parish of Lancaster and also one of the pulp mills and a large brick making establishment. The fisheries of Lancaster amounted in value to \$28,958 in the year 1899, and employed two vessels and 65 boats, manned by 140 men. The principal fish caught were salmon, lobsters, herrings, haddock and hake. The town of Fairville, which has a population of 2,500 is in this parish. It contains five places of worship. It is a station on the Canadian Pacific Railway and one of its industries is a large brewery.

The parish of Simonds, population 3,072, which lies to the eastward of St. John, has an area of 118,000

acres of which 48,000 are occupied and 15,000 are improved. The parish is mainly agricultural and contains a large area of marsh land and a great deal of good upland soil. The farmers of Simonds are generally well off, and the city of St. John has always depended largely on this parish for its supplies. The St. John Alms House and Reformatory are situated in it. The parish is famed for its lakes, some of which are of large size.

The parish of St. Martins, population 1,957, is the largest in the county, having an area of 176,400 acres of which 40,000 are occupied and 1,200 are improved. A good deal of the land at the eastern end of this parish is sparsely settled. The principal industries are lumbering, farming and fishing. The value of the fisheries in the year 1899, was \$12,292. These fisheries employed 40 boats manned by 80 men. The principal fish caught were salmon, lobsters, haddock and herring. The village of St. Martins is beautifully situated on the shores of the Bay of Fundy, and is a favorite summer resort. At one time it engaged largely in shipbuilding, but this industry has disappeared. St. Martins has railway connection with St. John by means of the St. Martins and Hampton Railway, which joins the Intercolonial at Hampton. St. Martins is an outport of St. John and does a considerable coasting trade and also exports lumber to the United States.

CHARLOTTE.

The county of Charlotte lies at the extreme southwest of the province of New Brunswick, and, including the islands connected with it, has an area of 832,500 acres of which 430,694 are granted and 391,806 still re-

main the property of the government. Charlotte is a county of great resources abounding in mineral wealth and having splendid fisheries. Included in its boundaries are the large islands of Grand Manan, Campobello and Deer Island, while scores of others, large and small, form splendid fishing stations, indeed the people of the islands mainly obtain their living by the fisheries which are not surpassed in value by those of any portion of America.

The fisheries of Charlotte in the year 1899 realized \$1,216,259. They employed 50 vessels and 1075 boats manned by 1668 men and in addition to these, 383 persons were employed in the canneries, making a total of 2051 persons who make their living by the fisheries of Charlotte. The fish caught, included about \$450,000 worth of herring, \$480,000 worth of sardines, \$77,000 worth of lobsters, \$25,000 worth of codfish, \$17,000 worth of clams, \$50,000 worth of haddock, \$40,000 worth of hake, \$45,000 worth of pollock and smaller quantities of other fish.

The lumber business of Charlotte is not very large. Most of the lumber which goes from the St. Croix is shipped at Calais on the United States side. Still there are considerable areas of good land throughout the county and there are a number of saw mills which supply the local demand.

The mineral wealth of Charlotte is considerable. It possesses enormous deposits of granite, both grey and red, which are worked at the town of St. George and form a valuable industry. Copper sulphides are found all along the coast of Charlotte county and development work has been carried on at Adams and Simpson's Islands on the coast and also on the east side of La Tete passage, and on Mascarene peninsula. These opera-

tions have been suspended, but it is probable that copper will yet be found in paying quantities in the county, as there are more than fifteen localities where copper ore has been found. Nickel is a metal which has been found in Charlotte. A few years since, attention began to be directed to the existence near St. Stephen of considerable deposits of pyrites, some of which upon analysis, showed a small percentage of nickel. There is no doubt that this ore is spread over a large area, but it would seem that there is a considerable variation in the percentage of nickel. Prospecting is now being carried on for this metal in the vicinity of St. Stephen. Galena has been found at Fry's Island and also at Campobello as well as on the Magaguadavic River, about half a mile below the town of St. George. There are large deposits of peat in the eastern end of Charlotte county. Mineral paints have been found in several places in the county. Barytes occurs in veins in Fry's Island and about the northern head of Grand Manan, while at the former place fluor is found associated with it. Garnets are found in considerable numbers distributed through the mica slates of the region about Moore's Island and also crystals of black tourmaline of considerable size; and amethysts of some value have been found in Grand Manan. Molybdenite occurs in the quartz rocks at Pennfield and it has also been observed in the quartz rocks near St. Stephen. A very large portion of the county consists of granite formation, but there is a slate belt of considerable extent in the western end of the county and the southern portion is chiefly devonian, silurian and pre-cambrian.

There are good tracts of land for agricultural purposes in the vicinity of St. Stephen all along the St. Croix river from Oak Bay to Upper Falls. This same

class of good land extends eastward to the Digdeguash river including all the area occupied by Pomeroy, Little, Old Scotch and other ridges in that section. Some of the valleys between these rivers are gravelly and stoney, but the slopes and summits of those rolling boulder clay hills afford good soil and much of it is in an excellent state of cultivation.

At Bayside and upon the lower carboniferous tract near St. Andrews, there are some fine farms where large quantities of root crops are raised. East of this, however, the land is not as well adapted for agricultural pursuits, much of it being hilly and broken and some of it covered with coarse gravel. Still there are numerous settlements and districts of greater or less extent where the soil is good and where the thrifty, hardy settler makes a good living. Along the Magaguadavic River, especially in the vicinity of St. George, there are many good farms and also at L'Etang Harbor and on the Pennfield terraces. In these places large clearings have been made and the farmers appear to be prosperous. Farther east the land is not as good. The West Isles and Grand Manan are generally similar to the mainland as regards agricultural capabilities. Occasional stretches of good soil are found upon them, but the people largely devote their time to fishing and trading so that the amount of land cultivated is comparatively small. The same remark applies to a considerable portion of the coast of the mainland.

Campobello has a considerable amount of good land, but as it is principally owned by a company of foreign capitalists, who use it as a summer resort, the conditions upon it are not favorable for settlement by farmers.

The county is traversed by the Canadian Pacific rail-

way and by the Shore Line, the latter connects St. Stephen, St. George, Pennfield and Lepreaux with St. John, while the former goes to St. Stephen and St. Andrews and connects these towns with the main line of the Canadian Pacific.

Charlotte abounds in lakes, some of them of considerable size. Among the largest of these are Lake Utopia near St. George, Lake Oromocto, Lake Victoria, Lake MacDougal and Digdegaush Lake. All these lakes and dozens of others abound in fish and form splendid resorts for the sportsman.

The principal rivers of Charlotte county are the Lepreaux the Magaguadavic, the Digdegaush and the St. Croix. This county is admirably adapted for sporting, not only for fishing but for game of all kinds. It fairly swarms with deer, and moose. Caribou are also plenty. The fact that it is so easy of access and so near the large centres of population give it a great advantage in this respect. The population of the county in 1901 was 22,415.

The parish of St. Stephen, which contains the towns of St. Stephen and Milltown, is the most populous in the county. It has an area of 25,000 acres all of which are occupied and 13,000 improved. There are many fine farms on the ridges of this parish. A good deal of this soil is a strong clay, which makes fine grass land and is also good for grain. On the ridges the clay is a fine loam, deep and moist. The population of the parish including the towns is 5,778. The town of St. Stephen has a population of 2,840. It contains six places of worship, two of the Church of England, and one each of the Presbyterian, Methodist, Roman Catholic and Baptist. Its industries are a candy factory, which employs 120 persons, a soap fac-

tory, which employs 20 persons, an axe factory, a wrapper factory, a furniture factory, a casket factory and chemical works. Milltown has a population of 2,044. It has three places of worship, Congregational, Methodist and Roman Catholic. There is located the St. Croix cotton mills, which employs 700 persons and is one of the finest mills in the Dominion. They make colored cotton. There is also a grist mill at Milltown. St. Stephen is a port of considerable importance, 819 vessels of 43,873 tons having entered or cleared in the foreign and coasting trade in the year 1900.

The parish of St. Andrews, population 1,390, has an area of 6,000 acres, all of which are occupied and 4,000 are improved. This parish contains the county town, St. Andrews, one of the oldest settlements in the province. The town is beautifully situated and has a splendid beach and excellent bathing facilities so that it is rapidly becoming a fashionable summer resort. Many of the rich people of Montreal, among others the president of the Canadian Pacific Railway, have summer residences here. There is also a fine summer hotel. The town contains five churches, a Presbyterian, Baptist, Methodist, Roman Catholic, and Church of England. There is a larrigan factory and also a fish factory in operation. St. Andrews is an important shipping point, 1,306 vessels measuring 92,585 tons, having entered or cleared in the foreign and coasting trade in the year 1900.

The parish of St. George, population 2,892, has an area of 100,000 acres, of which 35,000 are occupied and 12,000 are improved. The town of St. George is prettily situated on the Magaguadavic River, which flows through it. Here there is a fine fall which gives ample water power to all the industries of the place.

The town of St. George has a population of about 1,500 and contains four churches, Baptist, Presbyterian, Roman Catholic and Church of England. It is the seat of a great granite industry, which employs about 300 men. There are six establishments where granite is polished for monumental work. This granite finds a market not only all over the Maritime Provinces, but in Ontario and Quebec. Some of it is grey but most of it is of a brilliant red color. The parish of St. George has an extensive coast line and includes L'Etang, which is one of the finest harbors in the Maritime Provinces. All along the coast is a great fishing industry and the men who engage in it are generally prosperous. During the year 1900, 172 vessels of 7,187 tons, entered or cleared at the port of St. George.

The parish of St. James has an area of 115,000 acres, of which 50,000 acres are occupied and 15,000 are improved. This parish has a considerable amount of good land. Pomeroy and Scotch ridges are the chief farming settlements. They have a loamy soil deep and strong. Bailey, also in this parish, has a fine soil, a good deal of it being loam, originally it was covered with hardwood. Population 1,860.

The parish of St. David has an area of 46,000 acres, of which 34,000 acres are occupied and 12,000 are improved. This parish contains much highland in ridges which were originally covered with hardwood and has a fine soil. Population 1,419. The valleys consist mostly of land that is lighter and more gravelly. There are, however, many places in the parish where agriculture is carried on with success.

The parish of Dumbarton has an area of 100,000 acres, of which 24,000 acres are occupied and 8,000 are improved. All the soil of this parish is light and sandy,

but it is good turnip land and there are many excellent farms. Population 711.

The parish of St. Croix, population 558, has an area of 20,000 acres, 18,000 of which are occupied and 8,000 are improved. This is a new parish which borders on the St. Croix River and adjoins St. Andrews. There is much good soil in it and many excellent farms. Most of the land is a reddish clay.

The parish of St. Patrick, which lies to the eastward of St. Andrews and has a coast line, has an area of 50,000 acres, of which 28,000 are occupied and 8,000 are improved. The people of this parish are largely devoted to fishing although there are many good farms. The soil is a gravelly loam. Population 755.

The parish of Clarendon, population 162, lies at the northeast part of the county and is an inland parish. It has an area of 140,000 acres, of which 8,000 are occupied and 1,500 are improved. The soil of this parish varies in quality, but there is a considerable amount of good farming land. The settlements are new and there is plenty of room for others.

The parish of Lepreaux, population 347, which lies to the South of Clarendon and has a coast line on the Bay of Fundy, has an area of 50,000 acres of which 6,000 are occupied and 1,500 are improved. This parish was formerly the seat of a great lumbering industry. The country around it is considerably broken and farming is not carried on to any great extent, still there are tracts of good land along the Lepreaux River and in the vicinity of the village.

The parish of Pennfield, population 1,002, is one of the oldest settlements in the county. It has an area of 100,000 acres and has a coast line on the Bay of Fundy. This parish contains 25,000 acres of land

which is occupied and about 8,000 acres which are improved. The soil is similar to that of the parish of St. George. The people of this parish are largely engaged in the fisheries.

The parish of Dufferin has an area of 4,000 acres all of which are occupied and 2,000 are improved. This parish extends along the St. Croix River and contains much good land, which is similar in character to the best of that in St. Stephen. Its population is 260.

Campobello has an area of 115,000 acres of which 15,000 are improved and all of which are occupied. This island contains much good soil, but owing to the local circumstances connected with it, there is no scope there for the farmer. Population 1,211.

Grand Manan has an area of 37,000 acres of which 16,000 are occupied and 7,000 acres are improved. The people of this island are mainly devoted to the fisheries, but there is much excellent soil upon it, and where the land is well cultivated it produces good crops. Population 2,671.

West Isles, which includes Deer Island, has an area of 8,000 acres all of which are occupied and 5,000 are improved. The people who reside here are mainly fishermen, yet they cultivate the soil to a considerable extent. Population 1,399.

KINGS COUNTY.

The county of Kings which lies to the north of St. John has an area of 877,000 acres of which 766,000 are granted and 111,000 still remain the property of the government. This county occupies an unique position among the counties of the province by reason of its

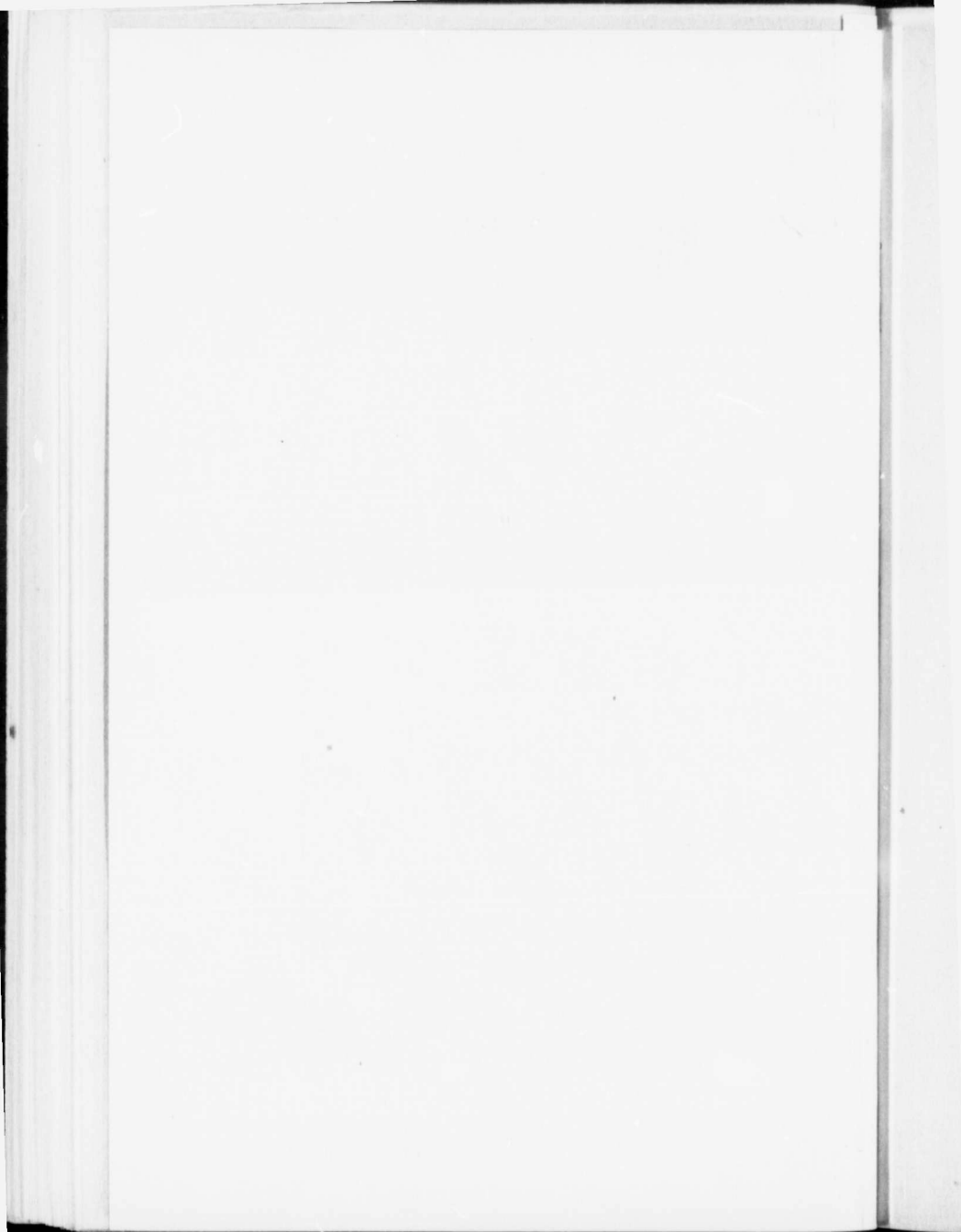
proximity to the largest city, St. John, and its admirable means of communication. These advantages have made it to a large extent the source from which the people of St. John receive their market supplies, so that the farmers who reside in Kings county can always rely on a ready sale for their products. There is no portion of the province where the people are more generally prosperous or enjoy greater advantages.

The county is traversed throughout nearly its whole length by the Kennebecasis River, which is navigable to Hampton a distance of about 22 miles from St. John. It has numerous tributaries which are lined with beautiful intervalles, and the whole of the Kennebecasis valley is one of the most choice regions in New Brunswick. The northern portion of Kings county is traversed by the river St. John, which flows through it for a distance of about 35 miles, and by Belleisle Bay which connects with the St. John and extends for about 12 miles into the parishes of Kingston, Springfield and Kars. There is daily communication, during the season of open navigation between St. John and Hampton on the Kennebecasis, and a steamer makes three round trips a week to the Belleisle while that part of the St. John river which passes through King's county is traversed by two or three steamboats every day affording the people who live in that district the best possible facilities for sending their produce to market.

In addition to these advantages in the way of transit, the western portion of the county, the parish of Westfield, is traversed by the Canadian Pacific railway, while the Intercolonial railway passes through the parishes of Rothesay, Hampton, Norton, Sussex and Cardwell, all lying to the eastward of St. John..



A Typical Carleton County Farm House.



The Central railway from Norton to Chipman passes through the parishes of Norton and Springfield, while the Havelock and St. Martins railway passes through the parishes of Hampton and Upham. The parish of Havelock is served by the Havelock & Petitcodiac railway which joins the Intercolonial at Petitcodiac. No less than nine of the fifteen parishes in the county have railway communication, while three of the others have excellent facilities for transit by means of steamboats.

Kings county is essentially an agricultural region. There is no portion of the province where farming is carried on with more skill and success. In the year 1900 this county produced 413,597 bushels of oats, 239,864 bushels of buckwheat, 369,025 bushels of potatoes and 242,802 bushels of turnips. Wheat was not grown to any considerable extent, but 12,500 bushels of that grain were produced in that year, the average crop being upwards of 19 bushels to the acre. There was also grown in the same year 6,909 bushels of barley, the average crop being almost 25 bushels to the acre.

Kings county contains 18 cheese factories, which in the year 1900 made 760,989 pounds of cheese. There are eight creameries in the county which in the same year made 138,854 pounds of butter. The Provincial Dairy School is located at Sussex in this county and is doing a most useful work. There are six agricultural societies in the county of Kings with a membership of 512 and seven dairy associations with a membership of 245.

Referring to the agricultural characteristics of Kings county, Mr. Robert Chalmers in his report to the Dominion Government on the surface geology of the province, says,—

"Kings county, taken altogether, has many fine valleys and uplands, and is the best agricultural district in southern New Brunswick. The choicest portions are in the valleys of the Kennebecasis, Belleisle and Millstream, and along Smith's Creek, Trout Brook, etc. There are also some good farms in Westfield parish, on the west side of the St. John, especially in the vicinity of Nerepis and along the Long Reach ; while in the extreme northern part of the county the uplands of Butter-nut Ridge and vicinity are of high fertility, underlain as they are mainly by lower carboniferous limestone. The latter district has a reputation beyond the limits of the county for its great agricultural capabilities.

"Upon the higher grounds of the south-eastern part of Kings, especially along Hammond River and its affluents, there are a large number of good settlements, boulder clay and rotted rock in situ forming the soil here in most places. These when cleared of stones are usually found to be rich heavy lands, well adapted for the production of hay and cereals.

"The best portions of Kings county, agriculturally, are of course, its intervalles and meadows, and from the great number of streams traversing it and the width of many of their valleys, especially in the districts occupied by the lower carboniferous rocks, these cover a large area. Some of these valleys held lakes in the Post-tertiary period, and have bottoms covered with lucustrine gravels, clays, loam, etc. Many of the farms are large and in an excellent state of cultivation ; their proximity to the city of St. John affords easy access to the markets, and the consequent regular intercourse of the people with the business portion of that community has rendered them intelligent, industrious and thriving."

Lumbering is not carried on in Kings county to any very large extent, but there are mills scattered all over it for local consumption, and a considerable amount of lumber is cut, especially in the parish of Waterford. Lumbering operations are also carried on in the parish of Cardwell and to some extent in the parish of Greenwich.

As Kings county has no coast line, its fisheries are confined to the rivers, which penetrate it. The value of the fish caught in the county for the year 1899, was \$21,174. There is a considerable salmon fishery in the St. John river. Sturgeon are also caught in large numbers and exported to the United States. Shad, herring and alewives are also taken in the St. John river, the Kennebecasis and Belleisle Bay. Among the items of fish caught in the county in the year 1900 were 25,000 pounds of salmon, 650 barrels of herring, 75,000 pounds of hake, 20,000 pounds of trout, 435 barrels of shad, 375 barrels of alewives, 10,000 pounds of bass, 27,000 pounds of pickerel, 12,000 pounds of sturgeon and 7 kegs of caviare.

Kings county contains many useful minerals, some of which have been worked with profit. Veins of iron carbonate have been found on the Nerepis river in Westfield parish. Copper pyrites with galena is found at Quispamsis, in Scotch Settlement, Springfield, on the northern slope of Kierstead mountain, in the parish of Kars, and at Nerepis station in the parish of Westfield. At Norton on the north side of Dickie mountain, copper glance occurs.

Antimony has been found near Sunnyside Lake in the Scotch Settlement, in the parish of Springfield.

Galena occurs on Dickie mountain in the parish of Upham, and on Hammond river in the parish of Upham, and also at Quispamsis.

Manganese is one of the most important minerals found in Kings county. At Markhamville, near the head of Hammond river, about eight miles from Sussex station, the manganese mines were worked for many years and the production of the mineral was large. Up to the year 1894, 23,024 tons of Manganese valued at \$409,203 were produced. The Markhamville manganese mine is said to have produced some of the highest grade manganese found in the world. About three miles from Markhamville a manganese deposit called Glebe mine was worked for some years. Manganese has also been found on the south-eastern side of Jordan Mountain about seven miles from Sussex and about 17 miles from Markhamville. About 250 tons of manganese have been taken from this mine.

A seam of bituminous coal, about 20 inches in thickness has been discovered at Dunsinane, near the line of the Intercolonial Railway, a few miles east of Sussex. During the year 1897, boring operations were undertaken with a drill belonging to the provincial government to a depth of nearly 1,300 feet and all the rocks passed through were said to belong to the coal formation.

A large deposit of silica has been found at Pollet river in Mechanics' settlement in this county. It has a depth of about four feet over the bottom of the lake, and a analysis showed a little over 80 per cent. of silica.

Valuable salt springs exist in the vicinity of Sussex and at Salt spring brook in the parish of Upham. The Sussex springs have been operated for a long time salt being taken from them as much a hundred years ago.

Mineral waters are found at Havelock, Apohaqui, Upham and also near Sussex.

Kings county at the last census had a population of 21,655. It contains numerous towns and villages such as Rothesay, Sussex, Hampton, Norton Apohaqui and Penobsquis on the line of the Intercolonial railway, Westfield on the St. John river and Kingston, which, was at one time the county seat.

There are some very superior steel bridges which have been built by the provincial government in this county, one over the Kennebecasis river at Hampton, two at Sussex over branches of the same river, one in Waterford, one across the Hammond river below Hampton and another across the same river at Tabor's; and there is also a bridge at Rothesay. These bridges have been erected by the provincial government under the act providing for permanent steel bridges. Kings county is well supplied with wharves for the accommodation of steamboats. The population of the county at the last census was 21,655.

The parish of Westfield, which lies in the extreme western end of the county, has an area of 100,000 acres of which 30,000 are occupied and 9,000 are improved. It is traversed by the St. John river, which divides it into two parts, the larger part being on the west side and the smaller on the east side of the river. forming part of the peninsula which lies between the St. John river and the Kennebecasis. This parish, which is traversed by the Canadian Pacific railway and which has excellent steamboat communication several times a day with the city of St. John, is now best known as a summer resort for the inhabitants of the city. Many beautiful cottages have been built by residents of St. John at Westfield station and also at Woodman's point on the opposite of the Nerepis river. The valley of this river has wide intervals and much fertile soil.

The land in Westfield along the St. John is moderately high and consists of a range of hills gently sloping towards the water and there are many fine farms. The nearness of this parish to St. John gives its people great advantages. Westfield has a population of 1,120. Fishing is carried on to some extent, Westfield has a steam ferry between Sea Dog Cove and Millidgeville in St. John county.

The parish of Kingston, population 1,635, lies to the east of Westfield on the peninsula between the St. John and the Kennebecasis. It has an area of 70,000 acres of which 25,000 acres are occupied and 20,000 are improved. This is one of the oldest settlements in the county having been first settled by the Loyalists in 1783. The village of Kingston, which lies midway between the St. John and the Kennebecasis, was at one time the county seat and is still a pretty and thriving village. The land in Kingston is generally of good quality although somewhat elevated. The whole of this peninsula belongs to the Devonian formation. There are a few local saw mills in this parish. At Clifton and other points the cultivation of small fruits, such as strawberries and raspberries, is carried on on a very large scale and not only is the St. John market supplied but tens of thousands of boxes are sent to the markets of the United States. Kingston has the river St. John and Belleisle Bay on one side of it and the Kennebecasis on the other, so that its means of communication by water are excellent. A steamer runs daily on the Kennebecasis to Clifton and there is a steam ferry between Moss Glen in this parish and Rothesay.

The parish of Greenwich lies on the west of the St. John river east of Westfield, and has an area of 37,000

acres, of which 25,000 are occupied and 10,000 are improved. The southern side of this parish bounds on the St. John river for a distance of about 20 miles. The land is somewhat elevated back from the river, but along its margin, there are large tracts of intervale land of great fertility. The farmers of Greenwich are all in comfortable circumstances and enjoy the advantages of a good market for all their early vegetables. Small fruits are cultivated to a large extent and there are also many fine orchards. Fishing is carried on to some extent. There are one or two saw mills which cut lumber for local consumption. It has a population of 803.

The parish of Kars, which is the smallest in the county, has an area of 25,000 acres of which 15,000 are occupied and 8,000 are improved. This parish is bounded on the west by the St. John river, and on the south by Belleisle Bay, so that it stands in a very favorable position so far as water communication goes. There is some fine intervale land along the river and bay. It has a population of 427. A great deal of hay is cut on its intervalles. Kars is mainly an agricultural parish and its people are prosperous.

