CIHM
Microfiche
Series
(Monographs)

ICMH
Collection de
microfiches
(monographies)

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- [x] Coloured covers/ Couverture de couleur
- [ ] Covers damaged/ Couverture endommagée
- [ ] Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée
- [ ] Cover title missing/ Le titre de couverture manque
- [ ] Coloured maps/ Cartes géographiques en couleur
- [ ] Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)
- [ ] Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur
- [ ] Bound with other material/ Relié avec d'autres documents
- [ ] Tight binding may cause shadows or distortion along interior margin/ La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- [ ] Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/ Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- [ ] Additional comments:/ Commentaires supplémentaires:

- [ ] Coloured pages/ Pages de couleur
- [ ] Pages damaged/ Pages endommagées
- [ ] Pages restored and/or laminated/ Pages restaurées et/ou pelliculées
- [x] Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- [ ] Pages detached/ Pages détachées
- [x] Showthrough/ Transparence
- [ ] Quality of print varies/ Qualité inégale de l'impression
- [ ] Continuous pagination/ Pagination continue
- [ ] Includes index(es)/ Comprend un (des) index

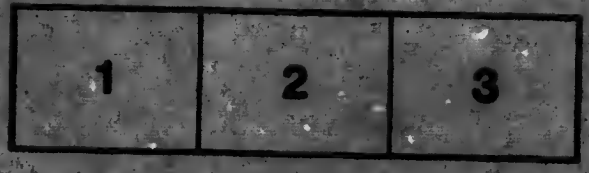
Title on header taken from:/ Le titre de l'en-tête provient:

- [ ] Title page of issue/ Page de titre de la livraison
- [ ] Caption of issue/ Titre de départ de la livraison
- [ ] Masthead/ Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/ Ce document est filmé au taux de réduction indiqué ci-dessous.

10X 14X 18X 22X 26X 30X

12X 16X 20X 24X 28X 32X



Land Settlement

IN

NEW ONTARIO

A short account of the advantages offered land seekers in Ontario

Rich and Cheap Lands
Easy of Access
Splendid Local Markets
Fine Climate
Good Water
Liberal Homestead Regulations

Prepared under the direction of

HON. E. J. DAVIS
Commissioner of Crown Lands

New Ontario

AS

A FIELD FOR SETTLEMENT.

Advantages and Drawbacks.

No portion of the American continent offers greater advantages to the settler who with little or no capital desires to establish himself and attain a comfortable independence than does the Province of Ontario. Embracing a total land area of 219,650 miles or 140,516,000 acres, lying within the great grain belt of North America, endowed with magnificent natural resources in the fertility of its soil, the wealth of its mineral deposits and the value of its timber, and possessing a climate eminently healthful and bracing, Ontario ranks as the most progressive and advanced agricultural community in America. Indisputable evidence of her superiority in this respect was afforded at the World's Fair in Chicago in 1893, when Ontario was adjudged the front place as to live stock, dairy and fruit exhibits and stood equal to any competing province or state in the variety and excellence of her general farm products. To-day there is no division of the continent that produces in such perfection and variety the grains, grasses, roots, fruits and live stock to be found on the farms of Ontario. The natural energy, industry, and intelligence of the people are unsurpassed elsewhere and the advantages of the soil and climate have been supplemented by the adoption of the most advanced scientific methods of agriculture. For many years the government of the Province has devoted special attention to the encouragement of agriculture in all its branches, in which they have been heartily supported by the Legislature. The liberal appropriations of public money made for this purpose have placed within the reach of the farming community the latest results of scientific research and investigation in relation to practical agriculture. The total amount expended by the Government for the encouragement of agriculture during 29 years ending with 1900 is in round numbers about $5,000,000.

Agriculture.

The agricultural instruction and experimental work carried on at the Guelph Agricultural College has done much to raise the standard of agriculture throughout the Province. Trained specialists in every department have placed their knowledge and skill at the disposal of the farming community, more especially in the important branches of live stock, dairying and horticulture. The result has been the attainment of such a high standard of excellence in many Ontario farm products as to lead to a continually increasing demand in Britain for our agricultural staples, more especially Ontario cheese.

Since the establishment of dairy schools and the sending out of travelling dairies as a means of instructing farmers in the best methods of butter making equal progress is being made in that department, and the butter produced in the Province is attaining an excellent reputation abroad as shown by the great increase in quantity exported.

Cheese in Ontario is produced entirely in factories, mostly run on the co-operative plan, and the same system is being rapidly introduced in the manufacture of butter, though most of the latter product is still produced by the domestic dairies. The number of cheese factories in operation in the Province in 1899 was 1,203, producing 123,323,923 pounds of cheese valued at $12,120,367, while the number of creameries or butter factories was only 323, producing 9,113,964 pounds of butter valued at $1,746,363. Even this shows a rapid increase in butter factories, as there were only 74 in 1893. The area under pasture in 1899 was returned by the municipal assessors as 2,710,263 acres. In connection with the dairy industry the following figures of live stock in the Province for the year 1900 are of interest—Cattle, 2,429,330; horses, 617,309; sheep, 1,797,213; hogs, 1,771,641; poultry, 9,541,241. These figures fairly represent the relative proportions of the various kinds of live stock under the mixed farming pursued in Ontario.

The latest returns of the Ontario Department of Agriculture for 1899 show that the assessed farm lands of Ontario comprise a total of 22,670,958 acres, of which 13,111,292 acres are cleared and under cultivation. The yield of the principal products in 1900 in bushels was as follows: Fall wheat, 23,369,737; spring wheat, 6,940,332; barley, 16,909,751; oats, 89,693,261; rye, 2,357,635; peas, 14,058,198; buckwheat, 1,874,261; beans, 820,373; potatoes, 21,476,439; mangel wurtzel, 24,728,525; carrots, 3,469,123; turnips, 59,330,395; corn (maize), 27,093,561. Hay and clover were produced to the extent of 3,133,045 tons and the tobacco crop amounted to 2,854,900 pounds.

Mixed Farming.

During the last generation the Province has witnessed a complete revolution in agricultural methods and processes—largely owing to

the educational work carried on by the Government. This has resulted in the substitution of mixed farming for the system of raising little else besides grain, which was formerly general. The advantages of the change are obvious from every point of view. When the farmer places his sole or main dependence upon the wheat crop the failure of the harvest for a single season entails severe hardship if not absolute ruin. With mixed farming in operation, the loss of a season's grain crop is much less heavily felt, as there are other sources of income in stock and dairy produce. In addition to this consideration, mixed farming on a stock-raising basis contributes greatly to maintaining the fertility of the soil, which is rapidly impoverished by successive grain crops unless its productiveness is renewed by lavish manuring.

The great amount of attention now devoted to stock-raising and dairy production has given a great impetus to the prosperity of Ontario farming, despite the decrease of prices which has affected agriculture throughout the world. Other branches which have made specially noteworthy progress are fruit-growing and poultry-raising, which have materially increased the farmer's source of income and enlarged the sum total of agricultural production. The character of the soil and climate of Ontario are admirably adapted for mixed farming. All kinds of stock and poultry thrive well with proper care, and the greater attention now devoted to breeding and the choice of the best varieties has been abundantly rewarded by the position now held by the horses, cattle, sheep, swine and poultry of the Province and their various products in the markets of Britain and the United States.

Fruit Growing.

In fruit all varieties which flourish in the temperate zone are successfully grown in profusion in the open air. Ontario carried off the honors for the excellence and comprehensiveness of her fruit display at the World's Fair in 1893, where the superior quality and great variety of the horticultural products shown excited the surprise and admiration of numbers of visitors who had imagined Canada to be an inhospitable region of almost perpetual frost. In 1900 the area in Ontario under cultivation as orchards and gardens was 339,411 acres—as vineyards 10,687 acres. The number of apple trees of bearing age was 6,518,048 and of young trees 3,430,670, and the estimated yield was 36,993,017 bushels.

The total value of the farm lands of Ontario in 1899 amounted to $563,271,777, while the value of all farm property, including land, buildings, implements and live stock amounted to $947,513,360, being an average of about $39.50 for each acre under occupation. The figures which have been given indicate sufficiently the prosperous condition of the farmers of Ontario, the productive character of the soil, the enterprise and industry of the people, and the splendid opportuni-

ties which await the settler who comes to the country with a determination to do his part by energetic work and careful management in developing the newer regions which yet remain to be opened up, and offer to healthy and industrious pioneers better and richer inducements than those presented in the earlier days. The fertility of the American prairie States and the Canadian North West has been proclaimed the world over and has attracted millions of emigrants whose labor has been fairly rewarded. But when the test of practical experience is applied it has been abundantly proved that there is no locality in the prairie states, famous as they are for grain production, which is equal in point of fertility to the Province of Ontario. Comparative tables covering a series of years have been compiled from official statistics which show that as regards the leading grain products the average yield per acre in Ontario is in excess of that for the adjoining States. The following is the latest available comparative table, for the year 1897, giving the average yield per acre of the principal cereals in Ontario, as compared with the grain producing States of the American Union and the Canadian Province of Manitoba.

Fall Wheat.	Bush.
Ontario	25.2
New York	21.4
Pennsylvania	19.7
Ohio	16.9
Michigan	15.6
Indiana	13.0
Illinois	7.9
Missouri	9.0
Kansas	15.5
California	10.0

Spring wheat.	
Ontario	15.1
Manitoba	14.1
Wisconsin	12.5
Minnesota	13.0
Iowa	13.0
Nebraska	14.5
Dakota, N	10.3
Dakota, S	8.0

Barley.	
Ontario	26.6
Manitoba	20.8

Barley.—*Con.*	Bush.
New York	25.0
Wisconsin	26.0
Minnesota	25.5
Iowa	24.0
Nebraska	22.0
California	23.0
Dakota, N	22.5
Dakota, S	20.0

Oats.	
Ontario	35.5
Manitoba	22.7
New York	31.0
Pennsylvania	28.2
Ohio	32.0
Michigan	26.0
Indiana	30.2
Illinois	32.0
Wisconsin	34.0
Minnesota	26.0
Iowa	30.0
Missouri	22.0
Kansas	24.0
Nebraska	31.0
Dakota, N	23.0
Dakota, S	22.0

"Old" Ontario.

The settled and cultivated portion of Ontario comprises a comparatively small proportion of its entire area, being almost confined to the southern division of the Province lying north of the St. Lawrence River and Lakes Ontario and Erie. The remainder of the country to the north and west of Lake Nipissing and the French River, known as New Ontario, a region of vast extent and rich in all the natural wealth and raw material requisite for the building up of a great and populous community is as yet but sparsely settled in some localities, while immense areas remain entirely uninhabited. In the development of the country hitherto the lumberman has been the pioneer of settlement. The older portion of Ontario was originally covered with dense forests which yielded valuable timber. As the country was cleared by lumbering operations, the settler followed. The employment offered in the lumbering camps frequently afforded him the means of subsistence until he could clear a portion of his farm and raise his first crop, and when his land became productive the demands of the lumberman provided him with a local market for his produce. Towns and villages sprang up as lumbering centres, and farming industry in the neighborhood became remunerative. The men attracted by the employment to be had in the shanties or at the saw mills frequently took up land and became farmers. So long as the soil, stripped of its pine timber by the operations of the lumberman, was of an arable character, the two industries advanced hand-in-hand, and flourishing settlements were built up wherever the forest was cleared away.

As lumbering operations were extended northward, however, an elevated table land of rugged and broken character was reached that formed the sources of many of the important rivers and streams of the Province, a land of lakes and creeks and rivers, a sportsman's paradise, the home of the beaver, the deer and the lordly moose, but a land ill-suited for general agriculture except in comparatively limited areas of a few townships together. From this table land rivers flow in different directions, and it is a wise provision for the industrial future of the Province that this belt should be kept in forest, except in the fertile areas referred to where the land is now being settled.