The parish of Rothesay has an area of 41,000 acres of which 20,000 are occupied and 14,000 are improved. This parish lies next to St. John county on the south side of the Kennebecasis, which at this point is two or three miles in width. The village of Rothesay is a famous summer resort and many of the wealthy residents of St. John have beautiful summer residences there. There is also a splendid summer hotel. The facilities which Rothesay enjoys for bathing, yachting and other amusements, and its nearness to the city, make it a most attractive spot. Rothesay is in fact

more like a suburb of St. John than a country district. It has two educational institutions, a school for girls and a college for boys. The agricultural character of this parish is good and there are many fine farms, admirably cultivated. The village contains three churches, Church of England, a Presbyterian and a Methodist. The parish of Rothesay is traversed by the Intercolonial Railway and trains pass between it and St. John many times a day. It has a population of 1,032.

The parish of Hampton lies to the eastward of Rothesay and has an area of 45,000 acres of which 30,000 are occupied and 15,000 are improved. This parish has a population of 2,026. It contains two villages, Hampton, a station on the Intercolonial, and Hampton village on the Kennebecasis, about a mile distant. At the latter place there is a large woodworking establishment, where all sorts of short lumber, boxes, matches, etc., are made. The parish of Hampton is traversed by the Intercolonial railway and Hampton station is the starting point of the Hampton and St. Martins railway. This region is admirably adapted to agriculture. Hampton station is the shiretown of the county and contains the court house, jail and other public buildings. The beautiful valley of the Kennebecasis traverses the parish.

The parish of Norton, which lies to the eastward of Hampton has an area of 55,000 acres of which 38,000 are occupied and 18,000 are improved. This parish is traversed by the Intercolonial railway and also by the Kennebecasis river, the valley of which expands into beautiful intervalles with many splendid farms. Norton station in this parish is the starting point of the Central railway, which goes to Chipman in Queens county and which will presently be connected with Fredericton by

means of a railway now under construction. Norton contains a cheese factory which made 30,000 pounds of cheese last year. The population of the parish is 1,449.

The parish of Upham lies to the north of Norton, and is bounded by the county of St. John. It has an area of 27,000 acres, all of which are occupied and 12,000 of which are improved. This parish is traversed by the railway between Hampton and St. Martins. Some lumbering is done in the parish but agriculture is the chief industry. It contains a population of 981. The land is good and in this parish are some of the oldest settlements in the county. There are two or three saw mills in Upham. There is also a valuable mineral spring, the water of which is charged with lithium and other minerals. There is a cheese factory which made 10,000 pounds of cheese last year.

The parish of Springfield lies to the north of Upham and is penetrated by Belleisle Bay and Belleisle Creek. It has an area of 70,000 acres of which 50,000 are occupied and 20,000 are improved. It has a population of 1,732. This parish enjoys steamboat communication with St. John by means of the Belleisle. It contains two cheese factories, which in the year 1900 made 36,000 pounds of cheese.

The parish of Hammond lies east of Upham and has an area of 30,000 acres of which 22,000 are occupied and 8,000 are improved. It has a population of 580. This parish is largely agricultural and contains a good deal of land available for settlers. Some lumbering operations are also carried on in it.

The parish of Sussex has an area of 80,000 acres of which 50,000 acres are occupied and 30,000 are improved. It has a population of 3,206. This is the

greatest agricultural parish in Kings county, and one of the finest agricultural districts in the province. It is traversed by the Kennebecasis river, which expands into beautiful and extensive intervalles and much of the upland is of excellent quality. Sussex is a great agricultural centre, being situated at the junction of a number of valleys which lead into splendid farming districts. Here is located the provincial dairy school. There are four cheese factories which made 165,137 pounds of cheese in 1900, and also three butter factories which made 115,520 pounds of butter in the year 1900. The town of Sussex is prettily situated in the midst of a splendid farming country and its surroundings are extremely picturesque and beautiful; nothing can exceed the beauty of the stretches of splendid soil which lie about it. The town contains many fine business establishments. There are eight places of worship, Church of England, Reformed Episcopal, Roman Catholic, Methodist, Calvinistic Baptist, Free Will Baptist, Presbyterian and Salvation Army. Provincial exhibitions are occasionally held here. It contains a furniture factory and a machine shop. Mineral water is also bottled on a large scale. Sussex contains one of the largest department stores in the maritime provinces. Altogether the town and parish form a most desirable place of residence.

The parish of Waterford lies to the east of Sussex and north of Hammond. It contains an area of 70,000 acres of which 30,000 are occupied and 15,000 are improved. The population of the parish is 957. There is quite a large lumbering industry carried on in Waterford and there are several saw mills and two grist mills. The village of Waterford is a thriving and growing place and the prospects of this parish are excellent.

Waterford contains a cheese factory which made 81,221 pounds of cheese in 1900 it also has a butter factory which made 10,579 pounds of butter in the same year.

The parish of Cardwell lies to the north of Waterford and is traversed by the Intercolonial Railway. It has an area of 70,000 acres of which 40,000 acres are occupied and 15,000 acres are improved. The population is 1,115. The village of Penobsquis is in this parish and the coal mine of Dunsinane. There are two or three large saw mills in the parish and at Penobsquis there is a remarkable spring of sufficient capacity to turn a mill. It was formerly used to run the machinery of a paper factory. There is a cheese factory which made 61,742 pounds of cheese in 1900.

The parish of Studholm has an area of 120,000 acres of which 80,000 acres are occupied and 40,000 are improved. It has a population of 2,656. This parish is bounded on the south by the Kennebecasis river and touches the Intercolonial at that point. It is one of the most flourishing parishes in the county of Kings. Some lumbering is done in the parish but the inhabitants are mostly agricultural. At Apohaqui there is a mineral spring the waters of which are bottled for table use. There are four cheese factories which made 152,000 pounds of cheese in 1900, and three creameries.

The parish of Havelock lies on the north eastern angle of the county and has an area of 90,000 acres, 45,000 of which are occupied and 25,000 of which are improved. It has a population of 1,936. Most of the land in Havelock is of the finest quality and the farmers are prosperous and wealthy. There is no portion of Kings county, or for that matter of southern New Brunswick, which offers better inducements for the

settler. It borders on the Intercolonial and at Butter-nut ridge connects with the Havelock & Petitcodiac railway. There is a valuable mineral spring in this parish at which mineral water is bottled on a large scale. It has a cheese factory at which 80,000 pounds of cheese were made in 1900, and also a creamery.

QUEENS.

The county of Queens lies on both sides of the river St. John and to the north of Kings county. It has an area of 924,700 acres of which 634,485 acres have been granted, leaving 290,215 acres still in possession of the provincial government. Of this area 360,000 acres are occupied and 120,000 are improved. The population of the county at the last census was 11,177. Queens county is essentially agricultural. It contains large areas of intervale land lying along the St. John river, including numerous alluvial islands. These islands are of extreme fertility and produce large crops of hay, they being every year fertilized by the washings of the river in the spring. Included within the area of the county of Queens is Grand Lake, which is about thirty miles in length and in some places five miles in width. Washademoak Lake is also in Queens, so that this county contains a larger area of water than any other county in the province.

Queens and Sunbury counties were the first portions of the province settled by English speaking people, a large number of persons having come to it from Massachusetts in the year 1762 and distributed themselves along the banks of the river. Nearly the whole of Queens county is included in the carboniferous formation and much of the upland is of light gravelly soil, capable of being cultivated early and yielding goop

crops when manured. The county also contains extensive areas of stronger land especially in the southwestern portion of it. Fishing is pursued to a limited extent in Queens county. In the year 1899, \$17,102, worth of fish were caught in it, the principal fish taken being salmon, trout, alewives and pickerel. These fish are caught by men, who at other times of the year are engaged in cultivating their farms. Salmon, shad and alewives ascend the Washademoak and Grand lake and are also caught in the St. John river.

Referring to the agricultural characteristics of Queens county, Mr. Robert Chalmers in his report to the Dominion Government on the surface geology of the province says:—

“The agricultural character of Queens county is, to a large extent, different from that of the districts already described. The larger part of the county is occupied by middle carboniferous rocks and consequently the general surface is in marked contrast to that of Kings, St. John and Charlotte counties, the soils and sub-soils being, for the most part sedentary. The valley of the St. John and those of the Grand and Washadamoak lakes contain fine settlements and many large, well cultivated farms. West of the St. John good land is found in Jerusalem and Hibernia settlement, etc., also in the vicinity of Gagetown. Near the mouth of the Otnabog there are also some excellent upland farms. Intervals skirt the St. John river here. These fresh water alluviums are quite extensive in Queens county forming the islands and strips of greater or less breadth on both sides of the river. They are of great value their productiveness being almost inexhaustible. Large quantities of hay are raised from them year after year without the application of any fertilizing material. The best

uplands of this county for agricultural purposes, are those along the banks of the rivers and lakes where the natural drainage is good."

The county of Queens has very large coal areas at Grand lake, the most of the mines which are in operation being at or near the vicinity of Newcastle creek. The coal found in this region is of excellent quality. The veins are, thin varying from 22 to 30 inches in depth, but they are very near the surface and in many cases, the coal is obtained by stripping off the surface soil. None of the mines in Queens county are more than 30 feet in depth, and the coal is obtained from them without the aid of much machinery. Coal can be mined at the Grand lake coal fields more cheaply than in any part of the Maritime Provinces. A railway is now being built from Newcastle to Chipman to connect with the railway from Chipman to the Intercolonial railway, also from Newcastle to Fredericton. The construction of this road will be the means of developing the coal areas of Queens county and placing their products on the market at a cheap rate. The coal is admirably adapted for steam purposes and especially for railways.

Iron has been found at Coal creek in Queens county and also on the Clarendon road. There are granites of excellent quality in the parish of Hampstead which are well suited for buildings and also for monument work. Much of the Hampstead granite is used in the city of St. John, and a good deal of it goes to the granite works at St. George, where it is polished and converted into monuments.

Queens county also possesses considerable deposits of lime.

A good deal of lumber is cut and manufactured in

the county every year, among the most important mills being two which are situated on the Salmon river, one at Chipman and the other some distance above it. The shiretown of Queens county is Gagetown, a pretty village of some 500 inhabitants, which is situated on the west side of the St. John river, on what is known as Gagetown creek. This is one of the oldest settlements in the province. The farmers of Queens county are all prosperous and depend largely on their hay, which grows abundantly on the splendid intervale land of the county. In the year 1900, Queens county produced 207,415 bushels of oats, 132,504 bushels of buckwheat, 235,711 bushels of potatoes and 89,308 bushels of turnips. Wheat and barley are not much grown.

There are two cheese factories in Queens county, which in the year 1900 produced 50,000 pounds of cheese.

The parish of Petersville, population 1,774 occupies the southern portion of the county and lies west of the St. John river. It has an area of 150,000 acres of which 60,000 are occupied and 20,000 improved. A good deal of the land in this parish is rugged. It is more hilly than most parts of the province, but it contains much fine soil, and is becoming settled by a body of prosperous farmers, most of whom have started in life with very little. The Canadian Pacific railway runs through the parish of Petersville giving it connection with St. John and Fredericton. A very beautiful section of the parish is the Nerepis Valley, which contains some fine intervale farms.

The parish of Hampstead, population 1,103, has an area of 65,000 acres of which 40,000 are occupied and 20,000 improved. This parish borders the St. John river and contains some very fine intervale land. The

upland is also of very good quality and there are few portions of the province where farming is carried on under better conditions than in Hampstead. The principal industry besides farming is the quarrying of granite, and there are two quarries in active operation. There is a cheese factory which made 28,000 pounds of cheese in 1900.

The parish of Gagetown lies to the north of Hampstead and also borders on the St. John river it has an area of 70,000 acres of which 35,000 are occupied and 12,000 improved. This parish also contains a great deal of intervale land and the farmers who reside here are wealthy. Population 925.

The parish of Wickham, which lies on the east side of the St. John river and is bounded by it, contains an area of 40,000 acres of which 30,000 are occupied and 10,000 improved. The intervale land here is extensive and the upland is of good quality. The parish of Wickham is also bounded by the Washademoak Lake. Population 795.

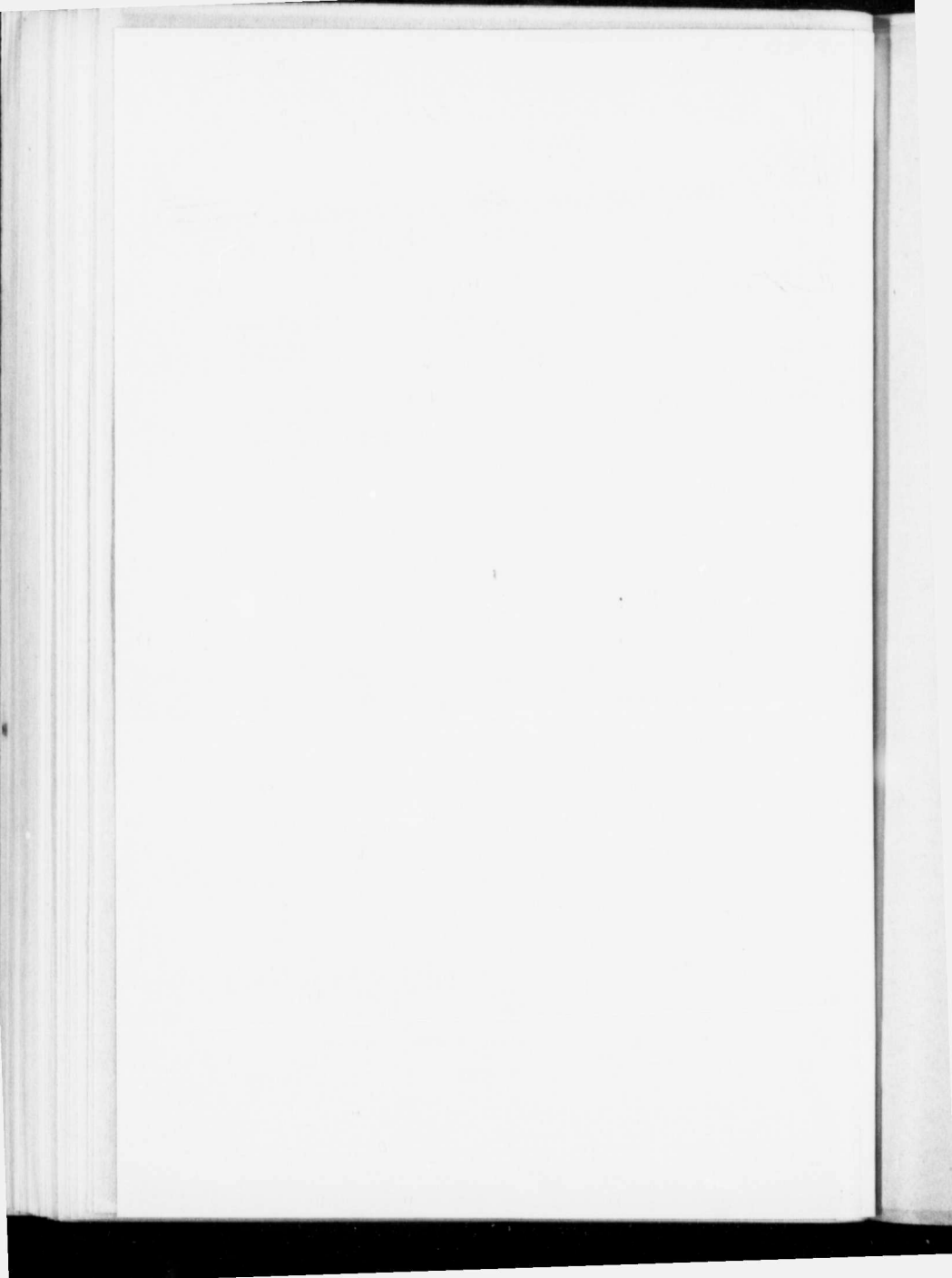
North of the parish of Wickham and also on the east side of the St. John river is the parish of Cambridge which has an area of 35,000 acres all of which are occupied and 15,000 improved. This parish also borders on Grand Lake and the Washademoak and its soil is generally of good quality. Population 1,200.

The parish of Johnston lies to the eastward of Wickham and Cambridge and is cut in two by the upper portion of the Washademoak lake. It has an area of 100,000 acres of which 55,000 are occupied and 18,000 are improved. Johnston is a good farming country, the characteristics of its soil being similar to those of Cambridge. Population 1,507.

East of Johnston lies the parish of Brunswick. It



Exhibit of Grain, St. John Exhibition.



is traversed by the Canaan river. It has an area of 160,000 acres of which 15,000 are occupied and 5,000 improved. There is a great deal of excellent land in this parish ready for settlement. It is one of the finest game districts in the province. Population 332.

The parish of Canning is on the east side of the St. John river and extends along Grand lake for most of its length. It has an area of 75,000 acres of which 25,000 are occupied and 8,000 are improved. There is a great deal of available land in Canning for settlement. Communication with it is good in the summer, by means of the steamboats which run on the St. John river and Grand lake. Hereafter it will be brought into closer contact with the outside world in winter, by means of the railway from Newcastle to Fredericton. The principal coal mines of Grand lake are in the parish of Canning. Population 699.

The parish of Chipman, population 1,614, lies to the eastward of Canning and occupies the northeast angle of the county. It has an area of 120,000 acres of which 45,000 are occupied and 12,000 improved. There is good farming country in the parish of Chipman and lumbering is carried on to a considerable extent, there being two large mills on Salmon river in the parish. The village of Chipman is a neat little town which has been built up almost wholly by the enterprise of the Messrs. King, who are large lumber operators in that region. Chipman contains considerable areas of coal land and one mine near the village is in active operation and supplies coal to the Central railway. Chipman is an excellent game district.

The parish of Waterborough is on the east side of Grand lake and north of the parish of Cambridge. It has an area of 130,000 acres of which 40,000 are occu-

ped and 15,000 improved. The farming land of Waterborough is similar to that of Chipman and there is ample room for a large number of settlers. Population 1,228.

SUNBURY.

Sunbury is the oldest of the counties of the province and was settled at the same time as Queens by immigrants from the state of Massachusetts. It lies to the north of Queens county and on both sides of the St. John river. It has an area of 686,000 acres of which 446,619 are granted and 239,381 are still vacant. The population of Sunbury is 5,729. Sunbury shares with Queens in the possession of large coal areas, which will be developed by the construction of the railway from Newcastle to Fredericton. Coal has been found near Tracey and on the northwest branch of the Oromocto. Bog iron ore has been discovered at Maugerville and Burton in Sunbury county.

Fishing is carried on to a limited extent in Sunbury the total value of the fish caught in the year 1899 being \$6,871. The principal fish caught are salmon, trout and alewives.

Sunbury possesses a large amount of splendid intervale land on both sides of the St. John, and includes several islands of great fertility. The farmers who possess these intervale lands are all wealthy.

Lumbering is carried on in Sunbury county to a very limited extent. The parishes on the west side of the river St. John are Lincoln, Burton, Gladstone and Blissville.

Gladstone lies in the southwest angle of the county and contains an area of 90,000 acres of which 25,000 are occupied and 8,000 improved. There is much good

land in this parish although there are considerable areas of light and hungry soil. The parish of Gladstone is traversed by the Oromocto river. This river flows into the St. John and is navigable for woodboats for about twenty miles. Population 1,002.

The parish of Blissville lies to the east of Gladstone. It has an area of 80,000 acres of which 25,000 are occupied and 10,000 improved. The characteristics of this parish are similar to those of Gladstone. Population 713.

The parish of Burton has an area of 100,000 acres of which 30,000 are occupied and 10,000 are improved. It extends along the St. John river as far north as the Oromocto, and it contains the court house and county offices. This parish includes Mangers and Ox islands. The intervale lands are extremely fertile and the farmers who own them are very prosperous. Population 1,424.

The parish of Lincoln, which lies to the north of Blissville and extends along the St. John river to the county line, has an area of 75,000 acres of which 25,000 are occupied and 8,000 are improved. There are some fine intervale lands in this parish. Population 770.

The parish of Manguerville lies on the east side of the St. John river, opposite Lincoln. It has an area of 200,000 acres of which 35,000 are occupied and 8,000 are improved. The intervale lands of this parish are extensive and fertile. There is a great deal of good land in the rear of these intervalles, which will afford a good opportunity to the farmer for cultivation. Population 534.

The parish of Sheffield has an area of 65,000 acres of which 30,000 are occupied and 10,000 are improved. It lies along the east side of the St. John river, and contains much fine intervale land. The farmers of

Sheffield and Maugerville are among the most wealthy in the province. Population 672.

The parish of Northfield lies to the east of Sheffield. It has an area of 75,000 acres of which 15,000 are occupied and 5,000 improved. This parish contains considerable coal areas, and as it will be traversed by the railway, its population is likely to increase under the stimulus of improved communication. Population 614.

YORK.

The county of York is only second to Northumberland in respect to size; it has an area of 2,278,000 acres of which 1,422,000 are granted and 856,000 still remain the property of the government. The population of the county at the last census was 31,601. York county lies north of Sunbury, and is bounded on the west by the international boundary. It is traversed by the St. John river, which passes through it from east to west, and by numerous tributaries of that river, such as the Nashwaak, the Keswick, the Mactaquact, the Nacawicac, the Shogomoc and the Pokiok. The south west Miramichi passes through the northern portion of the county. It contains numerous lakes such as North Oromocto lake, Lake George, Magaguadavic lake, Big Cranberry lake, Skiff lake and many others.

Agriculture is the leading industry of York county and next to it comes lumbering. The St. John river is bordered by wide intervalles and numerous alluvial islands of great fertility, and all the streams which flow into the St. John have more or less intervalle land upon them. The character of the upland is generally good and there is no part of the province where farming is

conducted under better conditions than in the county of York.

In the year 1900 the crop of oats in York reached the total of 594,680 bushels, an average of more than 32 bushels to the acre. The buckwheat crop was 185,485 bushels, and 365,089 bushels of potatoes and 359,956 bushels of turnips were grown in the county. Wheat was not much grown, the total crop being only 17,511 bushels, but the average was good, the crop being a little more than 20 bushels to the acre. York contains seven cheese factories, which last year produced 227,474 pounds of cheese. Much of the county has been long settled and the farmers who now live in it are mainly men of the third and fourth generation from the original settlers. The farmers of York have the advantage of a good market in the city of Fredericton and of excellent means of communication with St. John.

The county is traversed by the Canadian Pacific railway, which connects Fredericton with St. John and Montreal and the country up river, and also by the Canada Eastern, which connects Fredericton with Chatham and the Intercolonial railway. York derives no small amount of its importance from the fact that it contains the seat of government.

The fisheries of York were valued at \$16,278 in the year 1899, and the principal fish caught were salmon and trout; of salmon 30,000 pounds were taken. This county is a great resort for the angler, and there is no better fishing to be had anywhere than in the numerous rivers and streams with which it abounds. The southwest Miramichi is famous for its sea-trout, which come up the river from the Gulf of St. Lawrence in the spring and early summer. It is also an excellent

salmon river. Land locked salmon are taken in the St. Croix river, which touches the western end of York county. The large lakes of the county are also resorts for sportsmen. All the northern portion of York county is a moose and caribou region, and deer also abound. All over the county there is excellent duck and partridge shooting, and the fact that the means of communication are so excellent makes York a most desirable place for sportsmen.

York contains many valuable minerals. Bog iron ore is found at Queensbury and at Beaver Dam settlement.

Antimony exists in large quantities in the parish of Prince William at a point about 25 miles from Fredericton, and three miles from the St. John river. This mine was worked for several years with profit. There is no doubt that antimony exists in large quantities in the county of York, and it may become in the future a source of great profit to those who engage in mining it.

Tin has been discovered in the parish of Prince William but no attempts have been made to mine it.

Gold has been found on the Nashwaak river, but it has never been worked to any considerable extent.

Manganese exists in Queensbury. Bituminous coal has been found in several localities in the county, on the Nashwaaksis river, on the Taxis river, in Cork Settlement and in the parish of Prince William. Limestone is found in the northern part of the county. Brick clay is found in several localities, and there are brick yards at Fredericton and also at Marysville on the Nashwaak river. As large areas of the county are still in a wilderness state, it cannot be said that it has been sufficiently explored to fully ascertain its mineral wealth.

Manufacturing is carried on to some extent in York, there being several manufacturing establishments at Fredericton and in the smaller towns in its vicinity.

THE CITY OF FREDERICTON.

The City of Fredericton, which is the political capital of the province, is situated on the west side of the St. John river opposite the mouth of the Nashwaak. It has a population of 7,117. The site of the city is very picturesque and pretty. It stands on a piece of high intervalle and the soil being deep and fertile abounds in beautiful shade trees, which give it a most pleasing aspect. It is laid out regularly and has a good water supply and is in every respect a very desirable place of residence. Here are located the parliament building and the public offices of the Provincial government. The parliament building, which contains also the Supreme court rooms, is a handsome structure erected about 20 years ago to replace an older building which was destroyed by fire. The government buildings are well adapted to the uses to which they are put and give ample accommodation to the public offices.

Fredericton has eight places of worship, two of the Church of England, and one each of the Roman Catholic, Presbyterian, Methodist, Calvinistic Baptists, Free Baptists and Salvation Army. The Episcopal Cathedral is a beautiful structure erected about 50 years ago under the supervision of the celebrated architect Willis. Fredericton contains two tanneries, a larrigan factory, two carriage factories, a foundry and three machine shops. Two daily papers are published in the city. Just below and above Fredericton on the river there are several saw mills where lumber is cut for shipping abroad. Fredericton is connected with the opposite

side of the river, which at this point is 1200 yards in width by two bridges, a railway bridge and a road bridge. Trains of the Canada Eastern railway run over the former. Fredericton is the seat of the provincial university, which is maintained by the government and where degrees are granted in the arts and in science. A well equipped science building is one of the features of this institution. A Normal school for the training of teachers and a model school connected with it are also located at Fredericton. Fredericton does a considerable trade with the outlying country, and its shops are well stocked with all kinds of goods. An Infantry school of permanent militia, numbering 100 men, is stationed at Fredericton.

The parish of New Maryland lies on the south side of the St. John river in the rear of Fredericton. It has an area of 100,000 acres of which 15,000 acres are occupied and 4,000 are improved. Its population is 387. This parish is crossed by the Canadian Pacific Railway, and it contains no important settlements. Its western boundary touches the north-west Oromocto lake. The inhabitants are engaged in agriculture mainly and to some extent in lumbering. The land is mostly light and dry and it is less adapted to farming than most districts in York. It is situated wholly within the carboniferous formation.

West of New Maryland and Fredericton and lying along the St. John river, which is its northern boundary, is the parish of Kingsclear. This is one of the oldest settled parishes in the county. It has an area of 83,000 acres of which 50,000 are occupied and 15,000 are improved. The population numbers 1,551. There are several beautiful intervale islands in the St. John river belonging to this parish, and extensive tracts of

intervale land. The farms are old and well cultivated, and the people who live upon them are prosperous. Kingsclear has always been a favorite residence of gentlemen from England, who have undertaken to live on their farms in New Brunswick, it being near a city and having many other advantages. The eastern portion of the parish belongs to the carboniferous formation and the western portion to the silurian. The land is elevated, but much of it is highly productive and there are many fine farms.

South of Kingsclear, lies the parish of Manners Sutton, with an area of 140,000 acres of which 40,000 are occupied and 15,000 are improved. The northwest Oromocto lake, which is about eight miles in length, is in this parish. This lake and the head of the northwest Oromocto river are famous fishing resorts. The parish also contains Big and Little Cranberry lakes and it is traversed by the Magaguadavic river and a number of its tributaries. It contains the famous Harvey settlement, which is a living monument of the success, which may be achieved by industry in New Brunswick. The people of this settlement came out from the north of England and landed in the province in a very destitute condition. The descendants of these people now possess splendid farms and are wealthy, having attained a position which they never could have reached in their own country. What they have accomplished may be done by any industrious community of immigrants, who may come to New Brunswick. There is a woollen mill at Harvey village at which cloth is made. Harvey is also a great sporting centre. Manners Sutton is traversed by the Canadian Pacific railway. Along the rivers there is much excellent intervale land, but in the southern portion of the parish the soil is not so good. Population of the parish 1,606.

The parish of Prince William lies to the west of Kingsclear, on the south side of the St. John river. It has an area of 150,000 acres of which 30,000 are occupied and 12,000 are improved. The population numbers 915. There are fine intervale farms in this parish and the characteristics of the soil are similar to those of the western portion of Kingsclear. There is a belt of granite on the western boundary of the parish. Here are located the well known antimony mines. Immigrants from the British Islands will find the parish of Prince William, which lies along the St. John river, a highly desirable place of residence. It is traversed by the Canadian Pacific railway, and it contains Magagudavic lake, which is about six miles in length, and also Lake George. There is a cheese factory in Prince William, which in 1900 made 48,295 pounds of cheese.

The parish of Dumfries lies to the west of Prince William and is bounded on the north by the St. John river. It has an area of 100,000 acres, of which 18,000 are occupied and 6,000 are improved. The population numbers 595. The settlements of this parish extend along the river. Most of the soil in it is of the granite formation. Lumbering is carried on to a considerable extent in Dumfries.

South of Dumfries is the new parish of McAdam. Population 714. This parish is traversed by the Canadian Pacific railway, and it contains the town of McAdam, which is the junction of the railway lines running east and west, with those which run north and south. McAdam is a neat village which derives its importance from the fact that it contains the machine shops of the Canadian Pacific railway. The new station is a fine structure of stone.

Canterbury lies south of the St. John river and

west of Dumfries. It has an area of 150,000 acres of which 45,000 are occupied and 15,000 are improved. It has a population of 2,108. This parish is traversed by the Canadian Pacific railway. Most of Canterbury belongs to the silurian formation and it contains much good land especially along the St. John river. The principal stream in it is Eel river which has numerous tributaries. Lumbering is carried on to a considerable extent in this parish, there being some saw mills of large capacity and also a tannery, which is said to be the largest in the maritime provinces.

Northlake which lies to the south of Canterbury, has an area of 90,000 acres of which 15,000 are occupied and 6,000 are improved. The population numbers 720. Nearly the whole of this parish lies in the granite formation. It contains numerous lakes, which connect with small rivers, most of which flow into the St. Croix. There is a good deal of lumbering done in Northlake and the parish may be said to be in a state of development. No portion of western New Brunswick offers greater attractions to the sportsman.

St. Mary's is the most easterly parish in the county of York on the north side of the St. John river. It has an area of 180,000 acres, of which 60,000 acres are occupied and 15,000 are improved. The population numbers 3,611, exclusive of that of the town of Marysville, which is in this parish, as are also the villages of St. Marys and Gibson. It is traversed by the Nashwaak river and its numerous tributaries and by the Canada Eastern railway. A large amount of lumbering is carried on in the parish of St. Marys. The whole of the parish lies in the carboniferous formation, but there is a good deal of intervale land along the rivers, and much of the upland is of good quality. Some of

the finest scenery in New Brunswick, exists in the valley of Nashwaak.

The village of St. Marys is on the north side of the St. John river opposite Fredericton and it has a population of 863 persons. There are three places of worship, Church of England, Roman Catholic and Adventist. This village is the headquarters of the Fredericton Boom Company, a corporation which takes care of all the logs which come down the St. John river. They maintain a machine shop there and there is also a large woodworking establishment in the place.

Gibson, which is also opposite Fredericton and almost connected with St. Marys, is the terminus of the Canada Eastern railway and has a population of 777. There is a foundry and an axe factory at this place, and three places of worship, Calvinist Baptist, Methodist and Free Baptist.

Marysville, which is three miles distant from Gibson on the Nashwaak river, has a population of 1,892. It is a station on the Canada Eastern railway. It contains five churches a Methodist, a Church of England, a Calvinistic Baptist, a Free Baptist and a Reformed Baptist. One of the largest cotton mills of Canada is located here. There are also two saw mills of great capacity, for sawing deals, boards etc., and a shingle and lath mill. Brick is also made at Marysville. This town is a creation of the energy and enterprise of one man, Alexander Gibson, who began life a poor boy, without any advantages whatever.

The parish of Stanley lies to the north of St. Marys and has an area of 450,000 acres of which 60,000 are occupied and 20,000 are improved. The population numbers 2,543. The leading industries of this parish are agriculture and lumbering. Stanley village, which

is a growing and prosperous community, has railway connection with the Canada Eastern at Cross Creek by means of a line six miles in length, called the York and Carleton railway. It has a large lumber and planing mill, and is lighted by electricity. The agricultural character of the parish is good, and there are unlimited opportunities of development in that direction. There is a cheese factory in Stanley, which in the year 1900 made 75,000 pounds of cheese.

The parish of Douglas which lies to the west of St. Marys and is north of the St. John river, has an area of 341,000 acres of which 75,000 are occupied and 25,000 are improved. The parish is traversed by the Canadian Pacific railway. Its leading industry is agriculture. Douglas is one of the stations of the Fredericton boom company and here what is known as the Sugar island boom is located. There are many beautiful farms in the parish of Douglas, and the agricultural population is prosperous. There is a cheese factory which last year produced 25,546 pounds of cheese. It has a population of 2,528.

The parish of Bright lies to the west of Douglas, and is bounded on the west by the Keswick river. It has an area of 100,000 acres of which 35,000 are occupied and 20,000 are improved. The population numbers 1,486. The parish is mainly agricultural and its farmers are prosperous. There are two cheese factories in it which made between them in 1900, 40,000 pounds of cheese.

The parish of Queensbury lies to the west of Bright, on the north side of the St. John river and has an area of 61,000 acres of which 55,000 are occupied and 25,000 are improved. The population numbers 1,392. The parish has been long settled and is wholly

agricultural. Its best farms are along the St. John river, but much of the land in the interior is of excellent quality. There is a cheese factory in the parish, which last year made 7,500 pounds of cheese.

West of the parish of Queensbury, on the north side of the St. John river, lies the parish of Southampton. It has an area of 124,000 acres, of which 65,000 are occupied and 20,000 are improved. Agriculture and lumbering are the leading industries of this parish. It is traversed by the Canadian Pacific railway. The population numbers 2,455. There is a cheese factory, which in the year 1900, made 35,800 pounds of cheese.

All these parishes in the county of York, especially those on the north side of the St. John river, offer excellent advantages for the settler, whether he is looking for a cleared farm or desirous to hew one for himself out of the wilderness.

CARLETON.

The county of Carleton, which lies to the north of York, had an area of 788,200 acres of which 718,400 are granted and 69,800 still remain the property of the government. This county from an agricultural point of view has no superior in New Brunswick, almost every acre of its large territory being available for the use of the farmer. During the year 1900 it produced 62,450 bushels of wheat, the average yield being 21 bushels to the acre. In the same year 1,460,291 bushels of oats were grown in Carleton, the average yield being upwards of 34 bushels to the acre. The crop of barley amounted to 12,091 bushels, the average yield being 30 bushels to the acre. There was also grown 268,779 bushels of buckwheat, 517,511 bushels of potatoes and 278,859 bushels of turnips. There are

in the county no less than four roller mills for the grinding of wheat, three of them with a capacity of 50 barrels a day and one of them with a capacity of 35 barrels a day. There are in the county of Carleton nine cheese factories, which produced in the year 1900, 300,000 pounds of cheese and there are ten creameries and skimming stations, which produced in 1900, 140,000 pounds of butter. It will be gathered from these figures that more attention is given to agriculture in Carleton county than in any other portion of the province, and it must be regarded at the present time as the most promising field for agricultural effort which New Brunswick affords. Other counties may surpass it in the future, but Carleton for the present must be regarded as the leading agricultural county.

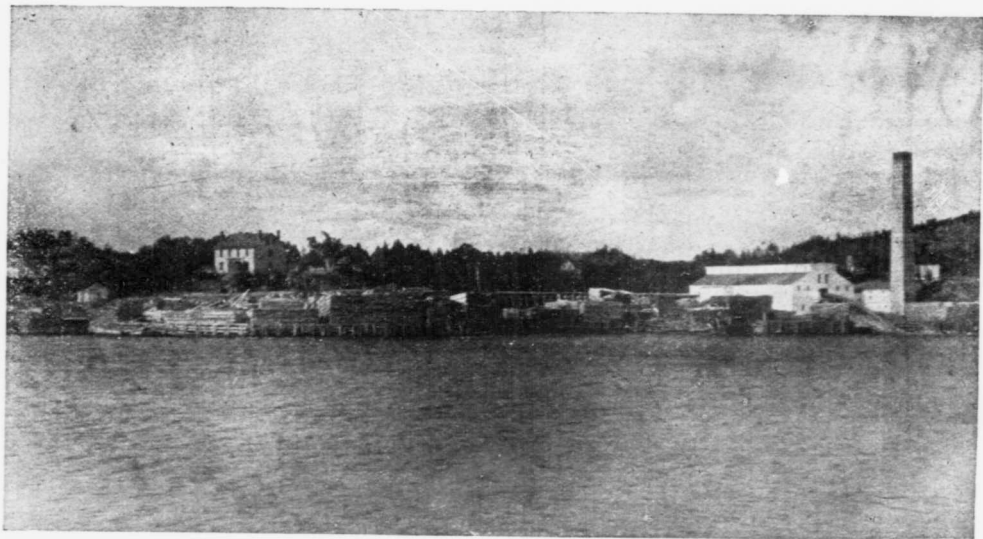
This county is traversed by the river St. John from north to south, the larger portion of it lying on the east side of the river, although that on the west side is the more thickly settled. The population of the county at the census of 1901, was 21,621. The great majority of the inhabitants of Carleton county are farmers. Carleton is traversed from north to south by the Canadian Pacific railway and has excellent means of communication with the outer world. Woodstock, its principal town, is connected by steamer with Fredericton during the season of high water and open navigation.

The mineral wealth of Carleton is considerable, and may in the future be fully developed. Iron has been long known to exist in the county, and the Woodstock iron mines were worked for a number of years with success. The iron made from this ore is of a first rate quality, and although the iron works there are not now in operation, this has been due to local circumstances more than to any other cause. The idea of

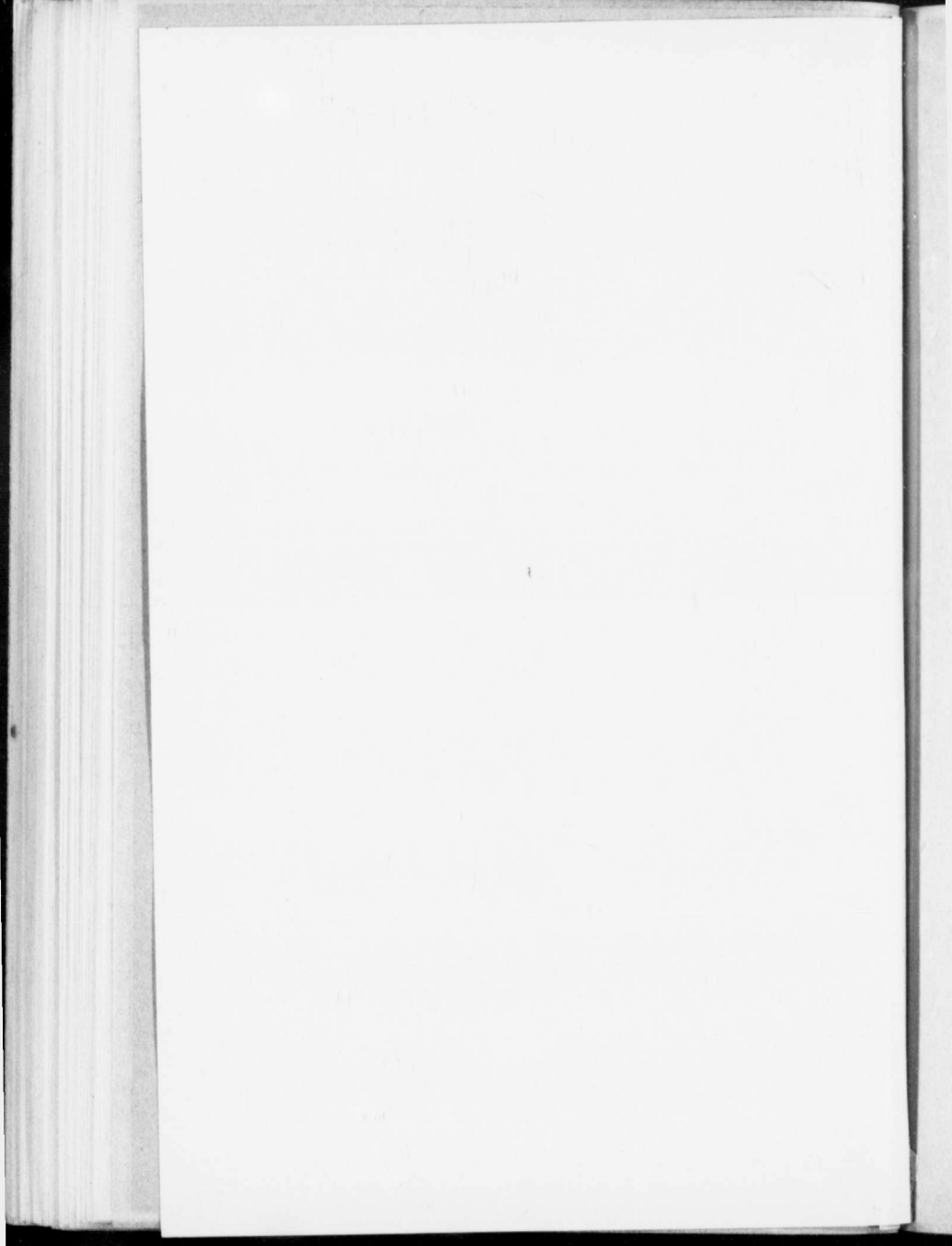
bringing the Woodstock iron ores down to Grand lake, where they can be smelted by the coal produced there, has been suggested, and will probably be carried out when railway communication is established with the coal fields. Heretofore all the ore smelted at Woodstock had been done by charcoal. Copper has been found in Carleton county in the vicinity of Woodstock at Bull Creek, and gold in small quantities has been washed from the sand of the Muniac river. Manganese has also been discovered in the vicinity of Woodstock, and limestone, available for commercial purposes, in several places in the county, kilns having been erected at Henderson's corner in the parish of Brighton and in one or two other places.

Carleton being an inland county, does not show many fishery products, but in 1898 the value of the fish caught was put down at \$4,440 chiefly salmon, trout and pickerel. The lumbering interests of Carleton county, are not very important, but there are a number of saw mills in the county which saw lumber for local needs. Carleton contains one town, Woodstock, and about a dozen villages, centres of local trade. The population of the county is 21,621.

The parish of Woodstock, has an area of 46,000 acres, all of which are occupied and 20,000 of which are improved. It contains the town of Woodstock, which has a population of 3,000, and is prettily situated on the west bank of the St. John river, being divided into two parts by a small stream, called the Maduxnaekag. There are few towns anywhere that have a more prosperous look than Woodstock, or which have better stores. It is the seat of a number of important industries. It contains three factories and machine shops, a steam saw mill, four woodworking establishments, two-



Lumber Mill on the St. John River.



carriage factories, a wrapper factory and a cannery. It has also a woollen mill, which employs 25 persons. There are nine churches in the town, three Baptist, a Presbyterian, a Methodist, a Roman Catholic, a Church of England, an Adventist and a place of worship used by the Salvation Army. Woodstock has a good water supply and an excellent system of sewerage. Three newspapers are published here. The Woodstock creamery has nine skimming stations connected with it, and in 1901 it made 200,000 pounds of butter. This is the largest creamery in the province, and nearly all its products go to England. The parish of Woodstock is fertile and well cultivated and the farmers enjoy the advantages of a ready access to market, it being traversed by the Canadian Pacific railway. Woodstock is connected with the other side of the river, with the finest road bridge in the province erected at a cost of about \$200,000 by the Provincial government. The population of the town and parish is 4,591. Upper Woodstock has 660 inhabitants.

The parish of Richmond lies to the west of Woodstock and bounds on the United States line. It has an area of 50,000 acres, all of which are occupied and 25,000 of which are improved. The soil of this parish like that of Woodstock is excellent farming land and the farmers are prosperous. It is traversed by the Canadian Pacific railway. Population 1,699. There are two cheese factories in this parish which made 80,000 pounds of cheese last year.

The parish of Wakefield lies to the north of Woodstock on the west side of the river. It has an area of 462,000 acres all of which are occupied and 28,000 of which are improved. The whole of the parish is a beautiful farming country and admirably cultivated.

Population 1,543. There are three cheese factories in this parish which made 76,000 pounds of cheese last year.

North of Wakefield on the west side of the St. John river and bordering upon it is the parish of Simonds, which has an area of 30,000 acres, 20,000 acres of which are occupied and 10,000 of which are improved. This parish contains the village of Florenceville. It is well settled and the land is of good quality. Population 768.

West of the parish of Simonds is the parish of Wilmot with an area of 70,000 acres, 45,000 of which are occupied and 25,000 of which are improved. There is no portion of New Brunswick which has an appearance of greater prosperity than this parish. The land is of splendid quality and is generally well cultivated and the farmers are well off. In this parish is the pretty village of Centreville, which is a growing community. At Avondale there is a woodworking factory and a cheese factory which made 10,727 pounds of cheese in 1900. There is a cheese factory at Bloomfield which made 63,000 pounds of cheese last year. Population 1,817.

North of Wilmot on the west side of the river is the parish of Wicklow with an area of 45,000 acres all of which are occupied and 27,000 of which are improved. The land of Wicklow is similar to that of Wilmot and the farmers of this parish are equally well off. Population 1,906.

On the east side of the river the most southerly parish is Northampton. It has an area of 58,000 acres, 35,000 of which are occupied and 10,000 of which are improved. This parish is somewhat hilly, but the soil is of good quality and being so near Woodstock its

farmers have an excellent market. It is traversed by the Canadian Pacific railway. Population 1,127.

North of Northampton on the east side of the river is the parish of Brighton, which has an area of 123,000 acres of which 50,000 are occupied and 23,000 are improved. It is traversed by the Canadian Pacific railway and contains the important village of Hartland, which has a saw mill and a woodworking factory, and a cheese factory which made 30,000 pounds of cheese last year. A weekly newspaper is published at Hartland. Population 2,788.

The parish of Peel lies north of Brighton on the east side of the St. John river and has an area of 38,000 acres, 25,000 of which are occupied and 13,000 acres are improved. In the parish is situated the village of East Florenceville. The land is excellent and the farmers prosperous. This parish is also traversed by the Canadian Pacific railway. Population 1,301.

North of Peel and bordering on the river on the east side is the parish of Kent, which has an area of 217,000 acres of which 60,000 are occupied and 25,000 are improved. The agricultural characteristics of Kent are similar to those of the other parishes which border on the river. It contains much land available for settlement. The village of Bristol has a woodworking factory. This parish is traversed by the Canadian Pacific railway. Population 2,779.

The parish of Aberdeen lies to the east of Kent, but does not touch the St. John river. It has an area of 99,000 acres, 35,000 of which are occupied and 15,000 of which are improved. There is much land in this parish available for settlement and its agricultural characteristics are excellent. At Glassville there is a cheese factory which made 37,000 pounds of cheese last year. Population 1,204.

VICTORIA.

The county of Victoria lies to the north of Carleton and has an area of 1,324,000 acres of which 1,236,533 have been granted and 88,000 acres still remain the property of the government. This county from an agricultural point of view is one of the finest in the province. It is traversed by the St. John river and such large tributaries as the Tobique and Salmon river. The southern portion of the county is mainly silurian, but there is a belt of slate on the eastern side, and also an area of granite towards the borders of Restigouche. There is probably no county in the province except Restigouche which contains such an area of good agricultural land available for settlement as Victoria. The portion along the St. John has been settled for a long time, but to the eastward there are vast tracts of land of great fertility which await the coming of the industrious pioneer. A large portion of the unsettled land in Victoria county was granted to a company for the purpose of building a line of railway from Fredericton to Edmundston, so that the amount of crown land available for settlement is not as large as it is in some counties. The population is 8,825.

The agricultural characteristics of Victoria county may be judged from its crops. In 1890 Victoria produced 18,378 bushels of wheat grown on 1011 acres, an average of 18 bushels to the acre. It produced the same year 326,778 bushels of oats, the average crop being 32 bushels to the acre. About 4000 bushels of barley were grown in the county, the average being about 24 bushels to the acre. The yield of buckwheat was 37,318 bushels, of potatoes 98,276 bushels and of turnips 42,882 bushels.

Victoria has a flour mill for the grinding of wheat

with a capacity of 50 barrels a day. It is located at Andover. It has a cheese factory which last year produced 50,000 pounds of cheese, and three creameries which in the same year produced 62,000 pounds of butter.

Victoria in 1899 produced \$4,106 worth of fish, mostly trout and salmon, but this does not take into account those caught by the angler. The county abounds in game and fish, there being abundance of moose and caribou, and also deer, in its forests, and of salmon and trout in its rivers, so that as a sporting country it can hardly be surpassed. The Tobique has long been noted as one of the finest salmon rivers in America.

The chief mineral product of Victoria is gypsum, which is found in immense deposits about 28 miles up the Tobique river. The gypsum is of a dark color and therefore is unfit for some of the purposes for which the white gypsum is used, but it forms an admirable fertilizer.

The county is well supplied with railways, the Canadian Pacific passing through it from end to end, with a branch up the Tobique to the plaster quarries. There are many very fine water powers in this county, the principal one being at Grand Falls, which has a fall of 60 feet and which descends by a series of rapids 60 feet more in the course of a mile. This water power is about being dealt with by a company in the same manner as Niagara Falls has been. The estimate of the horse power here available is not less than 60,000 and probably it is nearer 100,000. There is no doubt, that at some period in the not very distant future, Grand Falls will become the seat of great industries, from the cheapness and extent of the water power available there. The other minor powers through the

county are one at Salmon River, a tributary of the St. John, where there is about 200 horse power available all the year round. At Four Falls on Little River, a tributary of the Aroostook, there is a fall with about 400 horse power. On the Pokiok, six miles from Andover there is a fall of 150 horse power, and 14 miles from Andover on the Olellie there is a fall of about 60 horse power. 17 miles from Andover on the Odell there is a fall of about 100 horse power. There is another at Three Brooks, a tributary of the Tobique, 20 miles from Andover, of 100 horse power. If the Narrows of the Tobique were dammed, a power of 1000 horses could easily be got there. These Narrows are about a mile from the mouth of the river. On Sisson Brook, a branch of the Tobique there is a fall of 125 feet, which would easily give 500 horse power at all times.

Lumbering is carried on in Victoria county to a considerable extent, the cut of the Tobique river averaging 25,000,000 superficial feet a year. There are a number of saw mills of large capacity on the Pokiok and on the Tobique, at Three Brooks, Little River, Salmon river, Riviere du Chute and on the Muniac. There is also a large saw mill at Andover.

The parish of Andover, population 1,260, has an area of 35,000 acres of which 25,000 are occupied and 10,000 are improved. This parish lies on the west side of the St. John river. It contains the town of Andover, which is prettily situated on the banks of the river and has a population of about 600. It is the county seat. It contains four places of worship, Presbyterian, Church of England, Methodist and Baptist. There is a large saw and grist mill situated there, and the water-works are especially fine with a high pressure. Andover is

much resorted to by sportsmen who are on their way to the fine fishing of the Tobique, and the hunting on the eastern side of the St. John river. The soil is a gravelly loam of much fertility.

Grand Falls, population 1,897, lies to the north of Andover on the west side of the St. John river, and has an area of 40,000 acres of which 30,000 are occupied and 10,000 improved. The soil of this parish is similar to that of Andover. The village of Grand Falls is close to the cataract of the same name on the St. John. Grand Falls has three churches, Roman Catholic, Church of England and Presbyterian. The population is about 1000.

The parish of Perth, population 1,663, lies opposite to Andover on the eastern side of the St. John river. It has an area of 84,000 acres of which 45,000 are occupied and 12,000 are improved. The soil of this parish along the St. John river, like that of Andover is a gravelly loam, in which planting and sowing can be done early. The town of Perth is rapidly rising into importance as a business centre. It has about 600 inhabitants and contains a number of good stores. In this parish are located the Kincardine and Kintore free-grant settlements which were founded in the year 1873. The colonists who settled there were all from Scotland and were brought out in a body and settled by the assistance of government on the tract of land on the Muniac river. These settlers met with great difficulties at first owing to the land selected for them being somewhat rugged, the person who made the selection looking more to the picturesque aspect of the matter than to the character of the soil. These settlements, however, are now on an excellent footing, and the people who survive are, after a lapse of 30 years, all well-to-do,

with farms of their own and located under conditions which they never could have attained, if they had remained in Scotland. The parish of Perth is traversed by the Tobique river, and there are some good settlements along its banks.

The parish of Gordon lies to the eastward of Perth and is also traversed by the Tobique River. It has an area of 294,000 acres of which 20,000 are occupied and 5,000 are improved. This parish contains the thriving settlement of Athurette and also the plaster quarries of the Tobique. The soil is a red sandstone with gypsum mixed in it, and on the low land along the river is a very deep loam. There is much good farming land in this parish and ample opportunities for development. The population is 868.