North of this table land lies a vast region only partially explored but sufficiently so to afford the knowledge that the fertile agricultural part of it is of great extent and capable of supporting a very large population. Extensive explorations undertaken by the Provincial Government in 1900 resulted in the location of large areas of excellent arable land amounting in all to upwards of SIXTEEN MILLION ACRES, which will before long be available for settlement with the opening of railway communication.

From time to time townships containing good land are surveyed and opened for settlement in different parts of the Province. These

districts have been selected with a view to their adaptability for farming purposes, ease of access by rail or steamboat, proximity to centres of industrial development or other causes, and to these various districts settlers are now invited under terms and conditions to which further reference is made elsewhere in this pamphlet.

Natural Advantages of New Ontario.

There are several considerations to be borne in mind which will indicate the superior claims of New Ontario as a field for colonisation over any other part of the continent. One of the most important of these is the diversity of industries established or in the course of establishment. Although, as has been stated, parts of the country are unsuitable for agriculture, its mineral wealth is destined to be one of the great sources of its future prosperity and development. Gold has been discovered in paying quantities in the Rainy River District at the extreme west of the territory, where a number of mines are in active operation. Copper, silver, and iron ore are found along the north shore of Lake Superior, and extensive works for the reduction of these ores and the carrying on of a group of industries, for which the mineral and timber resources of the country furnish the raw material, have been established at Sault Ste. Marie, which is rapidly becoming a flourishing manufacturing city likely in a few years to rival in importance many long established eastern industrial centres. At Sudbury and farther to the east in the district of Nipissing are found the largest nickel deposits in the world, which are being extensively worked, and here also large reduction works are established. The growing demand for nickel for a variety of purposes, more especially for armor plating and the scarcity with which this metal is distributed in the few countries where it has so far been discovered, is causing a very rapid development of the localities where it is produced, and furnishes a continually increasing source of employment to those who may settle in the neighborhood of the mines and smelting works. There is only one other extensive deposit of nickel now known, that of New Caledonia.

Many parts of the country are rich in timber and the growing demand throughout the world for paper renders extremely valuable the spruce forests with which large areas are covered. The spruce and other pulpwood timber growing on the portion of the territory explored in 1900 was estimated by the exploration parties at 288,000,000 cords. For the purpose of utilizing this timber to the best advantage in the manufacture of pulp and paper, mills have been started at several points distributed throughout the region, each of which gives employment to a large number of people, whose presence creates a demand for all manner of supplies, and stimulates the growth of subsidiary industries.

The building of railroads and wagon roads as an aid to settlement is being actively carried on, creating a demand for well paid labor and the rapid exhaustion of the supply of lumber and woods of all kinds in the older portion of the Province and the United States, in the face of a steadily increasing demand, renders lumbering operations in the new districts continuously active and profitable.

Demand for Labor.

All these varied industries make the conditions of life for the agricultural settler considerably easier than is usually the case in a new country, certainly much more so than in the early days of settlement in Ontario. Hitherto almost the only opportunity presented to the settler in the backwoods of obtaining any employment whereby he could subsist until his farm became productive, was that offered by the lumber camps. In localities where no work of this nature was in progress the man who took up land was obliged to provide in advance for the maintenance of himself and family during the time he was occupied in clearing sufficient land to produce a crop, and waiting for it to mature. Few industries of any kind made their appearance until the country was well settled, and the pioneers had to look to agriculture alone as a means of support. In many localities in New Ontario these conditions are reversed and the mechanical industries are the first to occupy the ground. Everyone familiar with the difficulties of colonizing a new country can realize what a great advantage this is to the settler without capital or the man of limited means. Many laborers who, under ordinary conditions, would have had no opportunity of acquiring a homestead, simply because they could not afford to wait for a crop and leave their families lacking bread, can obtain work in connection with some of the numerous industrial enterprises for a longer or shorter term, and take up a farm in the neighborhood as soon as they have saved sufficient money to live on until they can depend on their produce. The growing settlements afford them a steady and remunerative market, not merely for their crops, live stock and farm produce but for the timber, such as in former days was burned off in order to clear the land.

As compared with the prairie lands of the West the balance is altogether in favor of the well-timbered farms of New Ontario. Although the prairie settler has not the labor of clearing his land, he is under the serious disability of having to pay high prices for building materials, fencing and fuel, which in Ontario are all to be had for the cutting, and he lacks the shelter afforded by the surrounding woods to growing crops.

Value of Settlers' Lumber.

During the last few years there has been a noticeable increase in the value of timber other than pine. In the earlier days pine alone

was marketable, the other trees being regarded as incumbrances to be got rid of as speedily as possible. Spruce, poplar and other trees furnishing the raw material for paper are now in great demand and the settler having such timber upon his lot can find steady employment in cutting and hauling these woods to the railways or the water front for shipment where a good price will be given for them. Hardwood is coming very largely into use in building operations for flooring and finishing and in furniture, and its consumption is increasing very rapidly. In place of burning off the hardwood in huge log heaps, as used to be done when it was not a marketable article, the settler in New Ontario in clearing his land can in most cases sell the logs at a rate that will pay him well for his labor.

Climate.

The climate of New Ontario leaves little to be desired, comparing very favorably with that of the Western States. The severity of the winter is tempered by the large areas of water, and the amount of forest covering which intercepts the sweep of the winds. The same degree of cold which would be severely felt in an exposed prairie country, open to the winds from every quarter, is only pleasantly bracing in a well timbered region where the snow remains on the ground all winter. The whirlwinds and cyclones often attended with appalling loss of life and great destruction of property, which are frequent in the American West, are unknown in any part of Ontario. The broken and rugged nature of the land, while it lessens the cultivable area, ensures fertility to the arable soil by preserving a constant supply of moisture, the evaporation from the lakes, rivers and forests resulting in frequent rains and tempering the heat of the summer months. That the climate is conducive to health and longevity is amply proven by the experience of old residents. The fevers, agues and malarial diseases which are frequently the scourge of newly developed districts where the land is swampy or low lying are unknown in New Ontario. Though this country is abundantly watered the formation of the undulating surface secures a rapid flow of the natural drainage and prevents the accumulation of stagnant water or the formation of fever-breeding marshes.

Taxation.

Owing to the great extent of her natural wealth and the policy adopted from the outset of conserving the public interest in the Provincial timber and mineral resources Ontario is in the unique and fortunate position of being able to dispense with Provincial (or State) taxation. Not only is the ordinary business of Government carried on from year to year without imposing any such burden upon the people, but in addition the Government distributes annually a very

large amount in services such as in less favored countries are provided for by the municipalities. The amount spent on education by the Province each year is about $750,000, the appropriation for the encouragement of agriculture upwards of $200,000, and the sum devoted to hospitals and charities about $200,000. In the newer districts the government also expends considerable sums, over $100,000 each year, upon the construction of wagon roads, which have greatly facilitated settlement. Other appropriations of small sums are made towards desirable public objects, the cost of which in other communities would be wholly met by the local taxpayer. Under the federal system of the Dominion the expenses of Provincial Government are partly provided for by a subsidy from the Dominion Government, which in the case of Ontario is largely supplemented by the revenue received from Crown Lands, timber and minerals. The policy of returning to the people so much of their income as is not required for the purposes of administration, in the form of grants for public services and requirements of a local character, tends to lighten considerably the pressure of municipal taxation. This is a matter which ought not to be lost sight of by the intending settler, as in some parts of the Continent where glowing inducements in the way of natural advantages are held out, these are more than offset by the high rate of taxation.

The various agricultural districts now offered for settlement in Ontario are separated, extending with intervals clear across the Province, from West to East. All these districts are served by railways except Temiskaming and it is expected that the road connecting this district with the railway system south, for which a charter already exists, will be completed in 1902.

Rainy River Valley.

Beginning on the West near the boundary of Manitoba and lying alongside the State of Minnesota, is the Rainy River Valley contiguous to the gold mines of the Lake of the Woods and Seine River districts. This is a block of very rich land, though limited in area, containing about 1,000,000 acres. The valley is reached from Rat Portage on the C.P.R. by steamer across the Lake of the Woods and up the Rainy River; from Winnipeg, Man., by the Canadian Northern Railway, and by the end of 1901 this road will be completed through the valley to Port Arthur on Lake Superior from which point the district may be more easily reached from the East. The soil of the Rainy River valley is very rich, consisting of alluvial clay overlaid with a top soil of black loam to a depth of several feet in some places. It is free from rocks and loose stones are rare. The timber is mixed hardwoods and evergreens for which there is a good market.

The land is disposed of in 160 acre lots—or quarter sections—as free grants subject to settlement duties.

Wabigoon.

About 113 miles east of Manitoba on the Canadian Pacific Railway a number of townships have been surveyed, called the Wabigoon settlement. There are about 250,000 acres of good land in the townships already surveyed in this block and there is already a thriving settlement with two villages, Dryden and Wabigoon. Explorations in 1900 revealed the fact that this block of good land extends north, forming an agricultural area of millions of acres in extent. In order to demonstrate the possibilities of the soil in this district a pioneer farm was established by the Government of the Province with excellent results. The timber here is not large and is mainly used for railway ties and fuel, special cordwood rates by rail making a profitable market in Winnipeg. The land here is for sale at 50 cents per acre, subject to settlement conditions, in 160 acre lots. The soil is clay and remarkably free from stones.

Thunder Bay.

Farther east on the shore of Lake Superior, surrounding the large towns of Port Arthur and Fort William, occurs the Thunder Bay district, including the valleys of the Slate and Whitefish Rivers to the south and west, and Dorion township on the east. This district contains much broken land, yet there is considerable first-class farming land still open for settlement, and the splendid market for farm produce and wood products as well as for labor make it a very desirable location for settlers.

Fort William is a divisional point on the C.P.R. where are located immense grain elevators for the storage of the grain of the west, brought in by rail and taken east from this point by water.

Port Arthur is the eastern terminus of the Canadian Northern Railway and its branch line, the Port Arthur, Duluth and Western. Another railway line, the Thunder Bay, Nepigon and St. Joe, is prospected to run north and east from Port Arthur to tap the extensive agricultural belt to the north.

There are about 100,000 acres of arable land yet in this district offered as free grants in 160 acre lots. There is also considerable good land in private hands that is for sale.

Algoma.

East of Port Arthur the C.P.R. passes around the north shore of Lake Superior through a country splendid in its rugged grandeur of mountain and lake but uninteresting from a farmer's point of view, for a distance of over three hundred miles. Rocky as this country appears along the C. P. R. we now know there is rich farming land north of the line, but there are no good agricultural districts along the railway till we approach Sudbury. The first surveyed township along the line is that of Moncrieff, west of Sudbury about 40 miles. At

Sudbury the St. Paul Minneapolis and Sault Ste. Marie branch of the C.P.R leaves the main line and this line until it reaches Sault Ste. Marie, passes through a well watered, broken and rocky country, but a country in which there are many splendid farms and prosperous farmers, destined to be the home of a great stock-raising and dairying district. This district is known as East Algoma. Its principal town is Sault Ste. Marie where are located the great Clergue industries. There are several other thriving towns and villages through the district including Garden River, Desbarats, Bruce Mines, Thessalon, Spanish Station, Walford, Massey, Webbwood, etc.

Extensive lumbering operations are being carried on in this district. Another large wood pulp industry besides the one at Sault Ste. Marie is proposed at Webbwood on the Spanish River. The Algoma Central Railway is now building from Sault Ste. Marie north to the main line of the C.P.R. and will open up an extensive tract of new, unsurveyed country.

The land in this district is for sale at 50 cents per acre.

Nipissing.

A short distance east of Sudbury begins the district of Nipissing which contains probably the largest area of good land surveyed and ready for settlement to be found in any of the Northern Districts at present. It comprises two districts, that along the C.P.R. and that to the north at the head of Lake Temiskaming.

Southern or Western Nipissing is a rolling clay land somewhat broken like East Algoma, but containing large areas of splendid land.

At Markstay, Warren, Verner and elsewhere are thriving settlements and besides Sudbury with its great nickel industries, are Sturgeon Falls, North Bay and Mattawa, all progressive and thriving towns. It is difficult to give even an approximate estimate of the area of good land in the district. Many of the surveyed townships are under timber license and a very large amount of pine is still standing in the district, where extensive lumbering operations are being carried on.

Between the agricultural lands in the southern part of Nipissing and the Montreal River occurs a large tract of land, containing great wealth in timber and minerals, gold, nickel, copper and iron, but unsuited for tillage.

Temiskaming.

North and east of the Montreal River at the head of Lake Temiskaming lies a body of alluvial clay land free from stone, well watered, densely wooded with spruce, cedar, tamarac, pine, poplars, birches and other soft woods, that runs away to the northwest and forms the southern extremity of what surveyors have called the "great clay belt" comprising fifteen millions of acres of good farming land. The

district of Temiskaming is reached from Mattawa by rail and steam
at present but it is expected a railway from some point on the C.P.
to this section will be constructed by the end of 1902. The land
the various sections in this district of Nipissing are for sale at 50
per acre subject to settlement duties. Further details concerning th
various districts will be given elsewhere.

While pointing out the many advantages possessed by Ontari
over other countries for pioneers it is only fair to refer to some of th
disadvantages and hardships incident to making a new home in
wooded country.

Drawbacks.

In the first place the new settler needs to understand that his enterprise involves much hard, rough work for comparatively slight returns at the outset and for some time to come. He must also be prepared to dispense with many conveniences and luxuries easily obtainable even by the poor in an older community, but unprocurable in a bush settlement. The absence of these however will not be noted as a mark of social inferiority, as his neighbors in this respect will be no better off than himself. He must be willing also to forego many social advantages and enjoyments which an old and thickly-settled country affords, a deprivation of which however will be the less felt because his work will leave him with but little leisure for recreation. He must be alert in making the most of opportunities and foreseeing and meeting difficulties, and prudent and economical in the management of his resources. No good purpose can be served by disguising the truth that the life of a settler with limited means in a new district involves much struggle and self sacrifice for the first few years, for which the money returns may at first appear entirely inadequate, as compared with the current wages in callings involving equal labor. But the man who takes up a homestead is working for the future and the reward of his toil is not merely subsistence wages, but independence and a comfortable provision for life. He knows that every acre he clears, every drain dug or fence built, though it does not yield its immediate return in cash in hand, adds so much to the money value of his farm and constitutes a permanent investment of the safest and most profitable character. While the man who works for others receives perhaps a larger money return, his employment is uncertain and his receipts are insufficient to allow him to lay up for the future, and his frequent fate is to be thrown on the world when past middle life without prospects or resources for his old age. The settler, on the contrary, though he may have fared hard and toiled strenuously sees the value of his property increasing year by year as the region where he has established himself becomes more thickly populated, and finds his condition improving with the opening of new markets and the increase of his stock, while

the farm he received as a free grant or on the payment of a nominal figure has become worth several thousand dollars. There is no other means whereby the man without other capital than the power and will to labor, can so readily attain a competence and a substantial position in the community as by taking up a bush farm, and there is no part of the world where the facilities are better and the surroundings more favorable to health, comfort and prosperity than the new districts of Northern Ontario.

For railway rates, names of local agents, etc., address P. Byrne, Ontario Government Agent, 7 James St., Liverpool, England, or the Commissioner of Crown Lands, Toronto, Ontario, Canada.

The districts to which the Department of Crown Lands is more particularly directing settlers, with the names and addresses of the local agents and means of access are as follows:—

RAINY RIVER VALLEY.—Land offered as free grants in lots of 160 acres. Means of access: Canadian Pacific Railway to Rat Portage, thence by steamer to Rainy River or by Canadian Northern Railway from Winnipeg. Agents: William Campbell, Boucherville; William Stephenson, Big Forks; C. J Hollands, Fort Frances.

WABIGOON DISTRICT.—Land for sale at 50 cents per acre under settlement conditions. Means of access: Main line of the Canadian Pacific Railway to Dryden. Agent: A. E. Annis, Dryden.

THUNDER BAY.—Land offered as free grants. Means of access: C. P. R. or steamer to Port Arthur or Fort William. Agent: J. F. Ruttan, Port Arthur.

EAST ALGOMA.—Comprising the section along the Sault Ste. Marie branch of the C. P. R. from Sudbury to Sault Ste. Marie. Land mainly for sale at 50 cents per acre. Means of access: Sault Ste. Marie branch of Canadian Pacific Railway. Agents: D. M. Brodie, Massey Station; J. Turner, Sault Ste. Marie.

WEST NIPISSING.—Comprising the district from Sudbury to Sturgeon Falls on the main line of the Canadian Pacific Railway. Land for sale at 50 cents per acre. Means of access: Rail by C. P. R. Agents: T. J. Ryan, Sudbury; J. D. Cockburn, Sturgeon Falls; Alex. Hamilton, Warren.

TEMISKAMING DISTRICT.—Land for sale at 50 cents per acre. Means of access: By Canadian Pacific Railway and branch line to Temiskaming station, thence by steamer up Lake Temiskaming. Agent: John Armstrong, New Liskeard.

Settlement Regulations.

Agricultural lands can be obtained from the Crown in Ontario by actual settlers only, subject to certain conditions as to improvement

and residence before the issue of the patent. There are two ways in which title can be acquired:—

1. By purchase.

2. By free grant.

The uniform price of the land in those portions of New Ontario which are thrown open for settlement by purchase is 50 cents per acre. The settlement conditions to be fulfilled before the issue of patent are the same in each case, viz.: the erection of a habitable house 16x20 feet at least, and the clearing of 10 per cent. of the land. Individual purchasers are restricted to 160 acres unless a portion is rough and broken, when the amount may be increased, not to exceed 240 acres to the head of a family. There are slight differences in the several localities however, in the time allowed for the payment of the purchase money and the number of years' residence required on the land before the issue of the patent and these are shortly set forth in dealing with the different settlements in detail. Unpaid balances are in every case subject to interest at 6 per cent.

The conditions as regards free grants are given in connection with the localities in which that system is in operation.

Settlers' Rights with Regard to Timber.

When a lot is sold or located it immediately passes from the operation of the timber license for everything but the pine timber. The settler may, however, cut free of dues such pine timber off his lot as he may require for building or fencing purposes and such as he may require to remove in the course of actually clearing his land for cultivation, on which latter he has to pay the ordinary Crown dues. When he has been six months in residence, has two acres cleared and house erected he is free to cut and dispose of the timber other than pine on his land. In the case of free grant lands in Rainy River district and all sale lands, all trees (including pine) remaining on the land at the time of issue of the patent pass to the patentee. In the case of free grant lands in Thunder Bay and Algoma Districts, the pine timber is reserved to the Crown in the patent, but the locatee is entitled to receive one-third of all timber dues paid on the pine cut on his lot after the 30th of April next following after issue of his patent

Rainy River Valley.

A MILLION ACRE TRACT OF FERTILE LAND.

The Rainy River valley is a very extensive and promising agricultural settlement in the Western portion of New Ontario. It comprises a tract of extremely fertile land situated in the southwest of the Rainy River District, which takes its name from the river forming the southern boundary separating it from the State of Minnesota. The district covers an area of about 22,500 square miles, extending westward to the Lake of the Woods, and the Province of Manitoba, the greater portion of which is better adapted for the mining and lumbering industries than for cultivation. The Rainy River valley is the most considerable tract of continuous agricultural land in the district and runs along the north shore of the Rainy River between the Lake of the Woods and Fort Frances, a distance of some eighty miles, extending back from the river front from fifteen to twenty miles or perhaps further in some places. The general surface of the ground is nearly level but sloping gradually towards the river without any conspicuous inequalities or broken country. It is a rich alluvial soil, varying from clay to clay and sandy loam, easily worked and very productive. Some distance back from the river the soil is superior in quality to that at the water front, though some stone is found inland, from which the land adjoining the river is quite free. Occasional swamps are encountered timbered with cedar, spruce and tamarac, but they are all dry in summer and can be rendered fit for the plow by surface drainage, as they are considerably higher than the river level. The tract is interspersed with frequent small creeks and streams, providing an outlet for surface water and rendering easy drainage by means of ditches. Townships have been surveyed for settlement and are now open, containing about 600,000 acres. How much of the unsurveyed land is suitable for agricultural purposes is not yet determined, but it is believed that further exploration may disclose considerably more rich farming land in the district in addition to much now known to be fertile.

The luxuriance of the natural vegetation found in the Rainy River valley is evidence of the great fertility and richness of the soil. Wherever the country has been fire-swept and the timber destroyed it displays a rank growth of wild clover. Native grasses, peas and

vetches flourish abundantly and wild fruits grow in profusion. All the grain and grass crops produced in older Ontario, including fall and spring wheat, barley, peas, oats, etc., do well, and field and garden vegetables yield heavily. Clover attains a very vigorous growth, in some instances yielding three tons to the acre several years after seeding. An equally important point in regard to clover is the practical certainty of the catch, which very rarely fails. Clover being such a leading factor in the system of mixed farming, the reliance which in any ordinary circumstances can be placed on this crop year after year, is one of the strongest points in favor of the Rainy River valley.

In 1896, Mr. Duncan Anderson, a prominent farmer of Rugby, Ont., was requested by the Government to make a personal examination of several localities in New Ontario, including the Rainy River valley, and report upon them as to their fitness for agricultural settlement. Mr. Anderson's report, from which some of the information embodied in the preceding description has been taken—in treating of the Rainy River valley gave the following personal experiences of settlers which may fitly be reproduced here: Mr. Arch. Reid, a very worthy settler, who has been here a number of years and now has the satisfaction of seeing his family settling around him says: "My crops have been good; they would average wheat, 22 bushels, oats 45 bushels, peas 30 bushels to the acre. Hay is always a heavy crop; native Indian corn gives good returns; potatoes always do well, and so do turnips." Mr. Williams, Fort Frances, says: "I have a quarter of an acre garden patch. Sold last year $140 worth of vegetables—one cabbage weighed 37 lbs. I had in my store window last fall a pumpkin that weighed 100 lbs. and a squash that weighed 125 lbs. (they were both raised by Mr. John Dingal) and have grown radishes and lettuce in the open air on the 10th of May." Mr. William Phair also bears testimony to the extraordinary productiveness of the soil. He says: "Produced 49 bushels of Fife wheat per acre; 270 bushels of oats on four acres; between two and three tons of timothy per acre, first crop cut in June, second crop early in September." Mr. Thomas Lundry (whose farm I travelled over and found that the soil is a strong, rich, productive clay, as is almost all the soil in the townships of Carpenter, Lash and Devlin), says: "The soil on Rainy River cannot be surpassed. You can sow barley on new ground as late as the middle of July and get a good crop. My neighbor, Duncan Reid, sowed two bags of wheat, about four bushels, and threshed ninety-six bushels. Where the ground is properly cultivated, I do not care what you plant, you will get a crop. There is plenty of pasture in the bush, and fall wheat and spring wheat do immense." "From what I saw when there last summer," says Mr. Anderson in conclusion, "the splendid crop prospects, the excellent climatic conditions for growth, and from the nature of the soil I believe there is no more fertile soil in the Province of Ontario, and I question if there is another tract any more productive on this continent."

Timber.