The parish of Drummond lies to the eastward of the St. John river north of Perth. It has an area of 404,000 acres of which 45,000 acres are occupied and 15,000 are improved. The soil of this parish along the river is a gravelly loam similar to that of Perth and Andover and there are many fine farms. The parish, however, is chiefly celebrated from the fact that it contains the thriving settlement of New Denmark, which was founded nearly thirty years ago by a party of immigrants from Copenhagen. This settlement is eight miles from the village of Grand Falls and the land is a high upland of excellent quality. Many of the settlers who came here were not farmers, and therefore they had to work at a great disadvantage, but they found in New Brunswick the opportunity of advancing themselves and they eagerly embraced it. This settlement has grown steadily in population and wealth and every year accessions from Denmark are received. The people are now in independent circumstances, the

possessors of fine farms and in a position which they never could have attained in their own country. There is no settlement in New Brunswick which has made more satisfactory progress than New Denmark, and its rapid advancement has been due mainly to the fact that the people kept the end they aimed at steadily in view and were willing to work for it. Population of the parish 2,684.

The parish of Lorne has an area of 350,000 acres of which 10,000 are occupied and 5,000 are improved. This parish lies to the north of Gordon and it is traversed its whole length by the Tobique river, which flows through it for a distance of more than 40 miles. The settlements are rapidly extending up the river in consequence of the fertility of the soil. Here there are wide intervalles, in some places two or three miles in width. Senator Baird, who is very familiar with the county, says that it is the finest land for general farming purposes that he has ever seen. Professor Hind, who visited the Tobique river many years ago, declares that the Tobique valley is capable of easily supporting a population of one hundred thousand people. Here are immense possibilities for the settler, a splendid soil, a congenial climate and comparatively easy access to market. Population 453.

MADAWASKA.

The county of Madawaska lies to the north of Victoria in the extreme northwest portion of the province. It has an area of 810,500 acres of which 683,670 have been granted and 126,829 still remain the property of the government. It is bounded on one side by the St. John river, which extends its whole length, and on the west by the Province of Quebec.

The county is traversed by the Canadian Pacific Railway, which extends to Edmundston, and also by the Temiscouata Railway, which goes from Edmundston to Riviere du Loup and has a branch to Connors, near the junction of the St. John with the St. Francis. The population of the county is 12,311.

This county contains some of the finest agricultural land of the province of New Brunswick. The St. John valley at this point is wide, and there are large areas of intervale land. The upland soil is of the silurian formation, and belongs to the high class upland described by Professor Johnstone in his report.

Most of the residents of the county of Madawaska are of French origin, the descendants of the ancient Acadians. They are highly prosperous and enjoy better educational advantages than their forefathers. Most of them are farmers, although many of them are employed in the lumber woods in the winter.

The mineral wealth of Madawaska has not been developed, nor are its resources in that respect fully ascertained. A blue phosphate of iron has been found on the banks of the river St. John four miles above Grand Falls, in the parish of Madawaska, associated with or contained in heavy beds of clay.

Lumbering is carried on to a considerable extent in the county, and there are numerous saw mills. The agricultural products of Madawaska in the year 1900 consisted of 26,062 bushels of wheat, the average crop being 18 bushels to the acre, 277,000 bushels of oats, the average crop being 24 bushels to the acre, 4,873 bushels of barley, 143,000 bushels buckwheat, 155,000 bushels of potatoes and 21,000 bushels of turnips. There are two roller grist mills for grinding wheat, one at Power's Creek, with a capacity of 45 barrels a day and

one at Edmundston with a capacity of 50 barrels a day. There are three cheese factories which last year produced upwards of 70,000 pounds of cheese and three creameries, which produced 45,000 pounds of butter. The people of Madawaska have a considerable advantage from the fact that their county lies near the centre of great lumber operations, so that they can get the highest market price for their products, without being under the necessity of sending them away.

The parish of Madawaska, population 1,882, has an area of 100,000 acres of which 20,000 are occupied and 8,000 are improved. It contains Edmundston, the county seat, which is a town of 1,500 people, prettily situated at the junction of the St. John river and the Madawaska. There are three places of worship in Edmundston, Roman Catholic, Church of England and Presbyterian. It contains two saw mills and a flour mill. The town does a large business and has some very fine stores indicating the flourishing state of the county. This is a great county for sport, the hunting in its vicinity being excellent, and the fishing on Madawaska river and Lake Temiscouata unsurpassed. A great many persons now go up the Madawaska to fish in the summer.

St. Leonard's occupies the southern end of the county and has an area of 90,000 acres of which 40,000 are occupied and 15,000 are improved. This is one of the finest parishes in the province for agriculture and the people are wealthy. The parish contains a considerable town of the same name on the banks of the St. John river. There is a roller mill for the grinding of flour and two creameries. Population of the parish 2,738.

St. Ann's lies to the north and west of St Leon-

ard's and has an area of 160,000 acres of which 25,000 are occupied and 8,000 are improved. This parish contains a cheese factory. It is a good agricultural country and is rapidly becoming settled. Population 1,283.

St. Basil, which lies to the westward of St. Ann's, has an area of 240,000 acres of which 40,000 are occupied and 15,000 are improved. This is a fine agricultural parish, as the land in it along the St. John river is of great fertility. There is a creamery in this parish, a saw mill and a grist mill. Population 1,608.

The parish of St. Jacques lies to the west of Madawaska and has an area of 76,000 acres of which 30,000 are occupied and 10,000 are improved. The soil of this parish is similar to that of the parish of Madawaska. The land is well wooded. In the parish there are two saw mills. Population 1,073.

St. Hilaire lies to the westward of Madawaska and St. Jacques and has an area of 40,000 acres of which 30,000 are occupied and 10,000 are improved. This is a fine agricultural parish. It has a creamery and cheese factory, a roller flour mill and a saw mill. Population 1,150.

The parish of St. Francis, which lies to the westward of St. Hilaire, has an area of 104,000 acres, of which 40,000 are occupied and 10,000 are improved. St. Francis is mainly devoted to lumbering, but the soil is excellent. Connors in this parish is a thriving village and a station on the Temiscouata railway. It contains a large shingle mill.

Claire is a new parish which has been carved out of St. Francis. The characteristics of this parish are similar to those of St. Francis. It contains a large saw mill.

ALBERT.

The county of Albert is bounded on the north by St. John, on the south by the Bay of Fundy, on the east by the Petitcodiac river, which separates it from Westmorland, and on the north by the county of Kent. It has an area of 435,000 acres, of which 378,410 have been granted and 56,590 still remain the property of the government. The quantity of land occupied is 225,000 acres and of this area 84,000 are improved. It will be seen from these figures that the county of Albert, although very little of it now remains the property of the crown, has ample room for a much larger population than it at present possesses. Albert county at the census of 1901 had a population of 10,925, but it can very easily support five or perhaps ten times that number of inhabitants, for few districts in the province are richer in agricultural resources or in mineral wealth.

The eastern portion of Albert county belongs to the carboniferous formation, while the interior and western portion of it is largely pre-cambrian. The surface of the county is considerably broken, and it is more picturesque in its aspect than most counties in the province. It is very well watered, for besides having a long coast line, it is traversed by numerous small streams in all directions, most of which are navigable for some distance for barges and rafts. These rivers generally flow through good land. It is estimated that not less than three-quarters of the area of the county is fitted for agricultural purposes, and no other county in the province possesses so great an abundance both of marine and upland alluvial manure, or such facilities for bringing them into use.

Albert county was settled by immigrants from New York and Pennsylvania, one hundred and thirty-five

years ago and subsequently it received a large number of loyalists, who left the United States after that country became independent. The first settlers occupied the marsh lands at Shepody, which had been previously inhabited by the French, the first body of French having come there upwards of two hundred years ago. The area of dyked marsh land in the county of Albert is estimated at about 10,000 acres, all of high quality and producing large crops every year. It is impossible to over-estimate the value of these marsh lands from an agricultural point of view.

The upland of the county varies in quality, but a very large proportion of it is good farming land, and there is no county in the province that offers a better opening to farmers than, Albert. The facilities for getting agricultural products to market are excellent, the Albert railway and the Albert Southern railway traversing it and connecting it with the Intercolonial.

Albert is very rich in minerals, the leading mineral of the county from an industrial point of view being gypsum, of which there are large deposits at Hillsboro and elsewhere. Copper is also found at several places in the county, Point Wolfe, Upper Salmon river and in the parish of Alma. Small quantities of drift gold have been discovered in the hills south of Coverdale and in other places in the county. Manganese deposits exist in Shepody mountain, Dawson settlement and in Elgin. The first two are regarded as very valuable. The Shepody mountain manganese was mined a number of years ago to a limited extent. The deposits in Dawson settlement are situated about five and a half miles from Hillsborough and are now the property of a company.

The most remarkable mineral product of the county,

however, is albertite, which was found in large quantities about four miles from Hillsborough. This vein has been worked out, but other deposits of albertite have been found in the county, and probably some of them may be sufficiently extensive to justify further operations.

Albert also contains large deposits of oil-bearing shale and also of what is termed oilite, which seems to be an intermediate condition between albertite and shale. Both shale and oilite burn freely. The oilite is a black glossy substance similar to albertite, the principal deposit of which is in the Baltimore district, and a company is now engaged in developing it. Shale is also found in Elgin.

Petroleum is also found in this county, although the business has not been greatly developed. It is thought, however, that districts of petroleum similar to those at Memramcook in Westmorland will be made available in Albert.

Prospecting is being done for silver in New Ireland and a company has been formed for the purpose of testing the value of the deposits there.

Building stone is to be found in many places in Albert, at Mary's Point, Grindstone Island, Hopewell Hill and Hopewell Cape. At Grindstone Island large quantities of grindstones were produced and exported and the deposits there are still valuable.

Albert contains many fine water powers, one of the largest of these being the Gordon Falls, on Pollet river near Elgin, with a fall of about 60 feet. This is estimated at 3,000 horse power.

The lumber industry of Albert county is considerable and is growing. Lumber mills, some of them of very large capacity, are situated all over the county.

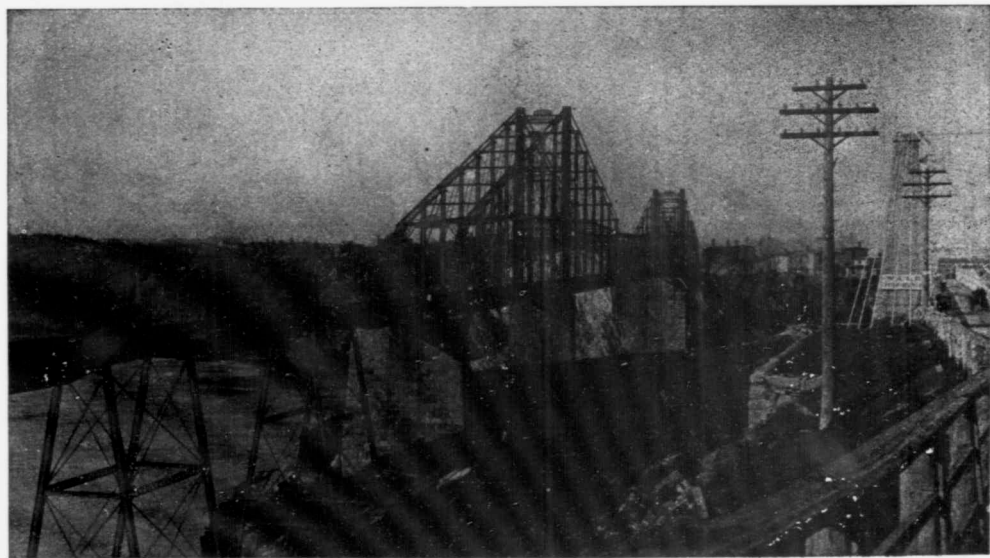
The chief points of shipment are Hopewell, Hillsborough and Harvey. The total shipments from these three points in the year 1900 were 41,509,444 superficial feet of deals and scantling. Of this quantity Hopewell shipped rather more than half and Harvey about a third.

The fisheries of Albert are not extensively worked and in 1899 according to the official returns amounted in value to only \$8,190. The principal fish caught were salmon, herring, trout and shad.

Albert county in the year 1900 produced 101,332 bushels of oats, 49,648 bushels of buckwheat, 126,194 bushels of potatoes and 57,774 bushels of turnips. Wheat is not largely cultivated, the total crop of wheat for the year amounted to 8,253 bushels which was grown on 405 acres, being an average of a little more than 20 bushels to the acre. There are two cheese factories in Albert county which produced 66,000 pounds of cheese in the year 1900.

The parish of Coverdale occupies the north-easterly angle of Albert county and borders on the Petitcodiac river. It has an area of 90,000 acres of which 38,000 are occupied and 12,000 acres improved. The front of Coverdale is very good from an agricultural point of view and it contains a stripe of valuable dyke land. There is a considerable area of good upland here, but the back of Coveidale through which the railway runs is mostly a poor soil. Population 1,400.

The parish of Hillsborough, which lies to the south of Coverdale and which borders on the Petitcodiac river, has a great deal of good soil all over it. There are extensive areas of dyke land and also much fine upland. Its population is 2,907. Baltimore Valley or Rosedale is a splendid farming district. This parish has an area of 62,000 acres of which 50,000 acres are



Cantilever Bridge, St. John, N. B.



occupied and 15,000 acres are improved. The town of Hillsborough is prettily situated on a hill which rises gently above the marsh lands. It contains a number of good shops and is the point of shipment for the plaster of the Albert Manufacturing Company, whose quarries are situated about three miles from the town. This company employes about 325 men and has seven quarries, five of which are in active operation. The company has a plaster mill at the point of shipment, where plaster is ground and calcined. 70,000 barrels of this ground and calcined plaster were shipped from Hillsborough last year and 100,000 tons of rock plaster. These quarries are worked all winter and the mill only closes down from about the 15th of January until the beginning of March. The gypsum, which is quarried at Demoiselle valley, is also shipped at Hillsborough, the plaster coming by railway to Hillsborough wharf.

The parish of Hopewell, population 1,968, which lies to the south of Hillsborough and borders on the Petitcodiac river and Hillsborough bay, has an area of 33,000 acres of which 28,000 are occupied and 12,000 are improved. Hopewell is broken by a high mountain range, but it has a large quantity of dyke land probably 6,000 acres and its upland is also good. Hopewell Cape, a pretty village on the eastern end of the parish, is the county seat, containing the court house and other county offices. Hopewell Hill is a pretty village at the western end of the parish. Plaster is shipped from this point, the product of a quarry which is situated about two miles from the village. Riverside, which is about two miles from Hopewell Hill, is a pretty village and the residence of Lieut. Governor McClelan. It has a public hall which will contain about five hundred people, and a very modern hotel.

The parish of Harvey has an area of 74,000 acres of which 35,000 are occupied and 14,000 are improved. The western portion of this parish has a magnificent soil, all that part south of the Shepody river being red marl. There is also a considerable area of marsh land. The villages of this parish are Albert, Harvey Corner and Harvey Bank. Population 1,402.

The parish of Alma, which lies south of Harvey facing on the Bay of Fundy, has an area of 53,000 acres of which 18,000 acres are occupied and 6,000 improved. It is very much broken, but it is picturesque and its lumber industry is important. The Albert Southern Railway traverses a part of this parish and connects it with Salisbury on the Intercolonial. One of the leading industries of Alma is a factory for the manufacture of glove boxes and veneer. This is a business which might be very largely developed throughout the province. Population 1,014.

The parish of Elgin lies on the southeast angle of the county and has a larger area than any of the others, 123,000 acres, of which 55,000 acres are occupied and 25,000 improved. The land in this parish is hilly, but has a soil of good quality even to the tops of the highest hills. The Pollet river runs through it and it is traversed by the Elgin Branch railway which joins the Intercolonial at Petitcodiac. Population 2,234.

WESTMORLAND.

Westmorland, although only the eighth of the counties of New Brunswick in respect to area, is the second in population and in resources it is at least equal to any county in the province. It occupies the extreme southeast portion of New Brunswick, bounded on the south

by the Province of Nova Scotia, on the west by the Petitcodiac river, on the east by the Straits of Northumberland and on the north by the county of Kent. It has an area of 887,300 acres of which 711,678 are granted or located and 175,630 still remain vacant, and the property of the provincial government. The area of land occupied in the county of Westmorland is about 500,000 acres of which 225,000 acres are improved and 130,000 are under crops; about 80,000 in pasture, about 2,000 in gardens and orchards and the remainder in woodland and forest. The population of the county is 42,059.

Portions of this county have been settled for more than two hundred years, the district along the southern boundary having been occupied by the French about the year 1675. They were attracted to it by its valuable marsh lands, which still furnish its most remarkable feature. These marsh lands in the county of Westmorland have an area of 25,000 acres and they lie principally along the Missiguash, Aulac and Tantramar rivers in Cumberland Basin, and the Memramcook and Petitcodiac rivers. The largest and most important of these are the Tantramar and Aulac marshes, which are said to be the most extensive deposits of marine alluvium in North America. These marshes are all connected with the head waters of the Bay of Fundy. There are also considerable areas of marsh land on the eastern portion of the county bordering on the Straits of Northumberland.

The marshes of the upper part of the Bay of Fundy have been formed by the great tidal waves which ebb and flow at the rate of five or six miles an hour into the bays and estuaries. These tides are loaded with a reddish sediment which is everywhere deposited before the ebb commences. It is not unusual for a single tide

to lay down an inch or more of mud along the river banks. The soft carboniferous shales around the head of the bay furnish, by their waste, the material necessary for marsh building. The marshes lie at the height of ordinary spring tides along the banks of the rivers or estuaries. The land is a few feet higher than the inner or central portions of the marsh, owing to the sediment being deposited more thickly. The depth and extent of the marsh deposits show that their forming must have extended over a long period. A large portion of the marsh land on the Bay of Fundy is dyked, and when the dykes are kept in good condition, these marshes are as dry as the adjacent uplands. They have always been noted for their great fertility. Hay has been grown upon them for two hundred years or more without the application of manure and they also grow grain and root crops abundantly. The dyking of the marsh lands is a work which involves a considerable amount of labor and expense, but which amply repay the expenditure. In some cases the dykes are carried along the banks of the rivers, while in other cases, what are termed "aboideaus" are built across the mouth of the smaller rivers by which the tidal waters are excluded. The soil of the marsh lands immediately bordering on the Bay of Fundy is usually richer than that deposited inland and is called red marsh. All lands more remote from the tide consist more largely of clay and are termed blue marsh.

Closer to the uplands there are considerable areas of peaty or swampy marsh lands, and the fertilizing of these lands is a work which has been going on for many years at various points. The process consists first in draining the marsh and building aboideaus and dykes. The tidal wave with its burden of red mud is then

admitted and a layer from six inches to two or three feet is deposited. Along the Missigauash, an area of about 10,000 acres of bog land is now being subjected to this process. This land will in time be of very great value. In the course of time all the low peaty land in the vicinity of the marshes will thus be reclaimed and the agricultural capabilities of the county largely increased. A boring made at Aulac near the Intercolonial Railway showed that the depth of marsh mud was 80 feet, beneath which was 20 feet of turf and peat bog and 17 feet of red clay. These figures show the enormous deposits of mud that have been made there by the tides of the Bay of Fundy.

The marshes are practically inexhaustible, because, if by continual cropping they become run out or weakened, they can readily be brought back to fertility by admitting the salt water and giving them a new covering of mud. This plan has been adopted by some of the farmers of Sackville, and where it has been tried the results have been found highly beneficial. During the first year after this treatment only the coarser kinds of grasses grow, but the second or third year, the marshes resume their former covering of meadow grasses, and continue for many years afterwards to yield abundant crops without further covering. Marsh owners who have thus allowed the tide to overflow their lands at intervals have been able to maintain their original productiveness in a large measure unimpaired.

From an agricultural point of view, Westmorland is capable of being made one of the richest counties in the province. In addition to the splendid marsh lands already described, it contains large areas of fertile upland. Indeed with few exceptions, the whole county is well adapted for the farmer, and it has been estimated by competent authorities that if well-farmed, it is capa-

ble of sustaining 250,000 people, about six times as many as now inhabit it. In addition to the marsh lands of the Bay of Fundy, Westmorland has marshes of considerable extent on the coast of Northumberland strait. These marshes, however, differ from those of the Bay of Fundy both in regard to their physical character and their agricultural value. Those of the Straits of Northumberland are invariably found in places which are protected from the action of the sea by barriers of some kind. The materials of which they are formed are not so rich as those of the Bay of Fundy and they are also of much less depth. The yield of hay upon them is also less. Where they are dyked they assume the characteristics of upland, and if neglected are liable to grow up into forests. These marshes are of limited area and they do not form a very important element in the agricultural wealth of the county.

There is no county in the province which is richer in minerals than Westmorland. It possesses numerous quarries of fine building stone, deposits of albertite, oilite, bituminous shale and an abundance of gypsum, and also copper ore, manganese and petroleum. These mineral resources, some of which are now being actively worked, are bound in time to make Westmorland rich. The oil wells of Memramcook have recently attracted a great deal of attention, and it is claimed that there are no richer deposits of oil to be found anywhere in America. These wells are now in a state of development, several having been bored and a number of them being good flowing wells. Bituminous shales are found in Memramcook, Belleveau and other parts of the county and they also run into Albert. There are stone quarries at several points along the Petitcodiac river. Manganese is found at Jolicure, Irishtown and also at Petitcodiac. There are plaster deposits at Cornhill near Petitcodiac,

and also at Grand Anse. There is a thin seam of bituminous coal which extends all over the county and deposits capable of being worked will probably be discovered. There are also fair indications of iron deposits, one on the Fox creek road, six miles from Moncton and on the land between Wood Point and Grand Anse, and there are underlying deposits of phosphate near the shales of Belleveau.

The fisheries of Westmorland county are valuable, the yield of all kinds of fish in the year 1899 being worth \$562,238. No less than 793 boats manned by 1,606 men were engaged in the fisheries of the county, while 1,742 persons were employed in the lobster canneries. The produce of the fisheries of Westmorland county in 1899 consisted of:—

Fresh Salmon,	9,500 lbs.
Salt Herring,	60,100 bbls.
Fresh Herring,	50,000 lbs.
Smoked Herring,	50,000 lbs.
Fresh Mackerel,	7,400 lbs.
Canned Lobsters,	808,400 lbs.
Fresh Lobsters,	129,000 lbs.
Dried Codfish,	17,000 lbs.
Halibut,	10,700 lbs.
Shad,	2,350 bbls.
Smelts,	890,000 lbs.
Gaspereaux,	1,400 bbls.
Bass,	9,000 lbs.
Eels,	170 bbls.
Oysters,	260 bbls.
Tomcods,	2,800 lbs.
Fish Oil,	200 gal.
Coarse and mixed fish,	1,500 bbls.
Fish as bait,	34,000 bbls.
Fish as manure,	30,000 bbls.

These figures show the extent of this great industry in the county of Westmorland.

The lumber business of Westmorland is of less importance than that of some other counties in the province, yet it is of considerable extent. At Shediac during the year 1900, 11,055,531 superficial feet of deals, boards and scantlings were exported. At Sackville during the same year 10,361,892 superficial feet were exported.

The chief agricultural products of Westmorland in 1900 were 17,815 bushels of wheat, 385,844 bushels of oats, 38,783 bushels of barley, 142,060 bushels of buckwheat, 806,263 bushels of potatoes and 199,359 bushels of turnips.

Westmorland contains two roller mills for the grinding of wheat, one at Shediac with a capacity of 50 barrels a day, and one at Memramcook with a capacity of 35 barrels a day. In 1900 it had seven cheese factories in operation which made altogether 5,270,000 pounds of cheese. There were also three creameries in the county which in the same year made 42,000 pounds of butter.

Sackville is the oldest and one of the richest parishes in Westmorland. It has an area of 120,000 acres of which 82,000 acres are occupied and 31,000 improved. In Sackville is situated the larger part of the Tantramar marshes, which gives a character to the entire parish and have made it wealthy. There is no doubt that the parish of Sackville can sustain a much larger population than it does at present, its agricultural capabilities being as yet only partially developed.

The town of Sackville is a rapidly growing community with a population of about 2,000, while that of the parish including the town is 5,286. Sackville has

five churches, the Church of England, Methodists, Baptists, Presbyterians and the Roman Catholics each having one. In the parish, outside of the town, there are four Baptist churches, two Methodists and two places of worship belonging to the Church of England. The educational institutions of Sackville, consisting of the University of Mount Allison and the male and female academy are a great feature of the place. They belong to the Methodist church and are in a highly flourishing condition. The residence building of the University is a very fine one; the library of the college is large and growing, and the art building connected with the University is the finest of the kind in Canada, the collection of pictures being a large one.

In Sackville there are many fine stores and the place has an attractive and prosperous appearance. There are two foundries for the manufacture of stoves and other iron work, a harness and larrigan factory, which employs a hundred hands, two smaller harness factories which employ about twenty-five hands, a boot and shoe factory which employs forty people, two carriage factories and a door and sash factory. Sackville has also a music hall which seats 300 people and is provided with a stage and scenery. It has a curling rink, a skating rink, an Oddfellows' Hall, and a lodge of Freemasons.

The parish of Westmorland is situated east of Sackville and north of the Nova Scotia boundary. It is the smallest parish of the county having an area of only 55,000 acres of which 38,000 are occupied and 20,000 are improved. It includes a portion of the Tantramar marshes, and there are also extensive tracts of marsh land near the mouth and along the banks of the Missiguash, which separates this parish from Nova

Scotia. It is along the Missiguash that the most extensive scheme of marsh improvement that has ever been undertaken in New Brunswick is now being carried on. At Baie Verte there are also extensive marsh lands although of inferior quality to those in the Bay of Fundy. Population 1,966.

Botsford lies to the north of the parish of Westmorland and has a seaboard of fifty miles on Baie Verte and the Straits of Northumberland. It has an area of 150,000 acres of which 80,000 are occupied and 35,000 improved. Agriculture is the principal occupation of the inhabitants. Much of the soil is excellent there being large quantities of marine alluvium deposits on its shores, and also fresh water deposits in the interior, both of which mixed with other ingredients as compost are used as manure. The greater part of the coast is settled and the parish presents facilities for improvement and for an increased population. Its inhabitants number 4,332.

Port Elgin, which is in Botsford parish is a town of 500 inhabitants and has one of the largest saw-mills in the county. There is also a woollen mill situated there.

Shediac which lies along the shores of the Straits of Northumberland, north of Botsford, has an area of 120,000 acres of which 70,000 are occupied and 30,000 improved. It has 6,430 inhabitants and is the most populous parish in the county, outside of Moncton. Shediac is the gulf terminus of the Intercolonial Railway, and the point from which steamers sail daily in the season of open navigation to Prince Edward Island. There is a considerable export of deals and other lumber from Shediac to Great Britain.

Shediac has five churches, one each of the Roman

Catholic, Church of England, Baptists, Methodists and Presbyterian. There is a boot and shoe factory in the town which employs eighty hands. There are two steam saw mills in the vicinity of the town, and a considerable trade is now being done in clams, which are shipped to the United States in large quantities. There is a quarry of excellent stone on the banks of the Scadouc river and another of granite stone of good quality. The soil of most of the parish of Shediac is good and there is abundant room for the formation of new settlements.