The land is for the most part covered with timber much of which is commercially valuable, and can be disposed of by the settler. In addition to pine, which is found scattered among the other trees, poplar, tamarac, spruce, balsam, cedar and birch are common, with oak, elm, ash and soft maple trees in fewer numbers. Lumbering operations are carried on extensively on Rainy River and Lake of the Woods, and from six to eight hundred men are employed in the lumber camps during the winter season. The cedar, spruce, tamarac and hard woods growing on the lands taken up by settlers readily find a market. The settlers receive 45c. for telegraph poles twenty-five feet long; 16c each for railway ties, cribbed; 5c. each for fence posts, cribbed, and from $1.50 to $1.70 per cord for wood. The latter is usually bought by the steamboats. From returns furnished by Mr. Margach, Crown Timber Agent at Rat Portage, the settlers in the Valley sold during the period of eight years, from 1892 to 1900, 605,617 railroad ties, 185,918 posts and 25,752 telegraph poles, receiving therefor, according to a calculation based on current prices, a total of $117,310.72, the returns for 1900 being incomplete. The demand for timber shows a steady increase in the sales for the twelve months 1898-99.

Clearing is an arduous undertaking in some localities where the land is heavily timbered and low-lying, but in many places the land has been burned over, which renders the task much easier. Fencing and building material are easily obtained. Rough lumber can be had at the mills from $7 to $10, dressed lumber costs from $16 to $20, pine shingles cost $2 per bunch and the charge for custom sawing is $3 per thousand feet.

Water Supply.

Few localities outside of Ontario are so well supplied with water throughout the entire year as the Rainy River Valley. The number of streams and watercourses traversing its area has already been referred to. The comparatively level conformation of the country and the fact that so much of it remains in timber prevents it being too rapidly drained of moisture. Excellent water is procurable everywhere by sinking wells at a depth of from eight to twenty-five feet. The settlement is entirely free from droughts, which during latter seasons have been so prevalent in the older portion of the Province.

Climate.

There is no particular significance in the name "Rainy River," which may perhaps convey to some an entirely erroneous impression as to the climate. The rainfall does not noticeably exceed that of other parts of the country in duration or volume. The climate is similar to that which prevails in the Lake Ontario region, with the

exception that the winter is slightly colder and considerably dryer and more even. The air is clear and bracing and there is usually abundant snow to make good sleighing from December to March, without the intervals of soft damp weather which frequently occur in the east. The snow generally remains on the ground until spring has fairly set in. The warmth of the summer is tempered by the coolness which prevails at night, accompanied by heavy dews. The season is long enough to allow corn to fully mature, and melons and tomatoes can be successfully grown. Oats sown in the middle of June have ripened before the frost set in, and plowing usually continues until the latter part of November. The summer frosts that render the returns of farming so uncertain in Manitoba and the Northwest are unknown. Most settlers regard the climate as on the whole pleasant and more satisfactory than that of Southern Ontario on account of the unbroken winter and the absence of parching heat and drought in the summer.

Progress of Settlement

The attractions offered by the Rainy River valley, the richness of the soil, and the ease with which remunerative labor can be obtained have resulted in a large influx of settlers during the last few years. Although it is only recently that people have come in large numbers some of the land was taken up as early as 1874. The older arrivals have generally prospered as shown by the appearance of their homesteads, with commodious and well-built houses and barns, extensive and cleanly tilled fields and fine stock. Many settlers have come from the North Western States, Manitoba and the Canadian North West owing to the advantages afforded by a well wooded and watered country as compared with prairie land. On the river front the land is all under occupation and in some parts settlement extends for some miles inland

The town of Fort Frances is the commercial centre and distribution point of the settlement. It is situated at the head of Rainy River where it receives the waters of Rainy Lake. Fort Frances was a post of the Hudson's Bay Co. The Dominion Government in 1875 surveyed the town plot, the name of Alberton being given to the place, though it is customarily known by its more ancient title. Of late years the progress of settlement has considerably stimulated its growth. It has three hotels, a large number of stores, a fine and commodious school building and Roman Catholic, Anglican, Methodist and Presbyterian places of worship, in addition to a Baptist mission. It has also a newspaper. Fort Frances is an excellent market for all kinds of farm produce, which are in great demand for the supply of the mining and the lumbering camps in the neighborhood. At Big Forks a village on the Rainy River about 16 miles below Fort Frances, a flour mill with a capacity of 50 barrels a day is in operation. Further

down the river is the village of Emo with two saw mills, a grist mill and several stores and workshops. The village of Barwick has two general stores and other conveniences.

Another growing local centre is the village of Boucherville, formerly known as Rainy River, and at other points small hamlets are growing up which will increase in size and importance with the progress of settlement and the development of new commercial and industrial needs. But the settlers find extensive markets in communities lying outside of the Rainy River Valley, though in its near vicinity.

Rat Portage, the principal town and judicial and administrative centre of the district, with a population of 7,000, owes its growth and prosperity to the commanding position it occupies at the northern extremity and outlet of the Lake of the Woods, where the enormous water power gives it special advantages as a manufacturing point It is situated an the main line of the Canadian Pacific Railway of which it is a divisional point and is distant 1,154 miles west of Toronto and 130 miles east of Winnipeg. In the early days Rat Portage was a trading post of the Hudson's Bay Co, and in 1876 the construction camps of the Canadian Pacific Railway were located in the neighborhood and the nucleus of a permanent settlement formed. When incorporated in 1891 it had a population of 2,200, and since that time its growth has been rapid. The principal industries carried on in the neighborhood are gold mining, lumbering, flour milling, and fishing, Rat Portage being the port of export for the products of the surrounding region. A large quantity of the fish with which the lake and its tributaries abound are shipped to the United States. Some 500 men find employment in the fisheries, a special feature of this industry being the sturgeon fishing. This fish is much valued in Europe on account of the caviare prepared from its roe which is esteemed a great delicacy. The Lake of the Woods produces the larger proportion of the caviare supply of the world.

The lumber and timber supplies of Manitoba, which are largely drawn from the Rainy River district, are forwarded from this point. The Ontario and Western Lumber Company own six saw mills and six planing mills in the neighborhood tributary to Rat Portage, all of which are lighted by electricity, furnishing employment to four or five hundred men. In addition to the magnificent water power furnished by the Lake of the Woods, the falls of the west branch of the Winnipeg River situated within two miles of the centre of the town furnish another source of supply. They are capable of generating a force of 30,000 horse power and will shortly be utilized for this purpose.

The town of Keewatin, situated near Rat Portage, of which it is practically a suburb, is also the scene of extensive operations. Here there is an immense water power, though only partially developed, and among other industries dependent upon it is the large mill of the

Keewatin Lumber Co. with a capacity of 12,000,000 feet per yea
Here is also located the largest flour mill in Canada operated by th
Lake of the Woods Milling Co, having a capacity of 2,200 barrels pe
day. Their output has an enviable reputation for its excellence both
at home and abroad. The machinery is the most perfect procurable
anywhere and is driven altogether by water power, having a mini-
mum capacity of 1,300 horse power. The two large elevators in con-
nection with the mill will contain 700,000 bushels. A custom reduc-
tion works for separating gold and silver from the rocks forms an
important adjunct to the mining enterprises carried on in the neigh-
borhood and an assistance in developing the smaller properties and
those of less assured value. The population of Keewatin is about
1,500 and is rapidly increasing.

The mineral resources of the district, outside of the Rainy River valley, include the richest and most remunerative gold mines in the province, which have been developed during the last few years. The gold-bearing veins of the district are of two kinds—bedded or lenticular, and true fissure veins. The bedded veins occur in green chlorite and hornblendic schist of Huronian age, and the fissure veins in masses of eruptive granite or gneiss, which have pushed their way up through the Laurentian rocks or through the Huronian themselves. In either the richest veins are usually discovered within a mile or two of the contact of eruptive and schistose rocks. The larger proportion of the ore is free milling, so that it can be readily extracted by the stamping and amalgamation process, giving a quick return for a comparatively small outlay of capital. The principal gold mining districts are Lake of the Woods, Lower Seine, Upper Seine, Lake Manitou and the New Klondike. The Lake of the Woods District is that tributary to Rat Portage and is the scene of the earliest operations for the development of gold mining in Rainy River.

As the territory has not yet been fully explored, it is altogether likely that as the country is opened up other areas will be found to be equally well adapted for cultivation as the Rainy River valley and the Wabigoon country.

Water Communication.

The special natural system of water communication which prevails has done much to insure the development of the Rainy River valley by giving the settlers a ready means of access to the leading markets of the district. The most important body of water is the Lake of the Woods, which is a beautiful sheet of water of about 100 miles in length by about 70 miles in width from east to west, occupying an area of some 1,600 square miles. The shores are much broken and indented and the lake interspersed with numerous islands. It is fed by the Rainy River, a large navigable stream about 500 feet in

width and 100 miles in length. This waterway connects with Rainy Lake at the village of Fort Frances. A line of commodious steamers connects Rat Portage on the C. P. R. with Fort Frances, and but for the falls at this point there would be continuous navigation for a distance of 300 miles. As it is, however, another line of steamers runs east from Fort Frances on Rainy Lake, passing Mine Centre and other important mining centres. In addition to the main channels of water communication there are minor chains of lakes and rivers intersecting the country in other directions and facilitating travel by canoe and boat.

Roads.

Liberal expenditures by the Government in the construction of colonization roads have done much to overcome the natural difficulties of roadmaking arising from the character of the soil and the scarcity of stone and gravel. About 150 miles of Government roads have so far been constructed and the mileage is considerably increased every year, the work affording employment to many of the settlers who receive for their labor $1.00 per day and board. Before long the system will afford access to every locality where fertile land exists.

Free Grants.

The general provisions of the Free Grants and Homesteads Act apply to the townships of Rainy River Valley but are modified by special regulations. The following are the conditions in force.

The limit of a Free Grant is 160 acres, but the male head of a family, or the sole female head of a family having a child or children under eighteen residing with him or her may locate for 160 acres and may also purchase an additional 80 acres at $1 per acre, payable one-quarter in cash and the balance in three equal annual instalments with interest. A single male over 18 years of age without children may be located for 120 acres as a Free Grant and purchase an additional 80 acres at $1.00 per acre.

All Free Grants are made conditional on the performance of the following settlement duties:

1. To have at least 15 acres cleared and put under cultivation, of which two acres at least are to be cleared and cultivated annually during three years.
2. To have built a habitable house at least 16 by 20 feet in size.
3. And to have actually and continuously resided upon and cultivated the land for three years after location.

In case a locatee purchases an additional 80 acres he must clear and cultivate 15 acres of the same within three years. Patents may issue at the expiration of three years from the date of purchase. The pine timber and minerals on the land are reserved when lands are

located. The locatee may cut and use such pine timber as he requires for building, fencing and fuel on his land, and he may also cut and dispose of any pine required to be removed in the process of clearing, but must pay timber dues on pine so disposed of. All trees which remain on the land at the time the patent is issued pass to the patentee.

The following townships are now open for location upon the above terms: Atwood, Aylesworth, Barwick, Blue, Burriss, Carpenter, Crozier, Curran, Devlin, Dilke, Dobie, Lash, Morley, Nelles, Pattullo, Roddick, Roseberry, Shenstone, Tait, Woodyatt, Worthington.

Agents for the Sale and Location of Land.

The following are the Crown Lands Agents for the Rainy River Valley:

William Campbell, Boucherville P.O., for the townships of Atwood, Curran, Blue, Dilke, Morley, Nelles, Pattullo, Roseberry, Shenstone, Tait and Worthington.

William Stephenson, Big Forks P.O., for the townships of Aylesworth, Barwick, Burriss, Carpenter, Crozier, Devlin, Dobie, Lash, Roddick, Woodyatt.

C. J. Hollands, Fort Frances P.O., is agent for the sale of lands in McIrvine township and the Government town plot of Alberton (Fort Frances).

Means of Access.

Hitherto Rat Portage has been the gateway to the Rainy River Valley, settlers from Ontario reaching that point by the Canadian Pacific Railway and taking the steamboat there for their destination. With the completion of the Rainy River Railway, however, the settlement will be rendered more accessible and settlers will have the advantage of an all rail route. The western portion of this road from Winnipeg to Beaver Mills has been constructed and is already in operation so that much of the traffic will go by way of Winnipeg. More direct access from eastern points will be afforded when the other section of the road, connecting with Port Arthur, is completed. It is expected to be ready for traffic before the close of 1901, and its advent will undoubtedly give a great impetus to colonization and do much to improve the condition of the settlers. This road, which is now known as the Canadian Northern, will afford another outlet from the west to Port Arthur on Lake Superior. It will greatly increase the opportunities for marketing to good advantage the timber and pulp wood cut down in clearing their lands, and the inducement thus afforded to select well-wooded lands will attract many to the Rainy River who might otherwise prefer a prairie farm.

The Wabigoon Settlement

ON THE CANADIAN PACIFIC RAILWAY.

Lake Wabigoon is situated almost in the centre of the Rainy River district and gives its name to an extensive tract of excellent agricultural land on its north-eastern shore, but extending considerably farther north and west. The limits of this fertile area in fact have not yet been definitely ascertained but so far nine townships have been surveyed having a total extent of about 234,000 acres. The Canadian Pacific Railway runs through the tract for about forty miles. The surface of the country is for the most part of gently undulating character and there are few swamps or low-lying stretches. Broken and rocky areas are rarely met with, being confined to one or two localities. In fact there are few equally extensive sections of country so little broken by poor or non-cultivable tracts to be found in any portion of Ontario.

Soil.

The general character of the soil, which varies little throughout the settlement, is a light-colored clay, changing to a rich clay loam on the lower levels. The soil of the valleys is especially fertile, as evidenced by the more luxuriant natural vegetation and the size of the timber. The clay of the higher lands is readily friable under cultivation and yields splendid crops, but in parts displays a tendency to dryness which will need to be overcome by the application of manure to ensure good harvests. There are practically no boulders or loose stones anywhere in the tract.

Timber.

Much of the country has been burned over, which greatly lightens the labor of the settler in clearing the land. The dead timber which abounds in many neighborhoods is largely utilized as fuel. The wooded tracts remaining are principally to the south, east and northeast The most abundant tree is the jack pine, which is in good demand for cordwood (fuel), the Winnipeg market drawing large supplies from the Wabigoon country. It sells for from $1.65 to $2.00 per cord, delivered at the railroad, and many settlers dispose of their live or dead timber to advantage in this manner. The remaining timber com-

prises poplar, some spruce and occasional tamarac trees. The popla is usually small. The tamarac can be readily sold for railroad ties which bring 40 cents for a length of 12 feet and 25 cents for eight feet. There are plenty of saw mills at which custom sawing is done for $3 per one thousand feet, and where good lumber can be purchased for $12 per thousand.

Climate.

The general characteristics of the climate are much the same as already have been described in connection with the Rainy River Valley. The winters are continuously cold, but free from severe cutting winds, and the depth of snow is seldom great. There are cool nights throughout the summer with heavy dews, and during the fall the weather is generally dry and fine. No injury has so far been experienced from summer frosts. The soil is usually ready for plowing about the latter part of April, while frost seldom interferes with cultivation before the middle of November. All the cereals, vegetables and small fruits which are produced in Southern Ontario can be grown to advantage.

Water Supply.

There is an abundance of good and wholesome water in every part of the settlement. Wabigoon Lake is a body of water some thirty miles in length by five or six in width, which finds an outlet in the Wabigoon River running to the north-west through some of the newly laid out townships. It is a fine navigable stream and furnishes an ample supply of water power. The Pelican River, which is tributary to it, waters a considerable area of the section. The lake is well stocked with fish, comprising whitefish, maskinonge, pike, herring and other varieties. Creeks and watercourses abound, and good spring water can also be obtained almost anywhere comparatively near the surface by sinking a well.

Government Pioneer Farm.

The superior adaptability of this region for agriculture was first definitely ascertained by the action of the Ontario Government in establishing the Pioneer Farm at Dryden, a point just north of the outlet of Lake Wabigoon, which has since become the business centre and distributing point of the settlement. The site was selected in 1895 by the Minister of Agriculture, buildings erected and operations begun by putting in a small crop of the leading grains and vegetables. The farm embraces a total area of 310 acres of which 170 have been thoroughly cleared and are in cultivation. The live stock on the farm at present comprises 12 head of cattle, besides young stock, 25 sheep and 10 hogs. The scope of the operations carried on has been gradually increased year by year, and the favorable character of the returns,

which demonstrate the great fertility of the soil and the climatic advantages of the country, have done much to promote colonization and create an active interest in the settlement.

Dryden.

The town site of Dryden was laid out in the summer of 1896, being situated between the Pioneer Farm and the lake. The splendid water power obtainable at this point has been improved by the construction of a dam formed to deepen the streams flowing into Wabigoon Lake for the improvement of navigation. It is estimated that at the falls on the Wabigoon River fully 3,000 horse-power can be developed. The Government has reserved land near the falls for power and public uses. Dryden which now contains a population of about 350 is likely to develop rapidly as an industrial and mining centre. Many mining claims have been taken up in Van Horne township in the neighborhood and development work is in progress at the west end of Wabigoon Lake. The river between Dryden and Lake Wabigoon, a distance of about a mile, is of a navigable character, rendering the country accessible by water communication in this direction tributary to the town.

The town of Wabigoon, situated about twelve miles to the southeast of Dryden on Lake Wabigoon, is another growing centre of population, its present inhabitants numbering about 150. Its future largely depends upon the development of the mining industry in its vicinity, where there are considerable deposits of gold, iron and other minerals.

Labor and Cost of Clearing Land.

The report of Mr. Duncan Anderson previously referred to contains the following paragraph, showing the comparative ease with which most of the land in these townships can be cleared and rendered fit for cultivation.

"As the timber is small, and much of it dead, it is easily burned and the land made ready for the plow. A man and strong boy can in some places clear up and stump as fast as a team can plow. One settler who came from the County of York (he was a tenant farmer there) has a couple of good working boys. He located in the township of Eton close to Oxdrift station, arriving about the beginning of April last. He started to plow on the 18th of the same month and by the 15th of May had twenty-five acres cleared up, plowed, and sown with wheat, oats, peas and barley. I was at his place on the 28th of May, he had planted his potatoes and corn, and was preparing his turnip land. I held the plow for a couple of rounds and had the satisfaction of knowing that I turned up to the summer sun some of the virgin soil of the Wabigoon country. The land is not all quite so easily cleared as this, but five dollars an acre will clear up and stump

most of the land in this settlement, with the exception of land along the creek bottoms, which is heavier timbered. To get the best results the land should be plowed twice, and thoroughly cultivated previous to sowing the first crop."

Dairying and Stock-Raising.

The country offers special advantages for dairying and stock raising both as regards natural conditions and the proximity of markets for the output of these important branches of agriculture. Clover grows very luxuriantly, the native variety producing two crops a year. The first clover crop raised at the Pioneer Farm, cut twice in the same season realised respectively two and one tons to the acre. Grass also attains a profuse growth owing to the abundance of moisture. The natural vegetation, especially the prairie grass and wild peas, furnish splendid pasturage and the creek bottoms produce large crops of wild hay, which is excellent feed for stock. Cattle are not so tormented with flies as in a more open country, as the scrubby growth found in the valleys acts as a protection from their attacks. The stock can also find shelter in the lower levels from the severity of cutting winds and rainstorms. The excellence of the pasture and the rolling surface of the ground are also highly favorable to successful sheep-raising. The sheep kept at the Pioneer Farm have proved thrifty and productive.

Roads.

There are few new settlements anywhere which are so favored in the matter of good wagon roads as the Wabigoon country. The work of construction is less difficult than in most other localities owing to the character of the soil, which does not readily form sloughs or mud holes after it has been once graded. Unless the season is unusually wet, travelling by wheeled vehicles is easy and convenient, and bicycling is practised on the leading thoroughfares. The Government has constructed thirty-eight miles of colonization roads in the western part of the settlement and also about twenty-five miles running in a north-easterly direction from Wabigoon and Dinorwic to Big Sandy Lake. In addition a number of miles of road have been built by the settlers themselves. The people therefore are well situated as regards access to local markets and points of shipment.

Markets.

The extensive development of the lumbering, mining and manufacturing industries throughout the Rainy River District has given the Wabigoon settlers a market for all and more than they can produce, at their own doors. The country around Rat Portage and its suburbs

of Norman and Keewatin is not an agricultural neighborhood and the increasing population have to obtain all the food supplies either from Manitoba or the farming settlements of the District of Rainy River. The Canadian Pacific Railway not merely connects the settlement with this market for fresh meat, dairy produce, etc., but is ready to purchase a considerable amount of such provisions for its dining cars. The local markets of Dryden and Wabigoon offer good prices for eatables—at Dryden butter brings 25 cents per pound, eggs 25 cents per dozen, potatoes taken from the field 40 cents to 60 cents per bushel, and pork from 12½ to 15 cents per pound. The lumbering and mining camps in a southerly direction employ a large number of men and the water communication furnished by Wabigoon Lake and River renders the settlement their most convenient source of supply. At present the bulk of the provisions they require are shipped from Manitoba via Dryden and Wabigoon Lake, as the output of the newly settled townships is not nearly adequate to the demand. It will be seen that the settler in the Wabigoon district is exceptionally well situated as regards markets and that instead of having to complain, as is sometimes the case, of their distance and inaccessibility he finds the surrounding industrial communities compelled to look to more distant sources and ready to take his produce as quickly as he can meet their demands.

Class of Settlers Wanted.

There are a large number of farmers' sons and other young men used to country life, who desire to become farmers, but who, owing to the lack of sufficient means to purchase land in the older portion of the Province, see no opportunity of becoming owners of the soil they till, except in some new settlement. Many farmers who are living on rented land or whose homesteads are impoverished and encumbered could also greatly benefit their condition by seeking new homes in the Wabigoon townships. The class most likely to succeed as settlers are men with some practical knowledge of farming and a little capital. Those absolutely without means will probably find greater obstacles to be overcome here, than in some other districts where a greater and more varied demand for labor exists.

Conditions of Sale of Land.

The conditions upon which land is disposed of have been specially framed with a view of reserving the soil for the bona fide settler and preventing its being taken up by speculators and held vacant to the injury of the neighborhood. The amount of land each applicant may purchase is limited to 160 acres except in the case of a head of a family, who may increase his holding to 240 acres; the price to be paid is 50c per acre, one fourth in cash and the balance in three annual instalments,

with interest at 6 per cent. The settler is required to clear and put under cultivation at least 10 per cent. of the land purchased, and to erect a habitable house of a size not less than 16 x 20 feet. In addition he must reside on the land for six months in each of the three years, or for two years continuously. On these conditions being complied with and the land fully paid for the settler will obtain his patent.

The townships thus far surveyed and open for settlement under the above conditions comprise, Aubrey, Eton, Melgund, Rugby, Sandford, Southworth, Van Horne, Wainwright and Zealand.

Mr. A. E. Annis, Superintendent of the Pioneer Farm at Dryden, is also the Crown Lands Agent and is prepared to furnish information and assistance in selecting locations to those requiring it. Intending purchasers should communicate with him.

Cost of Transportation.