The parish of Dorchester, population 6,068, has an area of 64,000 acres all of which are occupied and 35,000 of which are improved. The town of Dorchester, which is the county seat, is prettily situated on a gentle elevation and contains about 1,200 inhabitants. It has five places of worship, one each of the Roman Catholic, Church of England, Baptists, Methodist and Presbyterian. The maritime penitentiary is situated at Dorchester. The port of Dorchester is about a mile and a half distant from the town and is reached by a railway which extends from the Intercolonial. Dorchester is one of the wealthiest parishes in New Brunswick and contains a great variety of resources. Besides a considerable area of fine marsh land it has a great deal of splendid upland. Farming is carried on in this parish under the most favorable circumstances and the people who are engaged in it are wealthy. The parish is bounded on the west by the Petitcodiac river and the Memramcook flows through it. A little distance from Dorchester are the works of the Intercolonial Copper Company. This company is now in operation and is producing copper in large quantities by the leaching process; they have expended about \$200,000 in develop-

ing this property. These works employ a large number of hands. There is a woodenware factory in the town of Dorchester. The parish contains the famous oil wells, which are situated at Memramcook close to the college. There are now a number of these wells in active operation and more are being bored. The oil is of a high grade and it is believed that this whole region is an oil producing district. The work of developing this property is now being carried on by the New Brunswick Petroleum Co., with a capital of \$1,000,000.

The College of St. Joseph's is situated in this parish and is doing an admirable work in educating the young people of Westmorland, especially those of the Roman Catholic faith. Near Dorchester, in the parish, are situated steam brick works and several quarries are in operation which produce pulp stones, grindstones and building stones. There is a roller flour mill at Memramcook and several other industrial establishments.

The parish of Moncton, including the city, has an area of 150,000 acres of which 90,000 are occupied and 35,000 are improved. This parish, although a good one from an agricultural point of view, derives its chief importance from the city of Moncton, which is one of the most progressive communities in Canada. The city of Moncton is the centre of the Intercolonial railway system and contains a population of 9,026 persons. Here are situated the work shops of the Intercolonial. Moncton contains a cotton factory, a foundry and machine shop, a flour mill, three woodworking factories, one of which makes barrels for the Acadia Sugar Company of Halifax and there is a woollen mill in the parish a little distance from the city. Moncton is a considerable shipping point. A short distance from Moncton there is a large deposit of brick clay and about

a million bricks are made from this yearly. The population of Moncton parish, outside of the city, is 5,587.

The parish of Salisbury which lies at the western end of the county of Westmorland, has an area of 206,000 acres of which 70,000 are occupied and 30,000 are improved. This parish contains two towns, Salisbury and Petitcodiac, each of which has about 500 inhabitants. Salisbury is the point of junction of the Albert railway with the Intercolonial, while the Elgin railway joins the Intercolonial at Petitcodiac. Population of the parish. 3,364.

KENT.

The county of Kent, which lies to the north of Westmorland and is bounded on the east by the Straits of Northumberland, has an area of 1,149,000 acres, of which 589,179 are granted and 559,821 are still the property of the crown. This county has a sea coast of about 60 miles and about 30 miles of river navigation for vessels of 200 tons. It is traversed by numerous streams among which the principal are the Cocagne, the Big and Little Buctouche, the Richibucto, the Aldouin, the Kouchibouguacis and the Kouchibouguac. The entrance of the Cocagne, the Big and Little Buctouche and the Richibucto form very good harbors, which large vessels can enter. The Cocagne and Big Buctouche take their rise in Westmorland county and are navigable for rafts and boats, the former 25 miles and the latter for upwards of 30 miles. The Richibucto is navigable for river steamers, rafts and boats for upwards of 40 miles from its mouth. The other streams extend inland for from 15 to 25 miles. The population of the county is 23,954.

The whole county of Kent is extremely level and the people who live in it are largely engaged in agriculture. Much of the soil is of excellent quality, especially that which lies near the rivers. A considerable amount of the land in the county is light and dry, but it produces good crops of oats, wheat, barley and potatoes when kept in heart by manure. The people of Kent county have admirable opportunities of enriching their land by means of alluvial deposits on the shores which make an excellent compost.

The fisheries form a leading industry of the county, their total value in the year 1899 being \$452,006. The fisheries employed one vessel and 1,115 boats, manned by 1,853 men, 925 other persons being employed in the canneries. The principal fish caught were salmon, herring, mackerel, lobsters, tomcod, trout, smelt, bass, clams and oysters. The catch of smelt sometimes reaches enormous proportions, no less than 1,640,000 pounds of this fish being caught last year. Large numbers of persons are employed in catching smelt in winter, and they are shipped mostly to the United States, and most of the clams taken in the county go to the same market. In 1899, 5,420 barrels of oysters were taken, most of them at Buctouche.

Lumbering is carried on to a considerable extent in the county of Kent and there are saw-mills on all the rivers. In the year 1900, 4,462,000 superficial feet of deals were shipped to the United Kingdom from Richibucto and Buctouche. This industry is not prosecuted to the same extent as it formerly was, more attention being now given to agriculture.

The county of Kent has always been noted for its production of wheat, of which it grows more than any other county in New Brunswick. In the year 1900,

108,064 bushels were grown on 5,944 acres of land, an average of more than 18 bushels to the acre. The crop of oats the same year was 420,027 bushels, 141,711 bushels of buckwheat were grown in the county, and 731,793 bushels of potatoes and 114,107 bushels of turnips. There are two roller mills for the grinding of wheat in the county, both situated at Buctouche. In the year 1900, there were three cheese factories in operation in the county which produced 36,000 pounds of cheese, and there were five creameries in operation which made 32,000 pounds of butter.

The whole of Kent county is situated in the coal bearing region of the province and coal has been found at several places, the principal deposits being at Coal Creek, not far from the Intercolonial railway. This coal mine is now being developed by a company.

There is some very good building stone in the county, the principal quarry being at Cocagne Bridge on the Cocagne river. Kent county, however, is less rich in minerals than any other portion of the province, but it has ample compensation in its good farming land and its excellent fisheries.

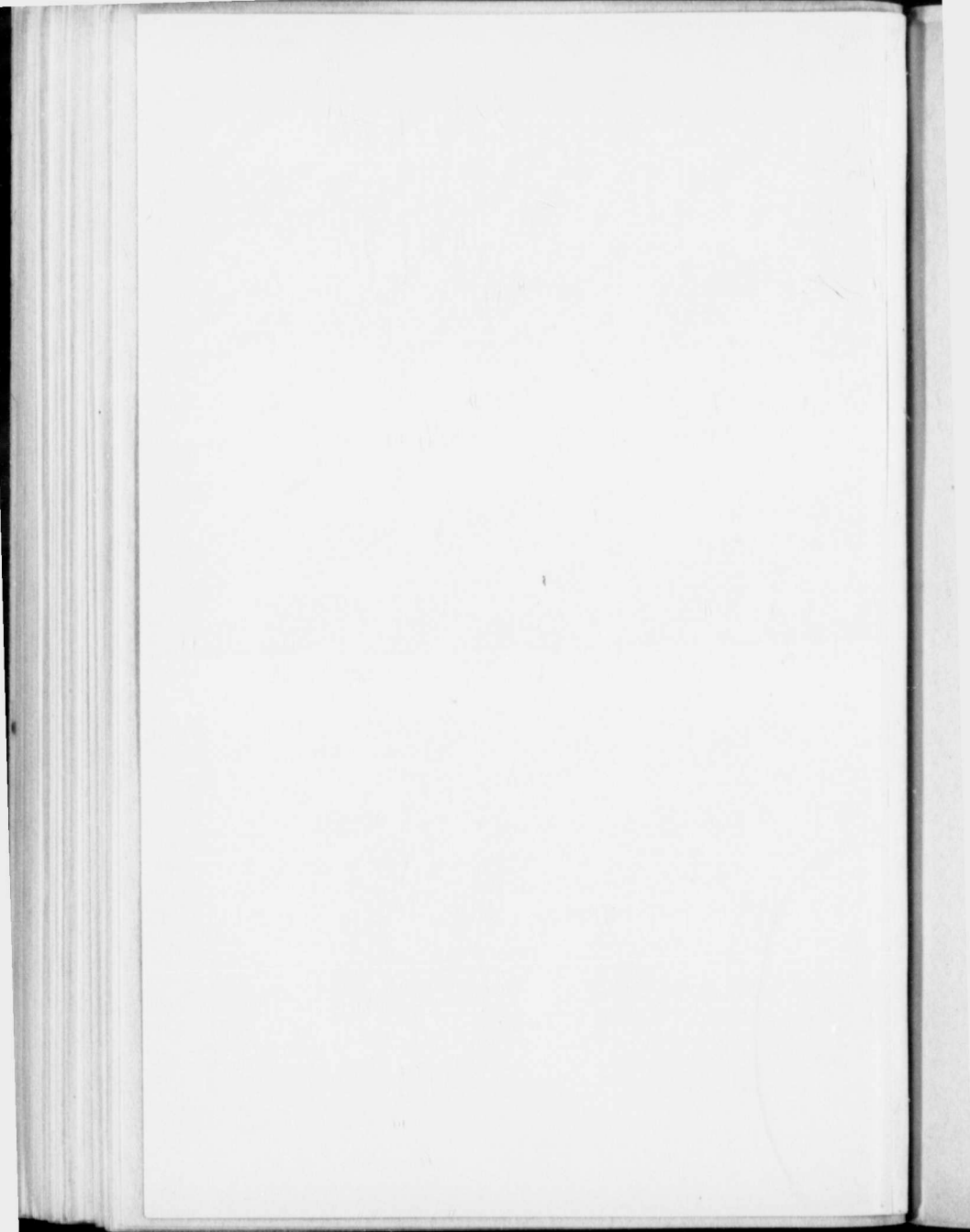
Among the resources of the county of Kent which may become of considerable value in the future, are its peat bogs. Many of these are very extensive, and are quite as capable of furnishing cheap fuel as those in Scotland and Ireland. The abundance of wood now prevents them from being utilized, although the day may come when they will become valuable, not only for fuel, but for other purposes. In many parts of Europe peat moss from similar bogs is an article of commerce. It is used as a packing material for the transport of goods liable to breakage, it takes the place of ice in the carriage of perishable articles, such as fresh

meat and fish. Meat when packed in it will keep fresh for weeks and will eventually become dry, the moisture being absorbed by the peat. Its uses as a non-conductor of heat are likely to create an extensive demand for it in the near future. In Germany peat has been used for years as an absorbent of the waste liquids and refuse of factories, and it is now being used for stable litter in the United States. Mr. Robert Chalmers of the geological survey expresses the opinion that this material is evidently intended to become of great value in the arts, in chemistry and in agriculture, as well as for sanitary purposes. "Bog land heretofore regarded as worthless is likely to become valuable property and flourishing industries promise yet to spring up from the use of this neglected material." When that day arrives, the maritime provinces of eastern Canada will be able to furnish an almost unlimited supply of peat moss for all the purposes enumerated. Some authorities are of the opinion that paper might be manufactured out of this peat moss.

The parish of Richibucto has an area of 78,000 acres of which 45,000 are occupied and 20,000 are improved. It has a population of 3,879. The town of Richibucto, which is the county seat, has a population of 1000. This town contains four places of worship, belonging to the Church of England, the Presbyterians, the Methodists and the Roman Catholics. There are in Richibucto a grist and saw mill, a carriage factory and a tannery. Richibucto is a pretty town with a good harbor. It is a port of entry and does a considerable shipping business. There are three flourishing establishments in Richibucto which pack all kinds of fresh fish. A great many salmon are caught in the Richibucto river. This portion of the county of Kent



Exhibit of Fruit, St. John Exhibition.



has one of the finest fishing coasts in the world for a variety of fish. Richibucto is connected with the Intercolonial by the Kent Northern Railway, which is 27 miles in length. This railway also extends to St. Louis seven miles further. Rexton, which is about three miles further up the Richibucto River, contains 600 inhabitants. It has four places of worship, Church of England, Presbyterian, Methodist and Roman Catholic. The parish of Richibucto contains much excellent land and is a good farming district. Galloway settlement, which was founded three-quarters of a century ago, mainly by immigrants from the Lowlands of Scotland, is one of the best farming districts in the county.

The parish of Weldford, which lies to the west of Richibucto and is traversed by the Richibucto river and its numerous tributaries, has an area of 154,000 acres of which 70,000 acres are occupied and 25,000 are improved. The settlements of Weldford extend both on the main river and on the South Branch, the East and West Branch and also on Molus and St. Nicholas rivers. There are many fine farming districts in Weldford, the land along the river being of excellent quality. In this parish there are two cheese factories, one in Molus river and the other on St. Nicholas river. The most promising coal mine of the county of Kent is in the parish of Weldford, and is now being developed by a company with a capital of \$1,000,000. Population 3,317.

Harcourt, which has an area of 300,000 acres, lies to the west of Weldford. It is the largest parish in the county, but of this large area only 20,000 acres are occupied and 5,000 are improved. Harcourt, a station on the Intercolonial, is a village of 400 or 500 persons. Harcourt is not generally regarded as a good agricul-

tural parish, but it contains some good land along the banks of the rivers. It is traversed by Salmon river, which flows into Grand Lake, and by its numerous tributaries. The parish is well wooded and a good deal of lumber is cut in it, but as its streams flow to the westward and their waters finally enter the river St. John, the lumber cut in the parish of Weldford does not go to the credit of the county of Kent. Population 1,104.

The parish of Wellington lies south of Richibucto and is bounded on the east by the Straits of Northumberland. It is traversed by the Buctouche river, a large stream with numerous tributaries. The parish has an area of 49,000 acres of which 45,000 are occupied and 20,000 improved. The town of Buctouché has about 500 inhabitants and is a flourishing community. It contains four churches, a Roman Catholic, a Presbyterian, a Methodist and a Church of England, and at Little River there is a Baptist church. The Roman Catholic church at Buctouche is one of the finest in New Brunswick. In the town there are two carding mills, two carriage and sash and door factories, two saw mills and two roller mills for the grinding of wheat, each with a capacity of 50 barrels a day. One of these mills contains also a plant for grinding corn by the roller process with a capacity of a hundred barrels a day. Each of these roller mills has a butter and cheese factory in connection with it. Buctouche does a large fishing business. Oysters are largely exported and they are cultivated by Mr. James Barnes, M.P.P., who is the largest dealer in this shell-fish. A great many clams are taken in Buctouche for export to the markets of the United States, and in their season about as many as 150 persons are engaged in raking them. The ship-

ment of clams from Buctouche averages about 600 bushels a day. Buctouche has a good harbor with a depth of 13 feet of water over the bar. It is connected with the Intercolonial by the St. Louis and Buctouche railway, which is 32 miles in length. A great deal of coal comes to Buctouche from the Cape Breton mines and is shipped over this railway. There are several other saw mills in the parish besides those enumerated. The whole parish of Wellington is a good farming district and the people are well off. The population of the parish is 3,317.

The parish of Dundas lies to the south of Wellington and has an area of 65,000 acres of which 40,000 are occupied and 20,000 are improved. This parish extends along the Straits of Northumberland. It is traversed by the Cocagne River and the only town in it is Cocagne which is situated at the mouth of this river. The parish is one of the oldest settlements in the county. The land is good and well cultivated. There are several saw-mills on the Cocagne River and there is a cheese factory at Cocagne. Population of the parish 3,453.

The parish of St. Mary's which lies to the westward of Wellington, has an area of 54,000 acres of which 40,000 are occupied and 15,000 are improved. The Buctouche river traverses this parish. It is accounted the finest farming district in the county of Kent. There is a cheese factory in the parish owned by a company at which 10,000 pounds of cheese were made in 1900. Population 2,449.

The parish of St. Paul's lies to the westward of St. Mary's at the head of the Buctouche river. This parish has an area of 35,000 acres of which 20,000 are occupied and 8,000 are improved. This is a new par-

ish and has only been recently settled. It has much good agricultural land and is prospering. Population 1,141.

The parish of Carleton has an area of 115,000 acres, 20,000 of which are occupied and 8,000 are improved. This parish has a coast line on the Gulf of St. Lawrence from Point Escuminac to the mouth of the Kouchibouguac. It is traversed by the Kouchibouguac river and its tributaries. The people of this parish are largely devoted to fishing and there is an important fishing station at Point Sapin. Population 1,132. The land along the Kouchibouguac river is fertile, but it is only settled along the banks of the streams. There is a saw-mill at the village of Kouchibouguac in this parish.

The parish of Acadiaville, population 1,256, has an area of 85,000 acres of which 25,000 are occupied and 8,000 are improved. This parish is to the westward of Carleton and on the upper waters of the Kouchibouguac river. The Intercolonial railway runs through it. It is well wooded. This is a new settlement with fair farming land and it is rapidly increasing in population.

The parish of St. Louis extends along the coast of the Gulf of St. Lawrence from the southern boundary of Carleton to the northern boundary of Richibucto. It has an area of 101,000 acres of which 40,000 are occupied and 15,000 improved. This parish is traversed by the Kouchibouguacis river and the Aldouin. It is a good farming parish and is quite populous, and is one of the oldest settlements in the county of Kent. There is a farmers' bank at St. Louis which is run by an association. The bank gives out oats in the spring which must be returned with interest in the autumn in kind.

This institution is in a flourishing condition. There is also a butter factory at St. Louis the products of which took second prize at the Chicago exhibition. There is a cheese factory at McLeod's Mills on the Kouchibouguacis river and also a large saw mill and grist mill. At St. Charles on the Aldouin, there is a roller mill for grinding wheat. Population of the parish 2,278.

NORTHUMBERLAND.

Northumberland is the largest county in the province of New Brunswick having an area of 2,756,000 acres, of which, 1,112,293 have been granted and 1,643,707 still remain the property of the government. This county is bounded on the east by the Gulf of St. Lawrence and it has an extensive coast line. It is cut in two by the Miramichi river, which is a very large stream with numerous branches. The Miramichi and its estuary or bay give the means of navigation to a large part of the county. This river forms a port of splendid dimensions at Chatham, which extends to Newcastle with accommodation for thousands of vessels. There is no part of the province that impresses a visitor more than the Miramichi district. On the river there are several towns, Chatham, Newcastle, Douglastown and Nelson, all the seats of numerous industries. A short distance above Newcastle the river divides into two branches, the Northwest and the Southwest Miramichi, both of which extend far into the country, and have numerous tributaries. There are considerable areas in this county which have hardly been explored. The

whole county is well wooded, and although a considerable portion of it was burnt over by the great Miramichi fire of 1825, so rapid has been the growth of the forest that extensive lumbering operations are now being carried on in this burnt district.

The most important industry of the county of Northumberland is lumbering, the Miramichi being only second to the St. John in this respect. During the year 1900 there was exported from the port of Miramichi 121,543,971 superficial feet of deals, scantlings and boards, and 3,949,838 superficial feet of spool wood and shooks. Most of the lumber exported went to the United Kingdom. In addition to the large output of spruce there are considerable quantities of hardwood cut in the Miramichi district. Large quantities of hemlock bark and extract of hemlock bark are also exported from the port of Chatham.

Next to lumbering, comes fishing which is carried on, on a very large scale. The fisheries of the county of Northumberland employ 4 vessels and 690 boats manned by 1,084 men, while the lobster canneries in the county employ 340 more, making a total of 1,424 persons employed in the fisheries of Northumberland. Large quantities of fresh salmon are caught and exported to the markets of the United States from this county, the quantity exported in 1899 being 370,000 pounds. The export of smelts is also carried on, on an enormous scale, the quantity caught in the county in that year being 2,750,000 pounds. There are 13 lobster canneries in the county which put up 1,072,000 pounds of preserved lobsters in 1899. There are in the county 51 freezing establishments for the preservation of fresh fish and 130 establishments where fish are smoked.

In addition to the kinds of fish above mentioned, Northumberland produced in 1899:—

- 8,020 barrels of salt herring.
- 2,100 pounds of fresh and smoked herring.
- 4,500 pounds of fresh mackerel.
- 2,000 pounds of fresh lobsters.
- 185,000 pounds of dried codfish.
- 29,000 pounds of trout.
- 2,100 barrels of alewives.
- 263,000 pounds of bass.
- 256,000 cans of sardines.
- 10,500 barrels of oysters.
- 1,150,000 pounds of tomcods.
- 27,000 pounds of flounders.
- 5,000 barrels of fish for bait.
- 12,000 barrels of fish manure.

The total value of the fish caught in Northumberland in 1899 was \$465,775.

The mineral wealth of the county of Northumberland has not been much developed, but there is no doubt that further explorations will bring to light many valuable minerals. Bog iron ore has been found on the Northwest Miramichi and on the Southwest Miramichi twenty miles above Boiestown. Gold has been found in small quantities on the Miramichi and its tributaries. There are large deposits of peat bog in Northumberland county similar to those found in Kent. The most important are near Point Birreau, south of Tracadie river, on the Tabusintac at Pt. Cheval and Pt. Escuminac. There are large deposits of clay in various parts of the county, the principal one being at Newcastle, where bricks have been manufactured extensively. On the Northwest Miramichi about a mile and a half above Chaplain's island, veins and masses of brownish red

ochre have been found in the slate rocks. There are extensive deposits of freestone at Newcastle, which turn out large quantities of building stone of fine quality and also stones suitable for the grinding of wood pulp.

A large business is done in the export of blueberries, which are canned in large quantities. One concern in Chatham has no less than eight factories, at which berries are put up. The export of canned berries from Chatham in the year 1900 reached a total value of \$29,135 and this is by no means the full amount exported, for large consignments which went by railway were credited to other ports.

Northumberland is well supplied with railways, being traversed by the Intercolonial from north to south and by the Canada Eastern, which runs from Chatham to Fredericton. There is also a branch of the Intercolonial extending from Derby Junction to Indiantown.

There are many fine water powers in the county of Northumberland, especially in the western portion of it. On the Northwest Miramichi is a place known as "The Falls," where the river comes through a deep rocky canyon. The banks there are almost perpendicular and a dam 60 feet high would not be more than 300 feet in length at the top. The current is very strong, with a series of rapids for three or four miles and here 60,000 horse power could be obtained with a head of 60 feet. This point is not over twelve miles distant from the Intercolonial railway; it is about 27 miles above Newcastle. It would run every mill on the Miramichi river. Near the mouth of the Big Sevogle river, a branch of the Northwest Miramichi, there is a fall of 20 feet. Here, by building a dam, a 30 foot head could be obtained and 2000 horse power developed. The Sevogle is a large river with lots of tributaries and there is

always plenty of water. This power is 28 miles from Newcastle, but not more than 20 miles from the Inter-colonial. There are some small water powers on the Barnaby river, which joins the Southwest Miramichi six miles above Newcastle, three of which are already utilized by saw mills. A good dam at the mouth of the Barnaby would give it a 25 foot head, right in sight of the Canada Eastern railway. On the Southwest Miramichi, about five miles above Indiantown, a head of 20 or 30 feet with from 6000 to 10,000 horse power could be obtained without overflowing the farming lands. On the Bartholomew river, at Blackville, there is a valuable water power, which is now being utilized. On Renous river, which joins the Southwest Miramichi at Indiantown, 18 miles from Newcastle, a smaller power to that of Blackville could be obtained. These powers may be estimated at 2500 horses. The Dungarvon, a large branch of the Renous river, eight miles above Indiantown, would give a power of 1000 horses. As the rivers in the eastern end of the county run through level land, the water powers in that section of Northumberland are not important.

The population of Northumberland at the census of 1901 was 28,543.

The parish of Newcastle, which contains the shire-town of the same name, lies on the north side of the Miramichi river. It has an area of 149,000 acres of which 25,000 are occupied and 10,000 are improved. This parish contains the towns of Newcastle and Douglastown. Newcastle contains five churches, Baptist, Methodist, Roman Catholic, Presbyterian and Church of England. It is prettily situated and wears an air of prosperity and contains about 3000 inhabitants. There are two saw mills in the town and one spool

wood mill. Close to the town there is a grist mill where wheat is ground by the roller process, and the famous Newcastle quarries which furnished stone for Langevin Block at Ottawa. There are several saw mills in the parish besides those in the town, one at Newcastle Bridge, one at Douglastown, and another between Douglastown and Newcastle. Douglastown is prettily situated on the north side of the Miramichi river. It is one of the oldest settlements on the Miramichi and contains two churches, a Baptist and a Roman Catholic. There is a great deal of good land in the parish of Newcastle, but the soil is light. The population of the parish is 4,130.

The parish of Chatham although one of the smallest in the county, is the most important. It has an area of 33,000 acres of which 20,000 are occupied and 8,000 are improved. The population of the parish including the town, is 6,624, the town itself has 5,500 inhabitants. It is incorporated. Chatham is prettily situated on the south side of the Miramichi river on a series of terraces, which rise gently from the water. It contains five churches, two Presbyterian and one each of Roman Catholic, Methodist and Church of England. In the parish there are three other churches, Presbyterian, Church of England and Roman Catholic. Chatham has fine water works which were put in at a cost of \$125,000 and a splendid sewerage system. It has two large mills for the manufacture of paper pulp, several saw mills and two foundries. It is a station on the Canada Eastern railway which extends down to Loggieville at the extreme end of the parish. The exports of Chatham for the year 1900 were valued at \$1,483,563. Of this amount \$854,075 consisted of lumber, \$323,117 of

wood pulp, \$277,236 of fish, \$29,135 of canned blueberries. The canning of berries is becoming a very important industry in the parish of Chatham and it is one which gives employment to a large number of young persons. The fisheries of the parish in 1899 employed 160 persons and were valued at \$198,290. One of the largest items in this output consisted of smelts, of which no less than 1,500,000 pounds were taken. 100,000 pounds of fresh salmon, 5,000 pounds of trout, 50,000 pounds of bass, 256,000 cans of sardines, 4,000 barrels of oysters, 20,000 pounds of flounders, and 1,100,000 pounds of tomcods were also taken by Chatham fishermen the same year. Several large firms are engaged in the business of canning fish and blueberries and this is done on a colossal scale. The Canada Eastern shipments at Chatham last year amounted to 109,001,010 pounds of freight received and 45,889,190 pounds of freight forwarded.

At Loggieville, in the parish of Chatham, the freight that went over the Canada Eastern railway last year was 10,242,950 pounds received, and 7,374,250 pounds forwarded. The parish of Chatham contains many fine farms in the vicinity of the town, but the best agricultural region is the district of Napan, which lies along the Napan river to the eastward of Chatham. This district was settled by immigrants from Scotland, and farming is carried on there in a manner that is not surpassed by any portion of the province of New Brunswick. The farmers in the Napan district are all well off because they cultivate a strong, productive soil with energy and skill. Some of the farmers of Napan keep as many as a hundred head of cattle, which will convey some idea of the scale on which farming is carried on. At Napan there is a fine deposit of brick clay, which is being operated extensively.

The parish of Nelson, which lies on the south side of the Miramichi, opposite Newcastle, has an area of 80,000 acres of which 25,000 are occupied and 5,000 are improved. The parish contains the neat little town of Nelson, which is a centre of the lumber industry. There are three churches in it, Roman Catholic, Presbyterian and Church of England. It also contains three saw mills, one of which makes box shooks, a carding mill and a brick yard. The land in Nelson is well farmed and Barnaby river, which flows through it, is well settled. The land is light and gravelly, but responsive to care and attention. Population 1,948.

The parish of Derby, which lies on the north bank of the Southwest Miramichi, opposite Nelson, has an area of 30,000 acres, of which 15,000 are occupied and 5,000 are improved. It contains some fine farms, but its agricultural resources have not been as fully developed as those of some other portions of Northumberland. At Derby are situated works for the making of the extract of hemlock bark, which employ about fifty people. The Southwest Boom Company, which takes care of all the logs which come down the Miramichi river, also have their headquarters at Derby. There are two or three saw mills in this parish. The population of the parish is 847.

The parish of Blackville lies next to Nelson and is divided in two by the Southwest Miramichi river. It has an area of 194,000 acres, of which 35,000 are occupied and 10,000 are improved. This parish has a good deal of fine intervale land. It is traversed by the Canada Eastern railway and is well watered. Lumbering and farming are its leading industries. Population 2,439.

The parish of Blissville lies to the westward of

Blackville and is also traversed by the Southwest Miramichi and the Canada Eastern railway. It has an area of 300,000 acres, of which 20,000 are occupied and 5,000 are improved. There is some good land in this parish and its characteristics are similar to those of Blackville. Blissville contains the village of Doaktown. Population of the parish, 997.

The parish of Ludlow lies to the westward of Blissville, and has an area of 215,000 acres, of which 20,000 are occupied and 5,000 are improved. The Southwest Miramichi flows through it and the Canada Eastern railway traverses it. There is a good deal of fine land in this parish. The intervalles of the Miramichi are of great extent and are very productive. The town of Boiestown is situated in this parish. Population of the parish, 993.

The parish of Hardwicke, which lies at the extreme end of the county on the south side of the Miramichi river, has an area of 68,000 acres of which 20,000 are occupied and 5,000 are improved. It is traversed by the Intercolonial railway. It has an extensive seacoast and its fisheries are important. The Bay du Vin district, which is in this parish, in the year 1899, produced \$109,740 worth of fish. 550 men are engaged in the fisheries of Bay du Vin and vicinity. The soil of Hardwicke is light but there is some excellent land on the Bay du Vin river. Population 1,299.

The parish of Glenelg lies to the rear of Chatham on the south side of the Napan river. It has an area of 140,000 acres of which 35,000 are occupied and 8,000 are improved. The parish is traversed by Black river on which there is much good land and the excellence of the soil of the Napan river has already been described. Population 1,337.

The parish of Alnwick, which lies on the north side of Miramichi bay in the extreme eastern end of the county, has an area of 150,000 acres of which 40,000 are occupied and 10,000 are improved. The parish is traversed by the Tabusintac and Burnt Church rivers. It is well settled and the attention of its people is largely given to the fisheries. The fisheries of this parish in 1899 employed 260 persons and produced \$107,445 worth of fish. There are some excellent land in this parish, especially on the Tabusintac and the farmers are prosperous. A large amount of lumber is also cut and there are several saw mills. Population 3,334.

The parish of Rogersville lies to the south of Nelson. It contains 72,000 acres of land of which 20,000 are occupied and 6,000 are improved. This is a comparatively new settlement, but is becoming prosperous. The soil is good although somewhat light and gravelly. This parish is traversed by the Intercolonial railway, and has excellent facilities for reaching market. Population 1,797.

The parish of North Esk is the largest in the county. It has an area of 900,000 acres of which 30,000 are occupied and 6,000 are improved. This is a very fine parish, probably the most important, from an agricultural point of view, in the county; but the settlements in it are new. It is traversed by the Northwest Miramichi river and also by the upper waters of the Nepisiguit. There are large intervalles on the Northwest and its tributaries, and much good settlement land. Lumbering operations are conducted in this parish on an extensive scale. The larger part of it is still in a wilderness state. Population 1,664.

The parish of South Esk lies to the south of North Esk and has an area of 600,000 acres of which 20,000

are occupied and 5,000 are improved. The principal stream in this parish is the Little South West and its tributaries. There is some excellent land on this river. This stream is fed by immense lakes and runs deep all the year round. The parish of South Esk escaped the great Miramichi fire of 1825, which did so much damage to some other portions of the county. Population 1,134.

GLOUCESTER.

The county of Gloucester, which occupies the north-eastern portion of New Brunswick, has an area of 1,950,000 acres, of which 488,643 acres are granted and 706,337 acres still remain the property of the government. This county has a coast line of about 150 miles on the Bay Chaleur and Gulf of St. Lawrence. It is traversed by numerous rivers, such as the Nepisiguit, Teteagouche, Caraquet, Pokemouche, Tracadie and many smaller streams. Attached to it is Shippegan Island and Miscou Island, which together are 40 miles in length. This county is largely peopled with descendants of the ancient Acadians, who form an industrious and prosperous farming and fishing community.

Agriculture and the fisheries are its chief resources, although a considerable amount of lumbering is still done. The county seat is Bathurst, which is at the mouth of the Nepisiguit river on a beautiful bay, which forms a safe and commodious harbor. All along the coast are aggregations of houses, which rise to the dignity of villages. The coast line of the Bay Chaleur is particularly charming, and there are many places which are becoming popular as summer resorts for persons from other parts of Canada.

In the year 1900 the lumber exported from Bathurst

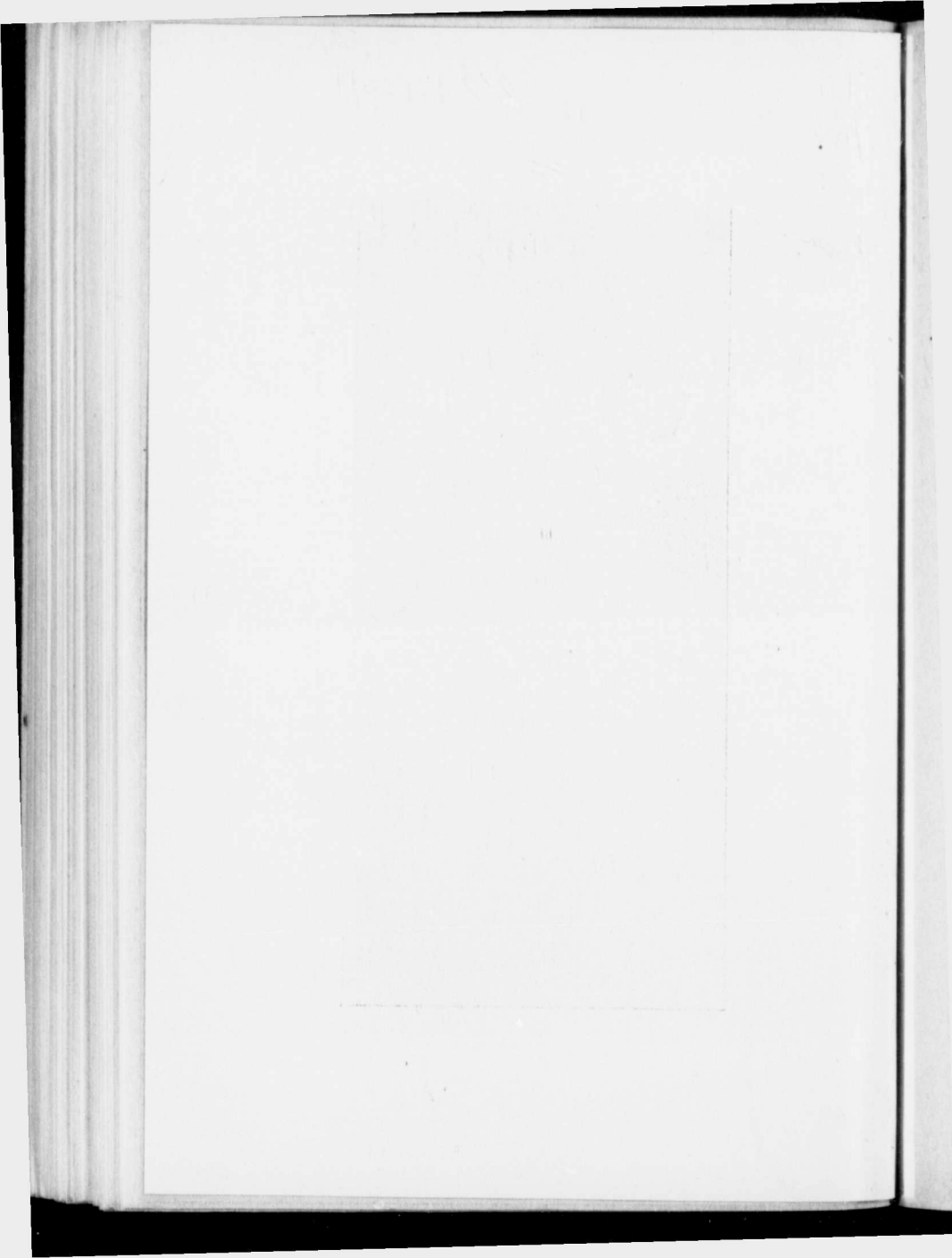
amounted to 18,669,000 superficial feet of deals, scantling and boards.

The fisheries of the county are next in value to those of Charlotte, and in the year 1899 amounted in value to \$1,030,660. These fisheries employed 208 vessels, and 745 boats manned by 4100 men, and 1700 persons were employed in the canneries. It will be seen from these figures how important an element the fishing industry is in the county, indeed nearly all the residents of the county of Gloucester are fishermen. The principal fish caught in 1899 were 366,000 pounds of salmon, 83,000 barrels of herring, in addition to 180,000 lbs. of fresh and smoked herring, 28,000 pounds of mackerel, 686,700 pounds of canned lobsters, 76,400 cwt. of dried codfish, 500 cwt. of haddock, 4,300 cwt. of hake, 47,000 pounds of halibut, 1,142,000 pounds of smelts, 1,300 barrels of alewives, 35,000 pounds of bass, 170 barrels of oysters, 28,000 pounds of flounders and 170,000 pounds of tomcod and considerable quantities of other fish.

The mineral resources of Gloucester although still in an undeveloped condition, are of great value, Copper is found at the Teteagouche Falls, eight miles from Bathurst and also at the mouth of the Nepisiguit river about three miles from Bathurst. These beds have been worked to a limited extent, but not recently. As these deposits of copper resemble those of Dorchester, which have become of commercial importance, there is reason to believe that the Gloucester beds will also be presently brought into operation. Galena has been found on the Nigadoo river, the north branch of the Elm Tree river and in Rocky Brook, at all of these places some work, chiefly of a prospecting character, has been done. The ore is said to be of good quality. Gold in small



Centreville, Carleton County, N. B. A Farming Centre.



quantities has been found on the Nepisiguit river near Grand Falls. At New Bandon, on the Bay Chaleur, there are veins of coal of some importance, the seam being 18 inches. These are on the shore and there is reason to hope that the vein when followed up will show better results. On Miscou island there is a large peat bog, which covers fully one-half the island. There is a bog of the same kind on Shippegan island with an area of about five square miles, and on the neck of land at the mouth of the Pokemouche river there is a large peat bog. All these in time may become commercially valuable. Freestone for building purposes and grindstones are quarried at Stonehaven and Clifton, on the Bay Chaleur, a few miles east of Bathurst. A large portion of the area of Gloucester has never been explored for mineral purposes, and therefore no adequate idea can be formed of its mineral wealth.

Agriculture is carried on successfully in this county, and more wheat is grown in it than in any other county in the province, with the exception of Kent. In the year 1900, 96,161 bushels of wheat were grown, the average production being 18 bushels to the acre. Gloucester in the same year produced 309,900 bushels of oats, 11,030 bushels of barley, 31,172 bushels of buckwheat, 511,860 bushels of potatoes and 78,386 bushels of turnips. The county contains two roller mills for the grinding of wheat, each with a capacity of 50 barrels a day. These are located at Petite Roche and Caraquet. There is a cheese factory at Bathurst which in the year 1900 produced upwards of 1,500 pounds of cheese. Agriculture is receiving more attention in this county than it did formerly and the results are very satisfactory. Gloucester contains five agricultural societies with a total membership of 424 and two dairy associations.

The county of Gloucester is traversed by the Inter-colonial railway, which crosses it from north to south and by the Caraquet and Gulf Shore railways which extend to Shippegan and Tracadie. These railways give ready access to its splendid sporting resorts. Some of the rivers of Gloucester are unsurpassed as resorts for the angler, and the Nepisiguit has long been known as one of the finest salmon rivers in America. The Tracadie, Pokemouche and Caraquet are splendid trout streams. No county in the province surpasses Gloucester in the matter of feathered game, its woods teem with partridges and along its coast line myriads of geese, brant and duck are found, while the lowlands and marshes afford fine snipe shooting.

The county of Gloucester contains a large area of fine farming land. In the northern portion, which is occupied by the silurian strata, the surface is undulating and the soil deep with beds of clay in places. Intervales and terraces of greater or less width affording excellent soil, skirt all the larger rivers. The carboniferous portion of the county consists mainly of good land, which is described as a deep, fertile soil. This is especially the case with the land along the rivers and the coast, which is better drained than that of the interior.

The population of Gloucester at the last census, was 27,935.

There are many fine water powers in Gloucester county. The Grand Falls of Nepisiguit river are 76 feet in height, and it is estimated by competent authorities would give a water power of 20,000 horses. At the Papineau Falls on the same river, nine miles from Bathurst, there is a power of 3,000 horses, and on rough water, two and a half miles from Bathurst, there is also a 3,000 horse power. The Teteagouche Falls, nine

miles from Bathurst, which are 55 feet in height, are estimated at 3,000 horse power. Twelve miles from Bathurst there is a fall of 75 feet on the Nigadoo river, which gives a fine power. On the Middle and Little rivers near Bathurst, there are two powers of 500 horses each. On the Caraquet river by damming, a power of 1,000 to 1,500 horses could be obtained.

Moose are very plentiful in Gloucester county, so much so that they sometimes get into the farmers' fields. Deer are also very abundant. The head of the Nepisiguit is one of the greatest game countries in the province.

The parish of Bathurst, population 4,913, is one of the largest in the county and has an area of 548,000 acres, 55,000 of which are occupied and 16,000 are improved. The town of Bathurst, including the village, has 2,500 inhabitants. There are three saw mills in Bathurst engaged in cutting lumber and in the manufacture of boxes and shingles. Bathurst has also a cheese factory. There is excellent sea-bathing in the vicinity, and it is much resorted to in summer by visitors from Montreal and other portions of Canada. The soil about Bathurst basin is heavy and strong. At Middle river and other places the soil is lighter, but the farms are well cultivated. On both sides of the Tete-agouche the soil is heavier and the ground more rugged. There are excellent farms there especially in a settlement called Rosehill on the south side of the river. In the vicinity of Bathurst village hops are extensively cultivated. All around the shore a great deal of salmon fishing is carried on. Bathurst town contains three churches, Roman Catholic, Church of England and Methodist. The Roman Catholic church is one of the finest ecclesiastical buildings in the province. Bathurst

village contains a Roman Catholic and Presbyterian church.

The parish of Beresford, which is situated to the north of Bathurst and on the coast of the Bay Chaleur, has an area of 100,000 acres, of which 55,000 are occupied and 18,000 are improved. This parish comprises the settlements of Belledune, Petite Roche and St. Therese, the two first on the Bay Chaleur and the last named, an inland settlement. The land of this parish is a nice light loam, well adapted for roots and grain. At St. Therese the land is somewhat heavier. There is fine salmon fishing on this coast. In the official returns of 1899, the fisheries of Beresford and part of Bathurst are lumped together so that it is impossible to separate them. They employed 400 boats and 800 men and the value of the fish caught was \$134,255. Population 4,457.

The parish of New Bandon has an area of 131,000 acres, 35,000 of which are occupied and 10,000 are improved. This parish includes the settlements of Clifton, Stonehaven, Grand Anse and Mizonette; the three first are on the shore and Mizonette is in the interior. The soil along the shore is a heavy clay and is quite productive and the farmers are all rich. There is also some salmon and lobster fishing carried on in this parish. The chief industry, however, is in grindstones. There are two large establishments at which grindstones are made, at Clifton and Stonehaven, employing about 90 men. They are mostly shipped to the United States and to Montreal. There are two or three portable mills in the parish cutting lumber. Grand Anse is a good farming country and some cod-fishing is done. Mizonette is a small settlement composed mostly of fishermen. New Bandon facing Caraquet is noted

for its oyster beds; the people of the parish devote themselves mostly to cod-fishing and oyster cultivation. The land in this settlement is dry and poor. Population 2,571.

Pacquetville is a new parish composed of the upper end of old Caraquet, its chief settlements being Barnesville and Pacquetville. It contains an area of 23,000 acres of which 15,000 acres are occupied and 6,000 are improved. This is a nice farming country, the soil is light but responsive; originally it was covered with large pine trees and some spruce. Population 1,341.

Caraquet, which lies along the coast of the Bay Chaleur has an area of 50,000 acres of which 35,000 are occupied and 10,000 improved. This is the largest deep sea fishing district in the Maritime Provinces, and every Monday morning more than one hundred fishing schooners can be seen there going out to sea to the fisheries. The fishing vessels of Caraquet range from ten to twenty-five tons, some of them going up to forty and forty-five tons. In addition to these vessels which are manned by 500 men, there are 550 boats employed in the fisheries of Caraquet, New Bandon and part of Bathurst. These fisheries employ altogether 1,650 men. The principal fish caught are codfish, the export of codfish alone amounting to upwards of \$600,000 a year. The codfish is of the very finest quality in consequence of the excellent manner in which it is cured and it finds a market in southern Europe. Lobster packing is also carried on in Caraquet. The soil of this parish is a light sandy loam but very productive. The fishermen are very independent and well-to-do. The oyster fishing which was at one time very important has now diminished in value. Caraquet is a pretty town

which extends for a couple of miles along the Bay Chaleur. It contains a very large Roman Catholic church, built of stone and also a college, which is conducted by the Eudist Fathers. There are four great fishing firms doing business at Caraquet which export fish, three of them are known as Jersey houses and the other is owned by natives of the county. The Bay of Caraquet is a beautiful harbor with abundance of water. The population of the parish is 4,074.

The parish of Shippegan is composed of Shippegan mainland, Shippegan island and Miscou island. It has an area of 71,000 acres of which 35,000 are occupied and 8,000 are improved. Miscou is a small island composed mostly of rugged land and not much farming is carried on; the principal business is lobster fishing. Shippegan Island has also lobster canneries, but a good deal of other fishing is done, there being about 90 fishing boats owned in the island. The land of the island is a good farming district and the people are well-to-do. The soil of Shippegan mainland is poor and very little farming is done, the people being engaged in the lobster and cod fisheries. The fisheries of Shippegan and Miscou islands amounted to \$234,215 in 1899 and employed 61 vessels, and 440 boats manned by 1,080 men. Among the fish produced were 356,000 cans of lobsters, 20,500 cwt. of dried codfish, 1,600 cwt. of dried hake, 12,000 pounds of halibut, 225,000 pounds of smelts and 6,000 gallons of fish oil. In Shippegan island there is a Roman Catholic church which cost \$30,000; the island contains about 1,500 inhabitants. The parish of Shippegan has 3,786 inhabitants.

The parish of Inkerman lies to the south of Caraquet. It has an area of 90,000 acres of which 25,000 acres are occupied and 10,000 are improved. This par-

ish includes Pokemouche island at which place one firm is canning 100 barrels of clams a day. Inkerman is one of the finest farming parishes in the county. Pokemouche island is a good farming district with a light but good soil; on the mainland the soil is heavier. On the shores of Pokemouche island there is a good deal of salmon and lobster fishing and canning is carried on on a large scale. Population of the parish 2,421.

St. Isidore is a new parish and forms the rear of Saumarez. It has an area of 82,000 acres of which 15,000 are occupied and 5,000 are improved. It is a very good farming country mostly hardwood land, maple being found to a large extent. A good deal of lumber is cut in the parish for the Tracadie mills. Population 1,087.

The parish of Saumarez has an area of 100,000 acres of which 31,000 are occupied and 10,000 are improved. This parish has an extensive coast line and fishing is carried on to a considerable extent. The residents of the parish are mainly farmers. The land along the shore is not of the best quality, but in the interior the soil is rich and the farmers are well off. There are two large saw mills in the parish, one of them being one of the largest in the Maritime Provinces, with an output of 10,000,000 feet of lumber a year. There are a considerable number of lobster factories in Tracadie and smelts are caught in large numbers. The Lazaretto, in which a number of unfortunate persons afflicted with leprosy are kept, is situated in the town of Tracadie. This institution is supported by the Dominion government. Population of the parish 3,286.

RESTIGOUCHE.

The county of Restigouche is second only to Northumberland in extent. It has an area of 2,072,710 acres of which 229,120 are granted and 1,843,590 still remain the property of the province. This county occupies the most northerly portion of New Brunswick, being bounded by the province of Quebec and by the Bay Chaleur. A great part of it is comparatively little known and is still an almost unexplored wilderness. It is the great game county of the province and the western portion of Restigouche is looked upon as the paradise of the moose hunter. Caribou and deer are also abundant in that region. The county is traversed by the Restigouche river, which for a part of its course forms the boundary between it and the province of Quebec. The whole county is well wooded, it has a region of high land, the hills sometimes rising almost to the dignity of mountains, and it contains vast areas of agricultural soil, which, when it has better means of communication, will become a great farming region. The population of the county at the census of 1901 was 10,586. In the year 1900 Restigouche produced 15,222 bushels of wheat, the average crop being 19 bushels to the acre, 165,563 bushels of oats, 38,053 bushels of barley, 18,186 bushels buckwheat, 138,028 bushels of potatoes and 30,221 bushels of turnips. There is one roller mill in the county for the grinding of wheat situated at Campbellton, with a capacity of 50 barrels a day.

A large part of Restigouche is a table-land varying in elevation from 800 to 900 feet above the sea level, the height increasing northwards. Tracts of level land are found between the river valleys, and the soil there is deep, free from stones, and fertile. This portion of Restigouche will presently be opened up by the con-

struction of the railway from Campbellton to the St. John river in the vicinity of Grand Falls.

The mineral resources of Restigouche have hardly been ascertained. It will take much exploration to determine what mineral treasures are hidden in the vast untrodden wilderness, through which the Restigouche river flows.

The forest wealth of Restigouche is very large and is becoming more fully developed year by year. During the year 1900 about 45,000,000 superficial feet of spruce deals and scantling were exported from the ports of Dalhousie and Campbellton.

The county of Restigouche is traversed by the Intercolonial railway, giving it excellent facilities for communicating with the outside world.

The fisheries of Dalhousie are of considerable value, their total yield during the year 1899 being \$76,095. The principal fish caught were salmon, lobsters, trout, smelts, flounders and tomcods. These fisheries employed one vessel and 226 boats manned by 405 men.

The parish of Dalhousie, population 2,183 which contains the shiretown of the same name, has an area of 40,000 acres, all of which are occupied and 10,000 of which are improved. The principal farming districts of this parish are along the Restigouche river and in the settlement of Dundee, which lies in the rear of Dalhousie. The soil is a rich loam of excellent quality. Dalhousie has a frontage of about 15 miles along the Restigouche river. Much of its area is on the granite formation, but a small portion of it belongs to the carboniferous formation. The land in places is hilly, rising to a height of 750 feet behind the town of Dalhousie. The town of Dalhousie has a population of 1,000 and

contains three churches, Roman Catholic, Presbyterian and Church of England. It is the centre of a large lumber industry, there being three saw mills in the town and also fish canning establishments. Dalhousie does a large shipping trade, the value of its foreign exports during the year 1890 being \$663,979, of which the largest output consisted of lumber. These figures include the exports of Campbellton which is an outport of Dalhousie and which contributed about one half the amount. The harbor is one of the best in the Dominion and ships of any size can enter it. Dalhousie is famed as a summer resort. It contains one bank, a branch of the Royal Bank of Canada. During the season of open navigation, Dalhousie has a steamboat service twice a week with Gaspé and the points along the northern shore of the Bay Chaleur. There is also a daily steamboat service between Dalhousie and Campbellton and a steamer makes three trips a day between Dalhousie and the Quebec side of the river. Dalhousie is connected with the Intercolonial by a branch line.

The parish of Addington, population 3,577, lies to the west of Dalhousie and has a frontage of 10 miles on the Restigouche river. It has an area of 175,000 acres of which 30,000 are occupied and 8,000 are improved. The Upsalquitch river, a tributary of the Restigouche, flows through the parish. A narrow strip along the front, on the Restigouche river is granite, the remainder is silurian. Between the highlands of the river are broad intervalles. In some places the hills in the granite area rise to a considerable elevation, at Squaw Mountain 2,000 feet, Slate Mountain 2,000 feet and Sugar Loaf Mountain 950 feet. This last named mountain lies right behind Campbellton, which is in the parish. Campbellton is a thriving town of 2,000 inhabitants.

It is incorporated and has a fine water and sewerage system and also electric lighting. It has six churches, Roman Catholic, Church of England, Presbyterian, Methodist, Baptist and Salvation Army. It contains many fine business establishments and has two banks. There are four saw mills in Campbellton, which employ altogether about 300 men, also a carding mill and an iron foundry. Campbellton also has a telephone system.

The parish of Eldon lies to the west of Campbellton and has an area of 1,050,000 acres of which 5,000 are occupied and 1,000 are improved. This is a vast undeveloped region which awaits the settler. The Upsalquitch river flows through the parish for part of its course. This river is settled about two miles above its juncture with the Restigouche. The land in the eastern part of Eldon is broken and hilly; the western part contains the table-land of the interior and is very fertile, being a continuation of the fertile belt of the Aroostook river region. The parish of Eldon is covered with a very heavy growth of birch, maple, beech and fir. It would afford means of support for 10,000 settlers. There is a great deal of white birch suitable for spool wood in some portions of it. The rivers of this region are noted for their salmon and trout fishing. This is the greatest game parish of the county and indeed of the province. Some portions of it have hardly been explored. Population 457.

The parish of Balmoral lies in the rear of Dalhousie. It contains an area of 307,000 acres of which 10,000 are occupied and 5,000 are improved. This parish is traversed by the upper waters of the Upsalquitch river and its branches. It is a new parish, but is becoming fairly well settled. It was originally settled about thirty years ago by immigrants from England,

most of whom had no knowledge whatever of agriculture and the consequence was that they became discouraged and most of them left. Only about three families of the original settlers remained, but their places have been taken by natives of the other portions of the county and of the neighboring county of Gloucester. The land of this parish is good, but elevated. Population 1,088.