Special rates of transportation in favor of settlers have been arranged for by the Government in connection with the railways, giving a very considerable reduction from regular passenger and freight rates. As these may vary from time to time those desiring detailed information as to the rate from any part of Ontario can obtain the lowest figures by addressing the Department of Crown Lands, Toronto.

For the year 1901, a special all-rail rate has been secured at $16 from any point in the older part of the Province, to obtain which a certificate must be procured from the Director of Colonization.

Thunder Bay District.

SURROUNDING THE TOWNS PORT ARTHUR AND FORT WILLIAM.

The District of Thunder Bay is situated on the north shore of Lake Superior and is bounded on the east by Algoma and on the west by the Rainy River District extending northward to the Provincial boundary. The Canadian Pacific Railway crosses the district skirting the lake shore for a considerable distance but there is comparatively little good agricultural land in the immediate neighborhood, the region adjoining the water front being for the most part rocky and sterile. Some extensive areas of fertile soil are found in the vicinity of Port Arthur and Fort William and there is also a tract some distance in a northeasterly direction which has proved extremely productive. The townships of good agricultural land now open for settlement comprise about 125,000 acres and the interior of the district, which is yet unsurveyed, is said to contain many areas of excellent farming country, which only need to be opened up to attract an influx of population.

The Soil and Timber.

There is considerable variety in the character of the soil of the townships which are now open to those in search of homes. Portions of the area are of red or light-colored clay changing to clay loam. In other sections sandy loam and black loam are the prevailing characteristics. The sub-soil is as a rule of a porous nature which together with the rolling formation of the surface in most localities precludes the necessity of drainage, excepting in low-lying land. Gravel ridges are found in some places, with occasionally stony patches. Much of the country has been overrun with fire, in some sections at a recent period, in others a sufficient time has elapsed to permit the appearance of a second growth of timber. The predominant trees are the poplar, spruce, white pine and jack pine and there is also a good deal of cedar, tamarac and birch. The extent to which the older forest growths have been removed by fire renders the work of clearing comparatively light in many cases. Frequently the land has been so swept of forest that it is overgrown with wild hay and vetches, which make good feed for stock. In the Slate River Valley more especially much of the land can be cleared with very little labor, from one to four days work per acre being sufficient to prepare the soil for cultivation.

Springs and streams abound and good well water is usually to be had at from 5 to 25 feet below the surface. The rivers are well stocked with fish, and the partridges and rabbits which abound in the woods form a welcome addition to the settler's food supply.

Climate and Productiveness.

The most noticeable difference between the climate of Thunder Bay District and that of southern Ontario is the steady cold which prevails during the winter months. The frequent thaws and damp rainy intervals that are customary in the lower lake regions are rarely experienced and the snow remains on the ground all winter. This is a great advantage both to the farmer and the lumberman, and renders the season much more enjoyable than when the temperature is subject to frequent variations. Plowing commences in April and the crops grow rapidly owing to the plentiful moisture afforded by copious rains in the early summer. The heat of midsummer is not so exhausting as in the east owing to the grea er coolness of the nights.

All the usual grain, root and vegetable crops produce abundantly, the soil being of remarkable fertility as shown by the luxuriance of the native vegetation. Vegetables attain a phenomenal growth and succulence. Raspberries, strawberries, gooseberries, currants and some varieties of apples and crab apples can be grown to perfection as can also asparagus, squashes, and other products requiring a genial temperature to bring them to maturity.

The portion of the district thus far referred to is that which has been surveyed and divided into townships but in various other parts fertile valleys and extensive grassy ranges are known to exist, along the line of the Canadian Pacific Railway to the west of Fort William and elsewhere. At Savanne a large saw mill is being operated and a farm is cultivated by the proprietors on the south side of Lac des-mille-Lacs where vegetables for the camps and hay for the horses are produced, and three similar supply farms are being worked by lumbermen between Fort William and Pigeon River. Some clay valleys have also been crossed by the surveyor locating the line of the Canadian Northern Railway between Port Arthur and Rainy River valley but they are not yet surveyed or open for settlement.

Port Arthur and Fort William.

The commerce and industries of the District are centred in the towns of Port Arthur and Fort William situated within four miles of each other on Thunder Bay, both being on the main line of the Canadian Pacific Railway, the Port Arthur, Duluth and Western Railway and the Canadian Northern Railway. They are also connected by an electric railway. These two places would have been one but for the reason

that the intervening ground is so low-lying and swampy as to be unsuited for building sites. Fort William has had the advantage of being a terminal point on the Canadian Pacific Railway. The workshops and grain elevators of the line have done much to build up the town. One of these elevators is of a new design comprising six or eight tanks constructed of steel plates. Eastward-bound grain is received from the cars by the elevators and shipped into lake barges. The Kaministiquia River flows into Lake Superior at this point and forms a safe harbor for vessels. Kakabeka Falls on this river where its current, 130 feet in width, makes a straight descent of 110 feet, is only a few miles from the lake. Its estimated capacity is between 30,000 and 35,000 horse power. A proposition to increase considerably the power available for manufacturing enterprises by taking water from above the falls, bringing it in an open canal to a plateau north of Port Arthur, 300 feet above the town, is under consideration. The preliminary surveys have been made, the necessary lands are being expropriated and contracts for power have been made. An impetus has been given to the growth of Port Arthur by the construction of the Canadian Northern [Rainy River] Railway of which it will be the eastern terminus. The company will construct a station, round-houses, workshops, wharves and elevators, and has practically acquired the control of one-half of the water front, comprising about 2,000 acres. The effect of its operations has been felt in stimulating building and considerably advancing the value of property in the town.

About 25,000,000 feet of logs, board measure, are cut every season for the saw mills in Fort William, Port Arthur and Savanne, and thousands of cords of spruce pulp wood and other wood for fuel are cut annually by the settlers. These operations furnish abundant work for those who cannot afford to depend entirely upon the produce of their clearings in the earlier stages of settlement, and are thus enabled to earn ready money. The present settlers along the line of the Port Arthur, Duluth and Western Railroad furnish the town of Port Arthur with cordwood, making good wages for themselves while at the same time clearing their farms. There is always a good demand for domestics in the towns, and the services of a good girl will readily command from $8 to $15 per month.

Port Arthur and Fort William are at the head of navigation on Lake Superior and the steamers of the Canadian Pacific Railway Co., the Duluth Steamship Company, the Northwest Transportation Company, and the Northern Navigation Company do a very extensive traffic to and from these points. During the summer months and the game season, the grand and picturesque scenery, the healthgiving breezes, and the excellent sport furnished to fishermen and hunters by the surrounding woods and waters attract many visitors in pursuit of recreation and health.

Throughout the whole section south of the Height of Land the waters are well stocked with fish. The Nepigon is famous the world over for the size and number of its speckled trout, while these gamey fish abound in nearly all the smaller streams in the district.

Game is very plentiful, including rabbits, bears, caribou and some moose.

Silver Mining.

The region lying to the North and West of Thunder Bay contains extensive rock formations belonging to the Cambrain system, which cover an area of about one thousand square miles. These rocks are rich in silver ore, sometimes uncombined with other minerals but more commonly in the form of a sulphite in combination with lead and zinc. The veins are true fissures varying from 2½ to over 40 feet in width and assaying from $1 to $1,000 per ton. Mining operations were found remunerative a few years ago when several mines were successfully operated but the work was suspended owing to the great depreciation in the price of silver and the difficulty under the conditions then existing of procuring supplies. More favorable conditions are causing a resumption of activity. At Silver Mountain some 40 miles from Port Arthur, one of the old mines, is now being worked with satisfactory results, and others are likely to be in operation soon.

Other Mining Operations.

Iron mining is an industry which is likely to contribute largely to the growth of Fort William and Port Arthur and increase in a corresponding degree the demand for farm produce of all kinds. At Atikokan range a drift has been run through, which shows a width of about 80 feet of iron in about six veins, and further down the range the presence of more or less iron ore has been disclosed. Operations have been undertaken for the development of these deposits of magnetic ore. The Mattawin Range can be traced for over 100 miles across the mainland and Hunter's Island, the largest deposit being at Greenwater Lake. Along the Port Arthur, Duluth and Western Railroad for the last forty miles west there are continuous indications of iron ore, and more or less surface work has been done with a view to its development. Near Iron Range Lake two shafts have been sunk to a depth of from 50 to 60 feet, in one of which 30 feet of good 45 per cent. ore was found.

A diamond drill has been steadily working on the Mattawin Iron Range for sometime. A vein of iron pyrites at a point on the Canadian Northern Railway just west of Kakabeka Falls is being opened up to secure material for the manufacture of sulphuric acid. A discovery of gold, north of the Canadian Pacific Railway upon Sturgeon Lake has excited much interest and may result in the addition of gold mining to the list of the industrial activities of the district.

The principal settlements of the district are confined to a group of townships within a radius of twenty-five or thirty miles of Port Arthur. The inaccessibility of the good land in the interior combined with the rugged and forbidding aspect of that near the railway or the water front, has done much to retard colonization. But latterly there has been a large and steady influx of a fine class of settlers both from Eastern Ontario and the United States. The territory tributary to the Rainy River Railway now in course of construction presents every inducement to the settler and colonization roads are being made by the Government which will give the necessary access to the markets of Port Arthur and Fort William. For some years settlement has been gradually making headway in the township of Oliver and the Slate River Valley, where the prosperity and success of these hardworking and thrifty people is amply evidenced by the comfortable and carefully kept appearance of their homesteads. During the year 1900 the main influx has been in the direction of Slate River Valley, 12 miles southwest of Fort William and Whitefish River Valley, 30 miles distant from Port Arthur. A large number of the colonists are men thoroughaccustomed to farming under conditions which are in the main similar to those obtaining in this Province. The number of former residents in the States, who settled in these neighborhoods during the year 1900 was 247. In order to aid incoming settlers while waiting for their land to become productive, the Government gave a good deal of work in connection with the construction of a colonization road 30 miles in length, on which $10,000 was expended. At the Whitefish Valley settlement, the small village of Hymer has sprung up within a twelvemonth with a sawmill, church, school house, boarding house and store.

The valley of the Kaministiquia stretching to the westward of Fort William comprises upwards of ten thousand acres of highly fertile alluvial land, which has mostly been stripped of its timber and is well adapted either for cultivation or stock-raising. Where it has been taken up root crops, timothy and clover have flourished to a degree that cannot be surpassed in any part of Ontario. This locality owing to its situation is particularly well suited for market gardens or truck farms to supply the demand of the neighboring towns, and also offers excellent opportunities for stock-raising.

Markets.

The industries carried on at Port Arthur and Fort William, the work steadily afforded by the transhipment of freight, and the activity caused by the construction of the Rainy River Railway and its terminal facilities have created a great demand for labor of many kinds at good wages. There is consequently a local market for everything that the settlers can produce at remunerative prices. The consumption of meat, butter, eggs, poultry, potatoes and vegetables is considerably greater than can at present or for some time to come be supplied from

the farms of the settlers. There is an excellent opportunity for market gardeners and dairymen, locating within easy access of these flourishing towns to do well and achieve a comfortable independence. Those wishing to engage in these industries near either town will have to purchase land from private owners. Good lots can be had for the purpose at from $5 to $25 per acre upon easy terms.

The scope which exists for the development of the dairying business may readily be seen when it is considered that half a million pounds of butter is annually imported into this section, every pound of which might be raised on the spot.

At the Toronto Industrial Exhibition for 1900 over 100 varieties of native grasses from this part of the Province were exhibited, proving unquestionably the luxuriance of the natural vegetation and the fecundity of the soil.

Another tract of good agricultural land lies west of Black Bay and about forty miles from Port Arthur in a north-easterly direction. The principal settlement in this quarter is the township of Dorion. It is accessible either by the Canadian Pacific Railroad, which has stations at Wolf River and Ouimet, by wagon road, or by water from Port Arthur. The land is remarkably rich and the growth of native grass in places where the ground has been burned over provides abundant food for stock. The limits of the agricultural land in this section are not known, but it is supposed to extend northwards to the shores of Lake Nepigon and a considerable distance to the west.

The Northern Region.

A line of railway running north from Port Arthur to the Albany River to the west of Lake Nepigon, under the name of the Thunder Bay, Nepigon and St. Joe Railway, has been projected and chartered. In an interview with a representative of the Toronto *Globe*, Mr. D. F. Burk, for twenty-five years a resident of the district, described the leading characteristics of the country through which the route of the railway has been laid, showing the profusion and variety of the natural resources that would be laid under tribute by the opening up of the interior. After noting the starting point at Port Arthur he stated that agricultural and timber lands near Dog Lake contained deposits of plumbago and colored iron ore. Other mineral deposits farther on comprised micaceous granite, common mica and marble or dolomite composed of lime and magnesia—a compound that would be of value in smelting operations. A large expanse of farming land comes next, some well timbered and other parts burned over, large areas being grass covered. In the neighborhood are found red hematite, paint ore, lead ore, asbestos and plumbago. On the shores of the Black Sturgeon River and on the banks of the Pashko-kogan River are salt springs, and between these two points and extending further

westward is a forest, the predominating varieties of which are pine, spruce and tamarac. These attain a large size, some of them measuring four feet in diameter. Among the minerals discovered along the route are gold, silver, copper, garnets, zinc, nickel, cobalt, arsenic, uranium and malybdenum. Another stretch of agricultural land is met with, and north of that extensive deposits of magnetic iron ore. These are followed by a timber belt, which gives place to large tracts covered with moss and peat and lignite beds. At the point fixed on as the northern terminus of the road on the Albany River there is a tributary drainage area of 12,000,000 acres.

Lake Nepigon, the region surrounding which will be tapped by the proposed line, is a beautiful sheet of water, eighty miles in length by fifty in width. There are upon its shores extensive beds of limestone, which will be of great commercial value as they are the only deposits of the kind known in the district. Other valuable minerals in the vicinity of the lake are glass sands, kaolin, marl, serpentine red and white sandstone, granite trap, marble and pyrites. For forty years the Hudson Bay Company have had a farm garden at Lake Nepigon, and their experience is an important tribute to the mildness of the climate and the practicability of raising crops usually supposed to be confined to lower latitudes. Corn and tomatoes ripen regularly here and are seldom injured by early frosts. Lake Nepigon and its tributary watercourses offer great attractions to sportsmen, and when communication is established with the outer world the grandeur and picturesqueness of its varied scenery will render it a popular summer resort.

Settlement Conditions.

The land in the Thunder Bay District is offered as free grants in 160 acre lots; each head of family and unmarried man 18 years of age may acquire a free grant of 160 acres and purchase another 160 acre lot at 50 cents per acre cash—subject to the usual settlement conditions with five years residence.

J. F. Ruttan, Port Arthur, is the Crown Lands Agent for the district—from whom information may be obtained as well as from R. A. Burriss, Dominion Immigration Agent also of Port Arthur—There is a commodious Settler's Home in Port Arthur in charge of R. A. Burriss who is the Dominion Immigration official for this District as well as for Rainy River Valley and the Wabigoon District—

A special passenger rate of $16.00 from any point in Eastern Ontario may be obtained by procuring certificate from the Director of Colonization, Toronto.

District of Nipissing

INCLUDING TEMISKAMING.

The Nipissing District forms the most southerly section of the unsettled portion of the Province. It extends from the Quebec boundary westward to Algoma, running north to Hudson's Bay, and projecting further to the south than any other of the districts, its limit in that direction being French River, Lake Nipissing and Algonquin Park—the latter being included in its territory. From this it will be seen that the new settlements in the lower part of the district are considerably nearer to the Ontario counties than any other field for colonization. The Temiskaming settlement—a separate description of which is given as it differs in some characteristic features from other parts—forms a portion of the District.

The natural aspect and soil conditions of the country are in most localities very similar to those which prevail in the adjoining district of Algoma. It is characterized by the same rock formations classified as the Huronian and Laurentian systems, which are very much in evidence on the frequent ridges of hills with which the good arable or pasture land is interspersed. The prevalence of rock on the uplands in many localities gives an impression of barrenness which only the practical results of successful cultivation can wholly overcome. But the valleys and lower-lying stretches winding between and among the rock clad heights, are frequently of great fertility and yield rich harvests under tillage. Here a great number of cereals and grasses are produced to perfection. White clover is a natural growth and makes its appearance everywhere when the forest vegetation is removed. Timothy and red clover show marvellous productiveness. The soil is particularly rich in potash and therefore potatoes and other root crops flourish well, the yield being both certain and unsurpassed in excellence. Corn (maize) can profitably be grown for fodder and if carefully treated can be ripened. Fall and spring wheat grown in the district are unsurpassed as to quality and yield magnificently. The same holds good as to barley, oats and peas—the crops frequently running 50 bushels of oats and 30 to 35 bushels of peas to the acre.

A great many kinds of small fruits grow wild in profusion, including raspberries, blueberries, cranberries, cherries, plums, currants, gooseberries and wild grapes.

The district is particularly well supplied with water. Lakes, rivers and streams abound, the southern portion of the district more

especially being a perfect network of watercourses. The water is wholesome and pure and its excellence and abundance is likely to prove one of the principal factors of the success of the dairying and stock-raising industry, to which a plentiful and continuous supply of good water is a prime essential. This requisite, together with the luxuriant growth of grass and clover as native pasture, the favorable character of the soil for root production and the protection from extreme cold and heavy winds afforded by the ravines and valleys, renders the Nipissing District conspicuously adapted for dairying and the raising of cattle and sheep. It also possesses a considerable advantage over the north-western prairies in this regard owing to the plenty and cheapness of building and fencing materials, which are greatly in requisition wherever the care of stock forms a leading industry. The item of timber for buildings and fences is a heavy expense to the prairie farmer in any event, and is of course greatly increased as the system of mixed farming and dairying supersedes wheat growing. The extensive forests with which a large portion of the district is covered will furnish the fuel and the building material needed by future generations provided they are carefully husbanded and the occupants of land allow the rocky slopes and the poor land to remain uncleared excepting as the wood is required for use.

The land in a large area of the southern portion of the district extending from Sudbury to Sturgeon Falls and southward to French River is largely free from stone and of excellent quality and during recent years has attracted a large number of settlers who have met with encouraging success They find a good market for everything they can produce at Sudbury, the centre of the nickel mining industry and also for the supply of the lumber camps. With the extensive development of nickel mining certain to take place in the course of a few years, the requirements of Sudbury will be very greatly increased and the advantages offered by this large and steady market, together with the opportunities of obtaining labor at good wages will result in a large influx of farming population to this part of the district.

In the western part of Nipissing are the following agencies:—

SUDBURY—Agent, T. J. Ryan. Townships open for settlement: Balfour, Dowling, and Rayside.

WARREN—Agent, Alex. Hamilton. Townships open for settlement: Ratter, Hugel, Kirkpatrick and Casimir.

STURGEON FALLS—Agent, J. D. Cockburn. Townships open for settlement: Caldwell, Springer and McKim.

The purchase money in all cases must be paid one-half in cash and the remainder in two equal annual instalments. In the townships belonging to the Sudbury and Sturgeon Falls agencies four years' residence on the land is required before the issue of the patent. In those attached to the Warren agency, the term is three years.

The Temiskaming Settlement.

Of all the sections of New Ontario now open for settlement the Temiskaming region possesses the largest continuous area of first-class agricultural land, which, combined with its advantages in the way of water communication and the prospects of close connection with the leading markets of the Dominion by rail in the near future, have attracted a large number of settlers during the last six or seven years. The settlement derives its name from its location on the western side of Lake Temiskaming, which is an expansion of the Ottawa River and forms the boundary between the Provinces of Ontario and Quebec. The townships now open for settlement extend in a northwesterly direction from the upper portion of the lake, the northern tier running about half way across the Nipissing district. Lake Temiskaming is 68 miles in length with an area of about 113 square miles. The shores of its southerly portion are rocky and precipitous, and the land in the vicinity too broken to present inducements to settlers. A complete change is noticeable in the character of the country bordering the upper end of the Lake where the land is level and extremely rich. The Temiskaming country forms the eastern extremity of the great clay belt, the existence of which was established by the extensive explorations undertaken by the Provincial Government in 1900. Beginning at this point it stretches in a northwesterly direction, with a slight break at the Height of Land, across the districts of Nipissing and Algoma and into Thunder Bay district, comprising a total area of some 24,500 square miles, or 15,680,000 acres.

The Temiskaming settlement occupies a large valley comprising about 1,000,000 acres of choice arable land about half of which has been surveyed and laid out in townships. The land which rises abruptly from the lake shore to a height of about fifty feet, slopes gradually towards the Height of Land, which is about fifty miles distant from the lake. The soil is fully equal in fertility to that of any portion of southern Ontario, being a rich clay with a surface of black vegetable mould. It has been found upon analysis to be exceedingly rich in phosphoric acid and potash with an unusual amount of nitrogen—constituents which render it highly productive under cultivation, and make it possible to secure large crops from it from year to year without materially impairing its richness.

Analysis of Temiskaming Clay or Undersoil.

The following is the result of the analysis of two specimens of the clay undersoil of the Temiskaming district, made in October, 1894, by

Prof Shuttleworth, Professor of Chemistry at the Ontario Agricultural College, Guelph :

	1	2	Average.
Moisture	1.700	1.710	1.705
Insoluble matte	74.660	74.880	74.770
Organic	3.650	3.690	3.670
Soluble silicia	0.312	0.255	0.283
Alumina	5.820	5.619	5.719
Peroxide of iron	4.000	4.000	4.000
Phosphoric acid	0.292	0.203	0.247
Sulphuric acid	0.192	0.213	0.202
Br. Ox. of manganese	0.583	0.544	0 563
Lime	0.977	1.732	0.854
Magnesia	2.180	1.850	2.010
Potash	1.980	.....	1.980
Soda	0.331	.....	0.331
Undetermined	.....	.....	3.666
			100.

Nitrogen in clay=0.160 per cent.

"The above analysis shows that the clay is very rich in phosphoric acid and potash, and, for a subsoil, is unusually rich in nitrogen. Such a soil might be cropped for many years before its richness was seriously trenched upon."

It does not, like some clay soils, become hard when exposed to the air but is friable when dry, and easily worked. There are few rock exposures and these are usually limestone. Very little loose stone is found, some localities being entirely without rock or stone of any sort.

The settlement, like most of the agricultnral regions of New Ontario, is well watered by a number of rivers and streams flowing into Lake Temiskaming from the north and north-west. The most noteworthy of these are the Blanche River, which is navigable at high water for a stretch of thirty miles, the Montreal and Wahbi Rivers. The prevalence of streams and watercourses throughout the district is a great advantage as it not only ensures the settlers against the hardships freqnently entailed npon less favorable localities by mid-summer droughts, but provides them with a ready means of marketing the timber and cordwood cut from their land. Most of the timber is of a comparatively small size owing to the district having been swept by fire many years ago, which facilitates the work of clearing. The settler in this district enjoys a great advantage in being able to dis-

pose of the wood which it is necessary to cut in clearing his farm at prices which are sufficient to pay for the labor thereby securing a cash income until his land produces a crop. The money is paid on the delivery of the timber on the banks of the nearest floatable stream. Cedar grows to a large size in some neighborhoods, and straight, sound sticks, suitable for telegraph poles, which can be obtained in large quantities, bring 1½ cents per foot on the ground. They are floated down the Ottawa River to market. Railway ties and fence-posts are also disposed of in the same way. Spruce and balsam are in increasing demand for pulpwood, the wood devoted to this purpose being cut into twelve-foot lengths, the price paid being $2.50 per cord. There is not much pine on the most desirable lands, but spruce of a size and quality which will yield good lumber and building material is found everywhere. The settler has a right to take pine timber required for building, but pine timber cut and sold is subject to Government dues at $1.25 per 1,000 board measure feet until the patent is issued, after which all pine becomes the property of the settler.