The parish of Colborne has a frontage of 10 miles on the Bay Chaleur. It has an area of 200,000 acres of which 20,000 are occupied and 8,000 are improved. There is a belt of granite along the coast, but most of its soil is silurian. It is well wooded with mixed timber. The land is exceptionally level and the soil is good. Indeed it is regarded as the banner agricultural parish of the county. The land is a clay loam and is kept in heart by the deposits taken from the kelp on the beaches. Its farms are fine and its people are well-to-do. Most of the settlers are Scotch. Charlo in the parish is becoming celebrated as a watering place. Population 1,072.

The parish of Durham lies east of Colborne and extends along the Bay Chaleur. It has an area of 2000,00 acres of which 35,000 are occupied and 10,000 are improved. The soil of Durham is similar to that of Colborne and it has the same facilities for obtaining manure. In the parish are several well known summer resorts, the principal one being at Jacquet river. The principal streams of Durham are the Louisa, Jacquet and Belledune. Fishing is carried on to a considerable extent in this parish. Population numbers 2,209.

The great falls of the Upsalquitch, which are not more than 18 miles from Campbellton would give an immense water power, estimated at 15,000 horse power. A head of 25 feet could be obtained there.

ESTIMATED CONTENTS OF COUNTIES IN THE PROVINCE OF NEW
BRUNSWICK, NUMBER OF ACRES GRANTED AND LOCATED
AND NUMBER OF ACRES VACANT.

County.	Contents compiled by T. G. Loggie from his map of N. B.	Granted and Located (estimated).	Vacant (estimated).
	Acres.	Acres.	Acres.
Restigouche.	2,072,710	229,120	1,843,590
Gloucester.	1,195,000	488,643	706,357
Northumberland.	2,756,000	1,112,293	1,643,707
Kent.	1,149,000	589,179	559,821
Westmorland.	887,300	711,670	175,630
Albert.	435,000	378,410	56,590
St. John.	386,400	351,103	35,297
Charlotte.	822,500	430,694	391,806
Kings.	877,300	763,088	111,212
Queens.	924,700	634,485	290,215
Sunbury.	686,000	446,619	239,381
York.	2,278,600	1,422,279	856,321
Carleton.	788,200	718,400	69,800
Victoria.	1,324,200	1,236,533	87,667
Madawaska.	810,500	683,671	126,829
	17,393,410	10,199,187	7,194,123

Considerable of the land formerly located is now vacant and the total vacant Crown Lands may be now put at nearly 8,000,000 acres.

CHAPTER VI.

Religions — Education — Newspapers — The Judiciary — Transfer of Farm Titles — Militia.

RELIGIONS.

There is no state church in New Brunswick; all religions stand upon the same footing and enjoy the same rights. New Brunswick abounds in churches, there being about a thousand places of worship in the province. The Roman Catholics number about one-third of the inhabitants of New Brunswick. The adherents of this church are most numerous in the northern counties such as Gloucester, Kent, Northumberland, Restigouche and Westmorland, where there is a large French population. About three-quarters of the Roman Catholics of New Brunswick live in these counties. In the counties through which the St. John river flows, with the exception of St. John and Madawaska, there are but few Roman Catholics, and in the county of Charlotte they do not form more than one-eighth of the population.

Next to the Roman Catholics in numbers, are the Baptists, of whom there are upwards of 80,000 in the province, two-thirds of them being Calvinistic Baptists; the Freewill Baptists number somewhat less than half as many as the Calvinistic Baptists.

The adherents of the Church of England and the Presbyterians are almost equal in point of numbers

each having about one-eighth of the population of the province.

The Methodists are somewhat less numerous than the Presbyterians. There are a few Congregationalists and a number of other smaller bodies including the Salvation Army.

The people of New Brunswick are eminently a church-going people and support their churches well. The Roman Catholic church in New Brunswick is divided into two dioceses, each under the jurisdiction of a bishop. The Church of England in New Brunswick forms one diocese, with a resident bishop.

EDUCATION.

New Brunswick has an admirable system of education, which has been in operation for about 30 years. It comprises common schools, superior schools, grammar schools and a Normal school, and a university which is maintained by the provincial government. The theory upon which the system of education is based is that the property of the country shall pay for educating the children of the country. This is a system which is now becoming generally accepted, and which is intended to insure a good English education to every child. The lowest grades of schools under this system are denominated common schools and they form the basis of the education of the people. A great majority of the people of New Brunswick never go beyond them, but the teaching given is sufficient for all practical purposes, embracing as it does a knowledge of the English branches, arithmetic, history and other studies. There are about 1,700 common schools in New Brunswick, the province being divided into school districts of suffi-

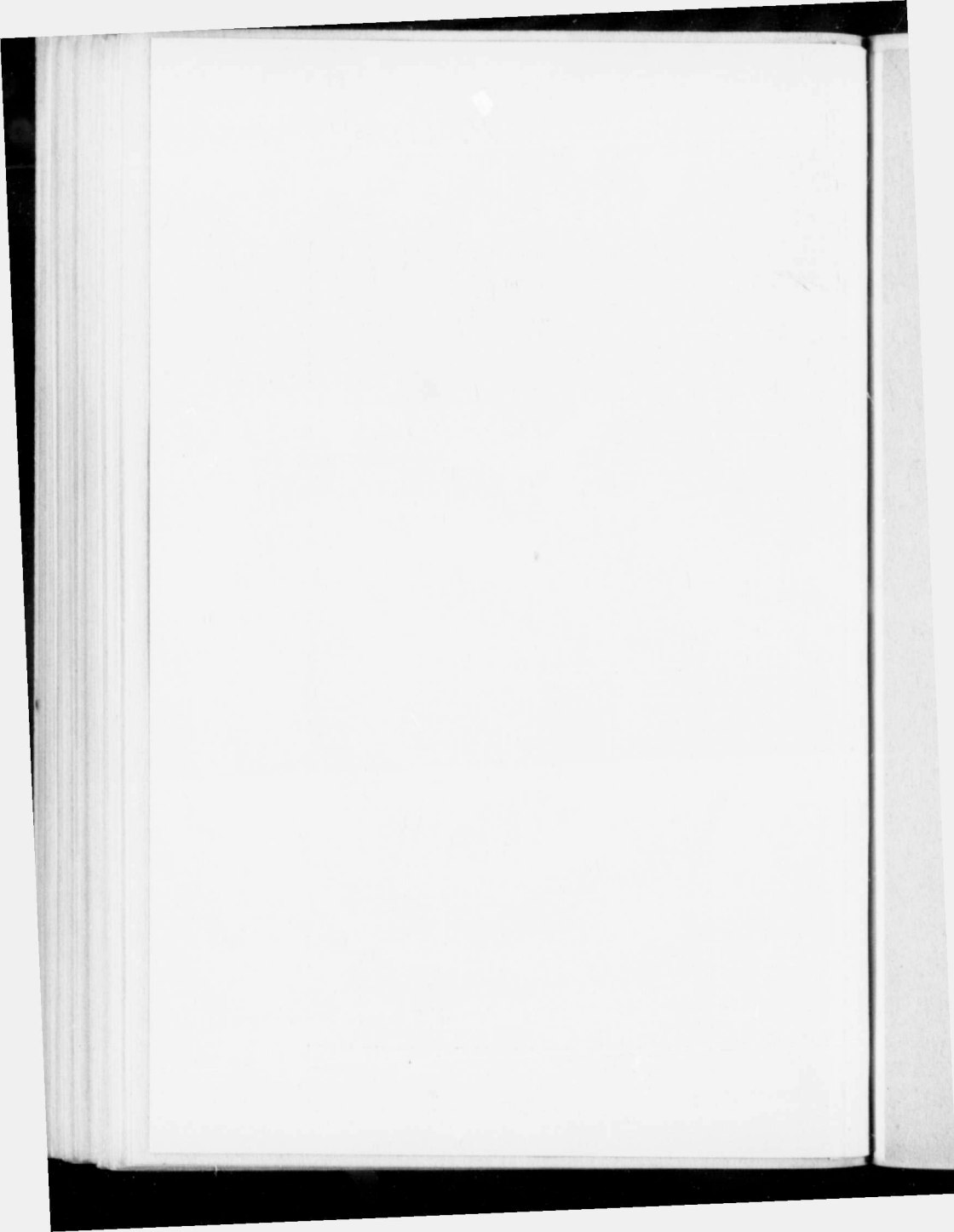
cient size to enable every child to reach a school without having to go too great a distance.

Above the common schools in the character of their studies, are what are termed Superior Schools, which are established on the basis that there shall be one for every 6,000 inhabitants. Of a still higher grade are the grammar or classical schools, there being provision made for one in every county of the province. At Fredericton a Normal Training and Model school is maintained, where teachers are taught the theory and practice of teaching, and from which they graduate with first, second or third class licenses according to their ability and educational acquirements.

The salaries of school teachers are derived from three sources, first, the provincial treasury, second, the county school fund, the third, district assessment. The allowance from the provincial treasury is for male teachers of the first class, \$135, for female teachers of the first class, \$100, for male teachers of the second class, \$108 and for female teachers of the second class \$81; for third class male teachers \$81 and for third class female teachers, \$63. The county school fund is a tax which is levied in every county at the same time when the assessment for county and parish rates is usually ordered, and it consists of an amount equal to 30 cents for every inhabitant of the county with 10 per cent added for probable loss and expenses of disbursing. Any sum required for the payment of the teachers' salaries over and above the sums provided by the provincial treasury and the county school fund, or any sums required for other school purposes during the year, are obtained by assessment on the school district, the amount to be determined at a meeting of the rate-payers. Three school trustees are elected in every dis-



Milch Cows on pasture farm of Mr. H. T. Hays. Sussex, N. B.



trict, one of whom retires annually but is eligible for re-election.

The schools are subject to the supervision of inspectors appointed by the Board of Education, and of the general superintendent of the board. The Board of Education for the province consists of the lieutenant governor, the members of the executive council, the chancellor of the University of New Brunswick and the chief superintendent of education, and it is endowed with ample powers.

The teachers of superior schools have an annual allowance from the government of \$250, and the teachers of grammar schools an annual allowance of \$350. The University of New Brunswick receives a grant of \$8,800 annually from the provincial treasury in addition to the revenues of certain lands given to the university by the province when it was first founded.

The University of New Brunswick is located at Fredericton and it has an efficient staff of professors. Its curriculum embraces not only classics and mathematics, but also those scientific studies, which are becoming so great a feature of modern universities. The latest addition to its equipment is a science building, which was opened for the first time last year. The fees at the University of New Brunswick are low, so that the advantages of this college are open to persons of very moderate means. There are also numerous scholarships, one of which a clever student can always obtain. The term is four years and the degrees granted in course are Bachelor and Master of Arts, Bachelor and Master of Science, Bachelor and Master of Engineering, Doctor of Philosophy, Doctor of Science and Bachelor and Doctor of Civil Law.

In addition to the schools that are under government control, there are a number of private institutions

of learning in the province. The Methodists have a highly flourishing university at Sackville, called the University of Mount Allison, which has the power of granting degrees. There is also a male and female academy which are largely attended.

The Roman Catholics have at Memramcook a fine college and academy in which French and English speaking pupils are taught. This college, which is entitled the University of St. Joseph's; grants degrees in the arts, science and literature.

There is also a Roman Catholic college at Caraquet in the county of Gloucester, at which a large number of pupils get an education.

NEWSPAPERS.

New Brunswick is well supplied with newspapers, there being no less than nine daily papers published in the province besides numerous weeklies; of these, five dailies are published in the city of St. John, two in the morning and three in the afternoon. Two dailies are published in the city of Fredericton and two in the city of Moncton. Weekly papers are published in Woodstock, St. Andrews, St. Stephen, Sussex, Gagetown, Sackville, Shediac, Richibucto, Chatham, Newcastle, Bathurst, Campbellton and Hartland. There are also several weekly papers published in St. John and Fredericton. All the dailies in the province have weekly or semi-weekly editions. There are semi-weekly papers published at Chatham, and Sackville which have a weekly edition. There are two Catholic newspapers published in New Brunswick, both of them in St. John. Two of the weeklies published in the province are in the French language. There are also two Baptist newspapers published, one by the Calvinistic and the other by the Free-

will Baptists. All these papers are generally well conducted and are largely circulated. The people of the province are great readers of the newspapers and there is no home in the province at which one or more papers is not taken.

THE JUDICIARY.

The laws of New Brunswick are founded on the English common law, and the same basis of jurisprudence prevails in the province that exists in England. Each province in Canada makes its own laws relative to the rights of property and other civil matters. Laws relating to bankruptcy and the criminal law are within the jurisdiction of the Dominion Parliament. The judges, however, under the terms of the British North America Act, are appointed and paid by the government of Canada, and the Supreme Court of Canada is a court of appeal for all the provinces. Persons desirous of carrying their appeals to a still higher court can go to the judicial committee of the privy council in England, but this court is seldom resorted to. The supreme court of New Brunswick consists of six judges, one of whom is entitled the judge in equity and does not go on circuit. All the judges, however, have jurisdiction in equity as well as in common law. The supreme court sits at Fredericton four times a year *en banc*, and there are circuits held in each county two, three and, in some cases, four times a year for the trial of cases at *nisi prius*. Below the supreme court are the county courts, which have jurisdiction in civil suits up to \$400 and in criminal cases in all kinds of crimes except murder. There are six county court judges. A great deal of the business which was formerly done by the supreme court

is now dealt with by these county courts. There always have been magistrates courts in the province for the trial of small cases, but at the last session of the legislature an act was passed establishing district courts in each parish. This act has not yet gone into force, but is to be brought into operation by proclamation at an early date. In the city of St. John and in Fredericton the police magistrate has jurisdiction in civil suits up to the sum of \$80 and most small cases are disposed of in this court.

TRANSFER OF LAND TITLES.

Most of the land in New Brunswick is held in fee simple, the number of persons who are tenants except in the cities, being quite small. Nearly every man owns his own farm and there is no reason why any man who is industrious and careful should be the tenant of another man. Land is transferred by deed and the deeds are recorded in the registry office of the county in which the land is situated. A movement is on foot to adopt what is called the Torrens system of land transfer, the one which prevails in Australia. This system will no doubt be adopted in this province shortly, and the difficulty of searching land titles will be avoided. Even under the existing system, the transfer of land and the hunting up of land titles is much easier than it is in the United Kingdom. The books of the county registrar afford the means of verifying land titles at comparatively little cost.

MILITIA.

The government of Canada has control of the militia of the provinces including New Brunswick. The

active militia of Canada numbers nearly 40,000 men, who enlist for three years in their respective corps and receive a certain number of days' training each year. All the militia of Canada are obtained by voluntary enlistment, although in the case of a deficiency in the number, the government is authorized to raise by conscription. This, however, has never been done, there always being far more young men desirous of entering the militia than the number required. The militia of New Brunswick consists of five regiments of infantry, 62nd, 67th, 71st, 73rd, and 74th; one regiment of garrison artillery, the 3rd; one regiment of cavalry, the 8th Hussars, and two battalions of field artillery, which are stationed respectively at Newcastle and Woodstock. There is also at Fredericton a military school for the training of officers. This school consists of a company of one hundred men, who are placed on the same footing as regular soldiers and under the same regulations. They form a part of what is called the permanent force of Canada, which comprises infantry, artillery and cavalry. The province of New Brunswick contributed a considerable contingent to the troops in South Africa, most of them being drawn from the militia.

CHAPTER VII.

The Forest — Game — Who Should Come to New Brunswick — How to Get a Free Farm — An English Immigrant's Opinion.

THE FOREST.

When New Brunswick was first discovered, its whole area was covered with a magnificent unbroken forest, for the Indians who inhabited it had not engaged in agriculture to any considerable extent, and had made no clearings worth mentioning. Major Robinson who made the first survey for the Intercolonial railway, was profoundly impressed with the magnificence of the forests of New Brunswick and stated in his report that there was no country in the world so magnificently wooded and watered. Since then the forests have been largely drawn upon for commercial purposes, but they still remain a source of great wealth to the province, and bid fair to continue so for centuries to come. While the consumption of wood in New Brunswick is large from year to year, its growth is large also, and with judicious management there seems no reason to believe that the forests of New Brunswick will ever be exhausted. The principal exports of New Brunswick consist of products of the forest and in the year 1900, the last for which we have complete returns, they amounted to the sum of \$6,706,339 of which \$4,677,317

went to Great Britain and \$1,677,345 went to the United States.

The most important wood in New Brunswick from a commercial standpoint, is the Black Spruce, of which there are immense forests throughout the province. Black spruce attains a height of from 60 to 80 feet and a diameter of from 18 to 30 inches. It is largely used for building purposes and was formerly much used in ship-building when that industry was flourishing in the province. It is much more used for all domestic purposes than any other wood, it being strong, light and elastic. Most of the spruce cut in New Brunswick is sawn into deals which are generally three inches thick and seven, nine and 11 inches in width, and which are exported to Great Britain. The extent of the spruce trade may be estimated from the fact that in the year 1900 there were shipped from New Brunswick ports 489,089,148 superficial feet of deals, scantlings, boards, etc., nearly all of which was spruce. This large consumption of spruce has sometimes made people fear that the forests would in the course of time be exhausted, but spruce grows with such rapidity that it seems quite impossible that the supply will ever be seriously diminished. Spruce is admitted to be the best wood for the manufacture of paper pulp. Spruce is in fact a weed in New Brunswick and any pasture that is left without attention for a few years will speedily come up in spruce and fir, and in the course of time, resume its original condition of a forest.

White spruce is a variety of the spruce tree which is not so abundant as black spruce and not so highly esteemed. It grows mostly in moist land, but where it abounds, it is an indication that the soil is strong and of a good quality. It is cut into deals and boards the same as black spruce.

The fir tree is very abundant in New Brunswick and it generally grows on soil that is well adapted for agricultural purposes. It frequently happens that land formerly covered with hard wood when allowed to relapse into forest, produces fir in great abundance. The wood is very durable when kept wet or dry, and is used by coopers in the manufacture of tubs, buckets, barrels and other similar utensils, and when of sufficient size, it is sometimes sawn into deals and boards.

The hemlock is a species of evergreen generally found mixed with rock maple, spruce, yellow birch and beech. It requires a moist, heavy soil. It is a firm coarse-grained wood and very durable when kept under water or kept thoroughly dry. Hemlock is widely diffused and is found in abundance in many parts of the province. Its bark is valuable for tanning purposes and in the year 1900 \$30,594 worth of it was exported from this province to the United States in addition to \$64,405 worth of extract of hemlock bark which went to Great Britain. Hemlock is much used for boards and is made into packing cases and is also used for fencing.

The white pine is the largest and loftiest tree grown in New Brunswick, frequently acquiring a height of 160 feet and a diameter of four feet. The wood was formerly very much used in New Brunswick both for domestic purposes and for export, it being very abundant, but in recent years white pine has become scarce. Formerly many thousands of tons of white pine timber were annually exported to the United Kingdom. It is mostly used for the finishing of the interiors of houses and edifices of every description. Wherever this species of pine abounds, the soil is generally sandy. Unlike the spruce it does not readily grow again on the soil on

which it formerly stood. The once extensive white pine forests of New Brunswick have largely disappeared, and have been replaced by spruce and other woods.

Red pine is a variety of this tree. It is highly impregnated with resinous matter and is very durable. It does not attain to as large a size as white pine but is a valuable wood for many purposes. It is a rapid growing tree and there are many extensive groves of it throughout the province.

Hacmatac is the name which is given to a widely diffused tree in New Brunswick, which resembles the European larch. It grows in various kinds of soil, but never attains perfection on very high land, the lower and more swampy the soil, the better is the quality of the timber. Its diameter seldom exceeds two feet, but in groves it attains a very great height. This wood is of great value for ship-building, railway sleepers, mill machinery and other similar purposes in places where it is likely to become both wet and dry. The wood is hard, although recognized among the soft woods.

Cedar is quite abundant in many parts of New Brunswick. It grows mostly in low swampy land. The timber is light and durable, soft, fine-grained and easily wrought. Cedar trees attain a diameter of two feet, but twenty inches is about the average. It is the most durable wood found in New Brunswick, being indestructible by the weather and enduring all kinds of changes for many years. For this reason it is largely used for shingles for the roofs of buildings, and there are many buildings in the province which were covered with this wood 30 and 40 years ago which are still in a good condition. It is also used for railway ties and sleepers, bridge piers and telegraph poles. A species of cedar is also used for hedges as it is a rapid growing tree.

There are several species and varieties of the birch known as the black birch, the yellow birch, the white birch and the grey birch.

Black birch was much used in ship-building, for which it is admirably adapted, being a strong, close grained and durable wood. The cabinet makers use it in the construction of tables, bedsteads and various kinds of furniture. It is a large tree frequently attaining to the size of four feet in diameter. It is found most plentifully in a damp alluvial soil and its presence indicates good land. A considerable amount of birch is made into what is called ton timber and is exported to England. The market for this species of wood is, however, quite limited. There is no doubt a great future for the birch forests of the province for the manufacture of furniture.

Yellow birch is similar in most respects to black birch, and is used for the same purposes, its timber is very valuable and it is very durable under water.

The white birch, to which the canoe birch is near akin, generally grows in poor dry soils, but in some places where it thrives, the land is productive, and in many spots along the margins of the Straits of Northumberland and near the rivers emptying therein the white birch is met with in large groves interspersed with spruce, fir, pine and other soft woods. It generally is long and slender, often reaching a height of 50 or 60 feet with a diameter of less than a foot at the base. The canoe birch, however, sometimes attains a height of 80 feet and a diameter of 2 feet at the butt. The wood of the white birch is not strong or durable, but being of fine grain and light, it is much used in the manufacture of showcases, spools, bobbins, chairs and wooden dishes. It is from the bark of the canoe birch

that the Indians make their canoes. The best charcoal is made from the white birch. The wood of the white birch is well adapted for many domestic purposes, where a fine-grained easily worked wood is required, and no better can be found for the manufacture of boxes than this wood.

There are three kinds of beech trees in New Brunswick, the common beech, the white beech and the red beech, and it is very abundant all over the province. Ridges covered chiefly with the growth of this tree are found in many places extending for several miles. The beech frequently attains a height of 60 feet and a diameter at the butt of upwards of two feet. The soils on which beech grows abundantly are generally looked upon as inferior for agricultural purposes. The beech produces at intervals of three and four years, large quantities of nuts, which formerly were used for feeding pigs in the same manner as acorns were used in the forests of Great Britain. The timber of beech is close grained, heavy and durable when kept under water or dry. The wood of the white beech is largely used for the manufacture of staves and there is no wood of American growth, which when dressed properly, has so smooth and glossy a surface. It makes excellent tool handles, shoe lathes and mallets.

The red beech is very durable, and is much used for the manufacture of ploughs, harrows and other farm utensils. There is no doubt that the uses to which beech is put might be greatly increased, and its abundance in the province points it out as a future source of wealth.

There are several species of the maple in New Brunswick, the principal being, the rock maple, white maple, red maple and moosewood.

The rock maple of which the hard maple, curly and bird's-eye maple are varieties, is found in great abundance throughout the province. It is highly saccharined. This maple is one of the most valuable of the indigenous trees of North America. The soils most suitable for its healthy growth are the alluvial meadow lands along the margins of rivers, and on the gentle slope of hills. It is seldom found growing thriftily either in swamps or on top of high elevations. The maple when well seasoned, is capable of resisting great pressure and when not exposed to moisture is very durable. The most important uses to which it is applied are the manufacture of furniture and the making of sugar. The beautiful varieties which its surface presents when dressed by the cabinet maker, render it highly valuable to him; when polished it has a satin-like surface. The curls, dots and bird's-eyes in it render it superior in beauty to mahogany and many other expensive woods now in general use. The sap of the rock maple is used in the manufacture of maple sugar, and when properly manufactured, this sugar is very delicious and commands a high price. Land upon which rock maple grows is also valuable for agricultural purposes, especially for hay, the soil being generally of a damp, rich black color and highly alluvial.

The white maple grows generally on flat, swampy land, although it is sometimes found in dry soils, but seldom of a large size. In situations favorable to its growth it attains a greater height than the rock maple, although it is not so large in diameter. The wood is very light, elastic and flexible, yet it possesses great strength and is largely employed in the manufacture of agricultural implements. The bark was formerly used in the manufacture of ink and when mixed with copper-as a good black dye was produced.

The Red Maple is similar in many respects to the white maple and grows in similar situations, preferring moist ground. The presence of this maple is no indication of the quality of the soil except when it grows very large. The wood of the red maple is employed for poles, fuel and all domestic purposes and the saplings make good hoop poles. The bark mixed with alum makes a good dye. Both white and red maple are highly ornamental, and in the autumn when the frost sets in, their leaves assume all kinds of colors and shades from purple to yellow. These trees retain their foliage longer than almost any others in the forest. The ashes of the maple are used in the manufacture of soap.

Moosewood does not grow to any considerable size, seldom exceeding 20 feet in height; the timber is little used. This tree is never found in groves but is generally interspersed in the forest.

There are two species of oak in New Brunswick, the grey and the red, the principal difference being in the color. This tree frequently grows to a height of 70 or 80 feet and a diameter of three feet or upwards. The timber is heavy, porous, elastic and durable and is used for ship-building, and in the manufacture of agricultural implements. It grows most luxuriantly in damp, alluvial soils, similar to those producing the rock maple with which it is frequently found interspersed. Its presence indicates a good soil suitable for farming purposes. The supply of oak in the province is limited, so that commercially this wood is not of much value.

There are three species of ash in New Brunswick, the white, black and yellow ash.

The white ash is not found in groves, but is scattered throughout woods of rock maple, elm and

oak. It is sometimes met with in swamps, but is then of inferior growth. Wherever it is produced thriftily, the land is damp and highly productive. It often rises to a height of 60 feet with a diameter of two feet. The wood is white and very elastic, when bent it retains its shape and is much used for making staves and agricultural implements.

The black ash, like the white, requires a strong moist soil. It thrives best in groves, in flat alluvia land on the margins of brooks, and in places where the soil is damp. It attains about the same size as the white ash and is used for about the same purposes. It is a fashionable wood for bedroom furniture. As its annular rings are easily separated by percussion, it is employed in the manufacture of baskets, and the bottoms of chairs.

The yellow ash is abundant all over the province. It is found in low spots and generally in large groves. It is not much used except by coopers for hoops, for it never grows to a large size, seldom exceeding six to eight inches in diameter with a slender stem. Wherever it flourishes, the land is difficult to bring into a state of cultivation.

There are two species of elm in the province, the white and the red; both are beautifully shaped trees. The white elm often attains a height of 100 feet and grows on the intervale land along the banks of rivers and in meadows; sometimes it attains a diameter of four feet. The wood is very elastic and strong and is employed in the construction of implements of husbandry and for domestic purposes. It is somewhat coarser in its texture and more durable than the white and it grows more freely in dry elevated places.

There are several species of poplar in the province,

the white poplar, the balsam poplar and the common poplar, the white and balsam poplar are not very plentiful. The wood of both is of a light brittle nature, and they are consequently of little use except for ornamental purposes in gardens or enclosures. The common poplar is very abundant throughout the province. It grows in a variety of soil, both dry and moist. In dry situations it is generally mixed with spruce and white birch, but on moist lands it is generally found with black ash and alder and here the soil is good and adapted for tillage. It is of lofty growth, attaining a height of 50 or 60 feet with a long straight stem without limbs. It is often found two feet in diameter. The wood is of a white color and of a light, porous texture. It is much used in the construction of sleighs, waggons and other vehicles and also in the inside finishing of houses. It is also used in the manufacture of what is known as excelsior, an article used for mattress making, upholstering and packing purposes. It is also a valuable wood for pulp.

Butternut is a tree which resembles walnut. It sometimes rises to a height of 60 feet and is of proportionate diameter. The nuts which it produces are frequently used for pickles the same as walnuts. Butternut is light and of a reddish color, taking a high polish. It is used for making furniture, for wainscoting and for other purposes. The old rafters of St. Anne's Chapel, Fredericton, show the beauty of this wood when applied to architectural purposes.

Dogwood or mountain ash is a highly ornamental tree, producing red blossoms and scarlet berries. It is of little use as timber, but is much used for medicinal purposes, as its bark is regarded as a fine tonic.

There are several varieties of willow scattered over

the province, but none of them are available for any useful purposes except as ornamental trees.

The wild cherry is also found in the province and grows abundantly in all new clearings. It seldom attains to any considerable size, so that its wood is not available for any useful purposes. It produces a fruit which is not unpalatable, and which if transplanted would make good stock for grafting the finest kinds of cherry.

The choke cherry is a small shrub growing along the banks of rivers and in bogs. The berries are very astringent and are not palatable.

The hazel is to be found in considerable abundance. It generally grows on rich land, and in all parts of the province. It produces nuts that might be easily cultivated.

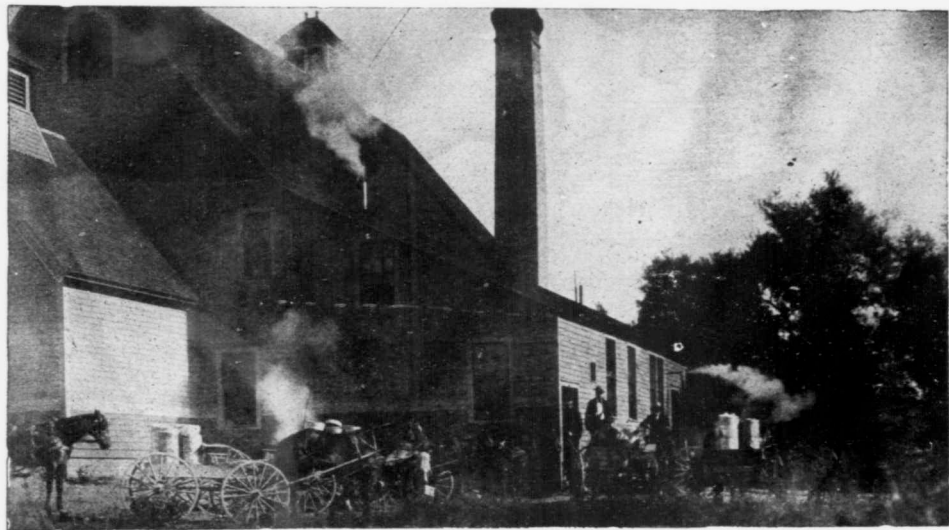
The hornbeam attains a height from 30 to 40 feet, with a corresponding diameter. It is a heavy wood and is used in the manufacture of farming implements. It requires a rich, damp soil, and its presence may be regarded as an indication of good land.

Basswood is another tree which is found in the province. Its color is pale yellow and the uses to which it is put are similar to those to which poplar is applied.

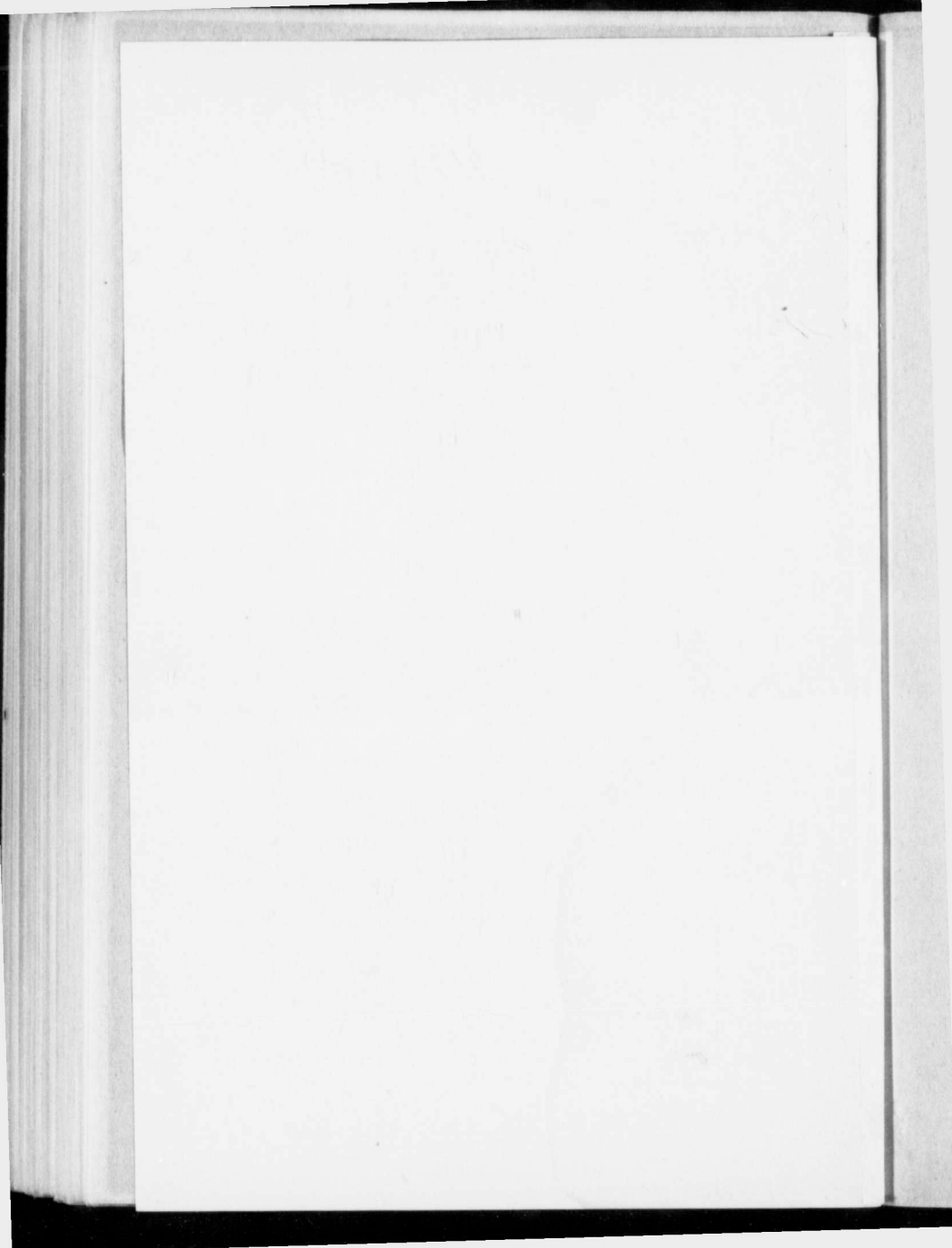
Mr. Alexander Monro in his description of the province, which was published nearly half a century ago, gives the following directions as to the choice of soils from the quality of the forests grown upon them:

First Class Soil.—This class of soil is generally wooded with oak, elm, rock maple, alder, white ash and hazel.

Second Class Soil.—This class is usually interspersed with rock maple, black birch, fir, spruce, beech and hemlock, or with black ash, hornbeam and cedar.



Provincial Dairy School, Sussex, N. B.



The third class soil produces black spruce, wild cherry and white birch.

The fourth class soil is covered with pine, haematac, spruce, white maple, swamp ash and poplar.

Mr. Monro adds:—"Notwithstanding the foregoing arrangement will be found generally correct, still a good deal depends on the thriftiness and luxuriance of the several descriptions of the trees. It will be almost universally the case that land covered with the various kinds of hardwood is richer than that producing soft wood. This arises from the nutriment and warmth afforded to the soil from the falling of leaves and other decayed matter."

GAME.

There is no country in eastern America in which game is more abundant than it is in New Brunswick. The sportsman will find in its forests and streams all that he can desire in the way of shooting or fishing, and the admirable system of communication by means of railways throughout the province enables him to reach the sporting grounds without any difficulty. New Brunswick has always been famous for its game. Away back in the period of French occupation, two hundred and fifty years ago, the great attraction of the country was the abundance of wild animals. We are told on the authority of Nicholas Denys, who wrote a book on Acadia, which was published in Paris in 1672, that as many as three thousand moose skins were brought down the St. John river each year as a product of the chase in that region. There was a time in the history of the province when owing to unlawful methods of catching moose, they became scarce, but in recent years, under the protection afforded by the laws enacted

by the provincial government, moose are now abundant, and any sportsman who goes in search of a moose, has a reasonable certainty of getting one. The area of land, which is seldom trodden by human feet, in the interior of the province, is so large that moose find there a splendid haunt, and the same is true with respect to other wild animals. The moose, however, does not always demand the recesses of the forest as his home, for it is by no means infrequent for a moose to make his appearance in the clearings, and occasionally they visit some of the oldest settlements.

The moose is the most magnificent specimen of the deer tribe, frequently attaining a height of six feet at the shoulders and a weight of 1,400 pounds. The spread of their antlers varies from 42 to 66 inches, a spread of 50 inches being considered a good one. The flesh of the moose is extremely palatable and the getting of a moose must be considered the highest achievement of sportsmanship, for the animal is extremely shy and difficult to stalk.

The caribou, which is allied to the reindeer of northern Europe, is a much smaller animal than the moose and seldom weighs more than 300 pounds. Caribou frequently go in herds of ten or twelve, and they afford excellent sport to the hunter. A large number of caribou are shot every year in the province, but they are rapidly increasing in number. The flesh of the caribou is considered very delicious.

The deer has become very abundant in New Brunswick in recent years. It attains a weight of about 200 pounds, although the average would be somewhat less. The whole region west of the river St. John abounds in deer, but they are spreading themselves rapidly all over the province. They do not by any means confine

themselves wholly to the recesses of the forest, but come out into the clearings, and it is not an unusual thing for a farmer to find a deer among his cattle. The writer in a drive up the old military road towards Temiscouta lake last summer, saw three deer in two separate groups, a single deer in a pasture about seven miles from Edmundston and two deer in an oat field about fifteen miles from Edmundston. The sportsman is always sure to bring in a good bag of deer, and that without going far to find it.

Moose are most abundant in the northern portion of the province. Caribou are to be found everywhere, while deer are most plentiful in the county of Charlotte and the whole region west of the St. John river.

New Brunswick has a large number of fur bearing animals which afford profitable sport for the hunter. Among these may be mentioned the bear, the raccoon, the wolverine, the marten, the mink, the otter, the lynx, the beaver, the musk-rat, the woodchuck, the fisher and the squirrel. The hare is also found in great numbers all over the province. This animal turns white in winter. Hares are caught in snares and form a valuable addition to the diet of settlers.

The bear is by no means a ferocious animal, but is extremely shy, and is never known to attack man, except when cornered or in defence of its young. The bear lies in a dormant state during the winter in a den and does not make his appearance again until the spring. None of the wild animals of New Brunswick are dangerous to man, but most of them are valuable for their fur. The provincial government has a fine collection of stuffed wild animals at Fredericton.

New Brunswick has deservedly a great reputation for feathered game and for fish. Wild geese are abun-

dant and there are no less than six species of wild ducks besides brant. The great haunts of wild geese and of brant are on the north shore counties, but wild duck are to be found on the rivers all over the province. There are two species of partridge although the proper designation of this bird is grouse. Curlew, plover, snipe and woodcock are also abundant and afford admirable sport. The great northern diver or loon is to be found in all the great rivers. In addition to these, there are two species of eagle, five species of hawk and four or five varieties of owls. These are but a few of the birds of New Brunswick, of which there are about two hundred species in all. The government possesses a splendid collection of them, which can be seen at Fredericton.

New Brunswick is pre-eminently the land of the angler, for nearly all its great rivers abound in game fish. The salmon, the king of sporting fish, frequents all the tributaries of the St. John below Grand Falls, such rivers as the Tobique being famed for that fish. Salmon also are found in all the rivers of the North Shore; the Nepisiguit, the Restigouche and the Miramichi have a world-wide reputation as angling rivers. All the lakes of the province swarm with trout and furnish admirable fishing in their season. There is hardly a stream in the province in which trout are not to be found, and some of the rivers such as the Tabusintac, are widely famed for the enormous numbers of fish which have been taken in them by sportsmen. Sea trout of large size swarm in all the rivers which flow into the Gulf of St. Lawrence in the early summer. In addition to these game fish, other species, which are esteemed in Europe, but attract little attention on this side of the Atlantic, such as chub and perch, are very abundant. Pickerel are also to be found in many rivers as well as eels, which frequently attain a large size.

Fuller information with regard to the haunts of game in New Brunswick will be found in an admirable little publication entitled "Gun and Rod," which has been issued by the Surveyor-General, and which can be obtained on application to his office in Fredericton, either personally or by letter.

WHO SHOULD COME TO NEW BRUNSWICK.

The great need of New Brunswick at the present time is a larger number of farmers who are skilled in the cultivation of the soil, and who have practised those methods of agriculture which prevail in the best farming districts of the United Kingdom. Scientific farming would pay in New Brunswick. The farmer in this province occupies a more independent position than he could ever possibly expect to be in if he remained in Europe. Two classes of people should find New Brunswick especially desirable as a residence, the English tenant farmer, who finds himself unable to make any progress, owing to the high rent or the decline of the value of agricultural products, and the English farm laborer, who works from year to year for a low rate of wages, with no other prospect before him but poverty in his declining years. The English tenant farmer unless under very exceptional circumstances, seldom becomes a landed proprietor. The vigorous competition of new countries in agricultural products has cut down his profits to so large an extent that he is not in as nearly as good a position as the English farmer was half a century ago. There has been no corresponding decline in rent to place him in the same favorable position he occupied when he had the British market virtually to himself. The consequence is that

he goes on from year to year in a business that is almost hopeless, and has to confine his energies to those branches of farming in which the competition is the least keen. Every English tenant farmer with the capital, which he has for the purpose of running his business properly, may become a landed proprietor in New Brunswick, the owner of his own farm and in a far more independent position than he at present occupies. In New Brunswick land is cheap and farms can be purchased for an exceptionally low price. There are plenty of good farms with farm buildings complete, which can be obtained for from \$1,500 upwards, farms which will yield a good return for the work bestowed upon them and give the proprietor a handsome income. These farms are not worn out or of inferior quality, but consist of good agricultural land capable of being greatly improved by judicious management. In many cases in New Brunswick farms are thrown on the market in consequence of the death of the proprietor, or by the disinclination of the younger members of the family to remain farmers. There is in New Brunswick as in all other countries, a constant tendency on the part of farmers' sons to embark in business in large centres of population, and this cause has thrown many farms on the market. These farms which may thus be purchased are not in the wilderness, but in old settlements where the people enjoy the advantage of good schools, churches and railways.

The English farm laborer also may become a landed proprietor in New Brunswick. He can obtain land out of which he can make a farm, absolutely free of cost, and in the course of a few years he will become entirely independent with a good farm and farm buildings. All that is needed to bring this about is a reasonable

degree of industry and thrift. There are thousands of people in New Brunswick living on fine farms, whose fathers came to them with absolutely nothing but a pair of strong hands, and who have been able to educate their children well, place them in good positions, and build up for themselves a valuable property. This is a prospect which ought to be very alluring to the hard worked farm laborer of the United Kingdom.

The method by which farms can be acquired by the farm laborer or working man of Europe is dealt with elsewhere.

Farm laborers from the United Kingdom, who desire to become farmers in New Brunswick, would do well to spend a year working on a farm before they strike out on their own account. In this way they will become familiar with the methods of work in New Brunswick and especially with forestry. One of the most essential conditions of success to a man who desires to hew himself a farm out of the forest is skill to use the axe, and this can only be acquired by practice. A man who learns to chop well carries in his own person nearly all the conditions of success as a pioneer farmer. A year's work on a New Brunswick farm will place him in possession of enough money to make a good start on his own property, and it will, what is still more important, teach him what is necessary to be done for the purpose of attaining success.

HOW TO GET A FREE FARM IN NEW BRUNSWICK.

Anyone can acquire a hundred acres of land free in New Brunswick under what is called "The Labor Act." Under this act a man, not owning any other land in New Brunswick and who is of the age of 18 years or

upwards, may apply for a hundred acres of land. If the land applied for is unsurveyed, the applicant must deposit one dollar with his application, and an order to survey the one hundred acres will be issued by the government to the nearest deputy land surveyor. When the survey is made, the applicant will bear the cost of it and his application will be published in the Royal Gazette as approved. Should the land applied for have already been surveyed at the expense of the Crown Land Department, a deposit of three dollars will be required for the expense of surveying. When his application has been approved, the applicant can take immediate possession of his lot and begin to improve it. He can then pay for it \$20 in cash or do \$30 worth of road work under the local road commissioner, on roads leading to or near his own lot. He must also build a house on the lot fit for occupancy at least 16 x 20 feet in size, and live in the same for three years continuously, except as provided by the act, which enables him to absent himself during certain months of the year. He must also clear and have under cultivation ten acres on his lot, and having complied with the other conditions mentioned and produced the commissioner's certificate to that effect, he will be entitled to receive his grant of land.

This means of obtaining a free grant of land has been much resorted to and has enabled many a poor man to become a land owner for the trifling expense of the cost of survey. The settler who desires to obtain a grant under the Labor Act, is not obliged to expend any money whatever. He can do everything with his own hands that is necessary for him to acquire his lot. Although forest land is more difficult to clear and bring into cultivation than a prairie farm, the settler on

forest land has many advantages over the prairie settler. In the first place he has an unlimited supply of wood for fuel at all times, and he is frequently able to make a good deal of money by cutting the wood off his lot in the shape of logs, cordwood and piling and other articles which are readily saleable. It is not necessary for him at the beginning of his career to stay all the time on his lot, but he can go elsewhere at certain times for the purpose of making money to enable him to carry on further operations.

It would be well for any new settler from the British Islands, who desires a free farm in this way, to thoroughly acquaint himself with the methods of chopping and cultivating the soil, which are in use in New Brunswick. By working on a New Brunswick farm for a year, he would acquire all the information necessary to enable him to make his own way with success. A good axeman will cut down the trees on a acre of land in a week or ten days, at the utmost, according to the character of the timber upon it. While doing this he will be careful to save and haul away whatever is likely to become valuable, leaving only that which is unmarketable, or which he can not sell, to be burnt. His chopping will generally be done during the winter, and he will probably be able, without interfering with his own work elsewhere, to cut down two or three acres. If he can cut down five or six so much the better. In the early summer, when the wood becomes thoroughly dry the will gather what he has chopped down and most of the stuff will be burned clean off the land. After a successful burning, what is left of the trees can be put together in piles and burned. Then the new settler will sow his crop. Probably he will find it to his advantage to put in buckwheat on most of it, as that grain ripens quickly

and yields abundantly. Some of it, however, he will put in potatoes, which grow splendidly on new land. With his buckwheat he will sow grass seed, so that in the following year the new field will be a meadow.

A settler going on in this way and cutting down five acres every winter, would in the course of seven years have a good farm of 35 acres, all new land of great fertility. He would be in a position to live comfortably on his farm and would be entirely independent. In fact in seven years he would have attained a degree of prosperity, which he could never expect to reach as a farm laborer in Great Britain.

Such a prospect certainly ought to be very alluring to an industrious and enterprising man, who desires to better his position. When the trees have been cut off the land for about seven years, the settler will begin to remove the stumps, which at that time will be easily handled and put in piles so as to be burned. Then the land will be ploughed and its fertility will be greatly increased. No work is more interesting or more attractive than the making of a new farm out of the forest, and it is especially so to one who has never been a land-owner before, and who feels that every blow he is striking is for his own benefit and for his family, and that he is rapidly placing himself in a position of comfort and independence.

AN ENGLISH IMMIGRANT'S OPINION.

The following extract from a letter written by Mr. James Williams, formerly of Marbury, near Nantwich, England, and then of Andover, Victoria county, New Brunswick, was published in the Chester Chronicle, and will serve to show how New Brunswick life impressed an English settler. After mentioning some exceptional

circumstances as to the harvest of the year (1882) Mr. Williams says :—"So, I suppose, we must have had a bad year, but it is very much better than the best we had in England. We are getting cordwood; when dry it is worth three dollars a cord. We should be glad of an Englishman to help to fell, then we could keep the horses drawing home. A man can earn his money summer or winter. We are going to sow turnips and potatoes on the new land. If anyone is too far from town to sell wood, the first crop of oats or bulbs pay for clearing. We are blest with the best of wood to burn; in some parts of the West there is no wood, and what they fetch from a distance is soft and soon gone. Wood and water are two essential things. We have both and the crop is ready to harvest in fourteen or fifteen weeks. We are paid for all we do in a few weeks. Last year we had to buy everything to live upon for fifteen weeks, and also the seed. This year we have plenty and wood to sell, which will be very different. We can drive one or two horses without duty. We are hampered with nothing, no disgusting agents to find fault. People drive wagons for a pair or single horses—sleds the same. Poor people from Ireland who came here forty years ago, they and their sons have first-class turnouts.

"The first settlers here think English people live better than they do. They consider themselves careful, and will use all the profit from six cows in their own family, but, we think, if they were in England, they would be in the workhouse. The young people wear rings and ear-rings, their cashmere boots and wool-lined over boots to drive in, buffalo rugs to sit upon and cover them in the sleds, which are very comfortable; and you will hear in a letter to my mother what a happy Christmas we spent. No intoxicating drinks are used

here, but everything that is good to eat. What are called luxuries in England are considered necessities here. There is only one family needing help here; he is an Englishman who came from London last summer and has very delicate health and is not suitable for farming business. His family have been well cared for, and our minister has proposed sending him to pass his examination for a teacher, as he has been well educated.

"There is some excellent cheese made in this neighborhood. I intend making some this season with the rennets you gave me; the cheese sell well here. If you know anybody who wishes to come here, we will keep them a little while, and they can soon have a suitable farm. If a man reaches here with £300, he is independent at once. One who came here last spring gave £40 for a log house and barn, a pig and wheat. Then at harvest he had 40 bushels of wheat, 70 of oats, 30 of potatoes and a lot of turnips and beans. He has now bought another cow of us and is very comfortable. He has twelve acres of land cleared, and is now clearing ten more, he will sell his oats and buy a pair of young steers to work his land; so if a man has £40 he can do well, but if he has £300 all the better. A man that can work, can do well if he has no money. Laborers and tradesmen are wanted, and are well paid for what they do.

"It is never very cold more than three days at a time. The sun is very bright, and the weather very mild. The coldest days we never feel cold in the body, only the hands and feet. We wear mittens and several pairs of warm socks and we have overboots to admit of them. Then we are very comfortable."

SUPPLEMENTARY.

While this work was being printed later statistics of the agriculture of New Brunswick became available and they are given below:—

ROLLER MILLS.

The number of roller mills in the province has increased by three in 1901, and they now number twenty-one, as follows:—

	No.
Carleton County, Woodstock, Centreville, Lakeville and Bristol,	4
Gloucester County, Petit Rocher, Caraquet and Riordan,	3
Kent County, Buctouche and St. Charles,	2
Madawaska County, Powers Creek and Edmundston,	2
Northumberland County, Newcastle, Boiestown and Rogersville,	3
Restigouche County, Campbellton,	1
St. John County, St. John city,	1
Victoria County, Andover,	1
Westmorland County, Shediac and Memramcook,	2
York County, York Mills and Monument Settlement,	2
	—
	21

The St. John Mill has a capacity of 150 barrels of flour per day; most of the others have a capacity of fifty barrels.

GRAIN PRODUCTION IN 1901.

The following table shows the number of bushels of wheat, oats, barley and buckwheat produced in each county in New Brunswick in the year 1901.

	Wheat bushels.	Oats bushels.	Barley bushels.	Buckwheat bushels.
Albert,	7,539	102,514	2,541	53,189
Carleton,	64,216	1,340,035	9,505	268,375
Charlotte,	2,668	126,518	6,976	14,901
Gloucester,	80,965	282,346	8,094	22,975
Kent,	104,551	387,050	5,985	137,697
Kings,	12,781	393,733	6,405	229,741
Madawaska,	24,849	276,344	5,187	142,991
Northumberland,	46,610	279,484	1,395	24,473
Queens,	1,741	191,652	2,325	124,547
Restigouche,	13,233	159,801	4,290	16,311
St. John,	52	71,220	620	7,391
Sunbury,	2,566	76,291	3,225	35,900
Victoria,	20,642	313,876	2,057	89,264
Westmorland,	78,484	373,848	30,936	135,018
York,	17,989	570,280	9,899	176,704

ROOT CROPS.

The following table shows the number of bushels of potatoes and turnips grown in New Brunswick in the year 1901:

	Potatoes, bushels.	Turnips, bushels.
Albert,	96,617	54,889
Carleton,	417,230	302,947
Charlotte,	145,015	219,089
Gloucester,	479,169	65,314
Kent,	582,614	126,734
Kings,	299,958	256,332
Madawaska,	139,158	19,433
Northumberland,	304,922	101,276
Queens,	186,051	79,474
Restigouche,	143,105	28,166
St. John,	102,900	95,000
Sunbury,	140,345	61,378
Victoria,	89,939	52,662
Westmorland,	599,651	215,727
York,	350,804	421,519

CHEESE FACTORIES.

The following table shows the number of cheese factories in operation in New Brunswick in 1901, and the quantity of cheese produced.

	Number of factories.	Pounds of cheese produced.
Albert,	2	81,200
Carleton,	10	284,307
Gloucester,	1	38,641
Kent,	3	14,763
Kings,	17	780,523
Madawaska,	3	80,080
Queens,	4	107,371
Sunbury,	1	9,000
Victoria,	1	62,729
Westmorland,	6	209,909
York,	8	208,787

CREAMERIES AND SKIMMING STATIONS.

The following table shows the number of creameries and skimming stations in New Brunswick and the quantity of butter produced.

	Number of factories,	Pounds of butter made,
Carleton,	10	124,229
Charlotte,	1	16,000
Kings,	7	206,197
Kent,	5	18,021
Madawaska,	6	70,106
Nort'umberland,	1	9,341
Westmorland,	2	37,271
Victoria,	3	55,561

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