The fertility of the soil is indicated by the profuse and luxuriant growth of the native grasses, wild fruits and other natural vegetation which flourish greatly wherever the forest has been burned away. Under cultivation every kind of vegetables and small fruits produced in temperate climates yield in profusion, and the grains and grasses produced are equal in yield and quality to those of any portion of the Province. Exhibits of the agricultural produce of Temiskaming have been shown during successive years at the Toronto Industrial Exhibition, consisting of fall and spring wheat, oats, barley, peas, timothy and clover, hay, potatoes, beets, carrots, onions, cucumbers and tomatoes; which attracted great attention owing to the size and excellence of the various products. The straw was remarkable for its bright color and stiffness, the grain was fully matured and the hay of unusual length and quality. Grain crops mature rapidly. In one instance a settler who sowed oats on the 5th and 25th days of June reaped a crop fully ripened in time to send some of the grain for exhibition in Toronto on the 20th of September. In some cases settlers have taken up land early in May, made a small clearing and produced a crop the same year. The settlement is particularly fortunate both as regards water supply and the natural facilities for drainage on account of the manner in which it is intersected by rivers and creeks. The country abounds in natural springs and when it is necessary to dig wells, water is almost always found near the surface. The water in the creeks is apt to become muddy after a heavy rain so that this source of supply cannot always be depended upon. The ease with which an outlet can be obtained for surface water by the construction of open ditches leading to the nearest watercourse enables the settlers to drain their farms where this is requisite, much more economically than in most districts.

The valuable report furnished to the Provincial Government by Mr. Duncan Anderson who made a special investigation of the settlement in 1898 contains the following passage which embodies a good deal of useful information as to local conditions and the methods which are advisable to adopt in clearing land. "In the townships around Liskeard and Haileybury, the country is generally covered with a dense mass of small timber, which, when properly chopped into 12 or 14 feet lengths and the brush carefully trimmed, it being evergreen, will, if wind and weather is at all favorable, be almost sure of a clean burn of brush. As those who have cleared land will know, this materially helps in the final clearing up of the fallow. The greatest drawback in clearing is burning the wind-fallen timber. In an evergreen bush, which is shaded at all seasons of the year, the fallen trees get thoroughly water soaked. The best way to get rid of them is to pile the logs up in heaps, being careful to put the fallen timber on the top of the piles, allowing them to remain two or three weeks before setting them on fire. If there is a good wind, and the time dry, not only will the piles burn, but the fallow will burn over a second time, burning moss, rotten wood and much of the surplus vegetable matter. On light land this second burning is not necessary, in fact the more decayed matter on it the better; but on this fertile, crumbly, calcareous clay, if there is too much mould and waste matter on the surface, the roots of the grain cannot penetrate to the clay soil beneath and the crop is more likely to be affected by summer frosts. Summer frosts which, like flies, are always troublesome in the first years of settlement, get less frequent and often entirely disappear as the clearings are made larger and the country is opened up. But if the crops are rooted in the clay they will stand frosts and the extremes of weather much better than when sitting on the surface, with their roots reaching for food amongst the mould and wood of a partially cleared fallow. In crossing a number of fields of oats (first crops), I noticed that wherever the oat roots had reached the under soil they were strong, healthy and green, but where they were harrowed in among a rotten mass of wood, the leaves were touched by the summer frost. Some of the settlers who have had experience in clearing, rake the land over by hand after logging, gathering into small heaps, chips, rotten wood and moss, and burn them off, so that the harrow teeth can reach the soil to mix it with the vegetable surface mould, insuring a safer crop and a far more profitable return. Clearing land is not altogether done by brute force —some skill is required. The most important point is to see that the surface is made so clean that the roots of the first crops will easily reach the clay soil below."

The climate of the Temiskaming district is bracing and extremely healthy as is abundantly shown by the low death rate and the infrequency of serious ailments among the settlers. The summer is not so hot as in the southern parts of Ontario, but the atmosphere is clearer

and, the average amount of sunshine greater, the effect of which is apparent in the rapidity with which the crops mature. This fully compensates for the comparative lateness of the spring. The winters as elsewhere in northern Ontario are characterized by steady cold, rarely broken by the thaws and rainy intervals which are generally experienced in lower latitudes; although continuous, the frost is seldom intense, the winter temperature being higher than in the more southerly districts of Muskoka and Parry Sound. The snow usually covers the ground about the beginning of December but it is never deep and disappears early in April.

The district is destined to become a great stock-raising and dairying country as it possesses all the requisites for the successful establishment of these important branches of agricultural industry. The cheapness of land and building material gives it a great advantage as compared with most of the older-settled parts of the Province. The plentiful supply of pure water and the excellence of the pasturage furnished by the luxuriant growth of grass and natural vegetation ensures a choice quality of meat and a good yield of milk, while the woods afford shelter from the winds and storms which are frequently a drawback to successful stock-raising in a prairie country. The extent of navigable water furnished by Lake Temiskaming and leading tributaries renders the creamery and cheese factory easily accessible. The great lack is ready and continuous communication with the leading markets of the Province, but this will be very shortly supplied by the construction of the Temiskaming Railway, which will enable the settlers to send their meat and dairy produce to Toronto and other Ontario cities and to participate in the advantages of the export trade to Britain.

So far the need of an outside market has not been seriously felt by the settlers as the local demand of the lumber camps for produce of all kinds has absorbed everything which they could supply at exceptionally good prices. Hay, oats, pork, beef, potatoes, butter, are all in requisition by the lumbermen, the prices paid being regulated by quotations in Ottawa and Montreal with the railway freight from Ottawa added. As production increases and lumbering operations are pushed further back, this profitable market cannot be depended on to the same extent and the price of the great staples of agricultural production will be largely controlled, as elsewhere, by the British market, so soon as railway communication is opened up. The settlement is only 300 miles in a direct line from Toronto and the construction of a railway of eighty miles in length north from North Bay will reach the heart of the best farming country. A haul of 440 miles will take the agricultural produce of this section to Montreal for shipment to Britain. When it is considered that the exports of Manitoba and the west have to be carried a distance of 1500 to 2000 miles to reach the seaboard it

will readily be seen that the opportunities for developing a remunerative export trade presented by the Temiskaming country are especially favorable.

An important question with many who are taking up land in the new settlements is the opportunity presented of obtaining temporary employment in the neighborhood. There are many men of limited means who are not in a position to go on the land and wait for a harvest and must depend for the first year or so upon other work. To such the lumber camps offer an opportunity of earning good wages for several months in the year. The progress of the villages of New Liskeard and Haileybury, the principal local centres, has been steady, and building operations and other work in and near these places have afforded work for a number of people. The principal resource of the settlers who are under the necessity of earning ready money until their farms become remunerative is, however, the sale of the wood removed in clearing as previously mentioned. In some cases men who have taken up land are glad to engage others to perform the settlement duties for them. As a general rule, therefore, the man who must live for some time on the immediate results of his labor, finds but little trouble in getting work, at no great distance from his holding. Those who locate upon burnt lands, of which there are considerable areas up the Blanche River, will find the land very easy to clear and can prepare an acre for cultivation in a few days, but of course they will have but little if any wood to dispose of, and cannot look to that source of income.

The Quebec side of Lake Temiskaming was settled for some years before the first settlers located on the Ontario shore. In 1894 there were only eight families settled in the district. The subsequent construction of the branch of the Canadian Pacific Railway from Mattawa to Temiskaming station at the foot of the lake gave a marked impetus to colonization. The population at the present time is estimated at about 2,000 and is rapidly increasing. The progress of settlement has been considerably stimulated by the construction of colonization roads by the Government, the sum of $8,000 being appropriated for that purpose in 1900 and a similar amount in 1901. A wagon road connecting the villages of Haileybury and New Liskeard has been built, and another road runs west from Haileybury through the township of Bucke and northwest through the same township. From New Liskeard a road has been constructed due north through the townships of Dymond, Harley, and Hilliard, to the Blanche River. Another road starting from New Liskeard skirts the shore of Wahbi Bay to Dawson's point. A road has been run east from the north road to Sutton's Bay and thence northward through the township of Harris. The west road is an important thoroughfare, the course of which lies west from New Liskeard through Dymond township into the township of Hudson with branches running north into Kerns township.

All these roads are Government undertakings in addition to which many roads have been constructed by the settlers on their own account. The Government have also built three substantial bridges and have erected at New Liskeard a substantial and commodious frame building for the temporary accommodation of newly arrived settlers and their families until they have erected houses on their lands. It is furnished with cooking apparatus and will accommodate several families at a time.

There are two villages in the district. New Liskeard, the larger of the two, formerly known as Thornloe, is situated at the head of navigation on the Ontario side of the lake. It is surrounded by an excellent farming district and is the distributing point for the townships of Dymond, Hudson, Kerns, Harley and the northern tiers of townships. It possesses six general stores, two sawmills, a temperance hotel, a sash and blind factory, and several minor industrial establishments. The leading religious denominations have erected churches, and a new school building costing two thousand dollars is in course of erection.

Haileybury, which is also a growing village, is the supply depot for Bucke township and the new territory to the west now being surveyed. It is the gateway for the tourist travel to the Temagami country of which there bids fair to be a steady increase as the attractions of that region become more widely known. Haileybury possesses a hotel, general store, sawmill, and other requirements of a village community.

There are at present twenty-four townships surveyed and open for settlement.

At present there is only one way of reaching the settlement, viz., by the Canadian Pacific main line to Mattawa, and thence by a branch of the same road to Temiskaming station at the foot of the lake. A line of first-class steamers owned by Mr. Lumsden, M.P.P., runs from this point to Haileybury and New Liskeard. A survey of the country is now going forward preparatory to the construction of the Temiskaming Railway which, when completed, will render the district more easy of access.

The settlers are an excellent class, the majority of them being from the farms of Ontario. They are as a rule intelligent, progressive and enterprising, and the previous experience which most of them possess is greatly to their advantage in undertaking pioneer work. They are disposed to welcome new arrivals in a friendly and helpful spirit, and the man who shows himself a good neighbor can always count on their co-operation and assistance in an emergency.

The land in Temiskaming settlement is for sale in 160 acre lots at 50 cents per acre, one half in cash, and the balance in two equal annual instalments subject to the usual settlement conditions of four years residence upon the land, having a habitable house 16 x 20 feet and having 16 acres under cultivation. John Armstrong,

New Liskeard, is the Land Agent, and the following townships are open for settlement: Bucke, Dymond, Hudson, Kerns, Harley, Harris, Casey, Brethour, Hilliard Armstrong, Henwood, Bryce, Beauchamp, Robillard, Dack, Evanturel, Ingram, Marter, Chamberlain, Savard, Sharpe, Blain, Marquis and Pacaud.

Eastern Algoma.

Algoma is the largest and, in some respects, most important of the districts into which New Ontario is divided. It extends north from the waters of Lake Huron and the Georgian Bay, a distance of over four hundred miles to James Bay and the Albany River. Its breadth from Nipissing District on the east to Thunder Bay on the west is about 180 miles. A territory so extensive naturally embraces many varieties of soil, climate and production. Much of it is as yet unexplored and the influx of settlement has so far been confined to a narrow fringe adjoining the water front, where the principal attraction has been the rich mineral and timber resources rather than the opportunities presented by the soil for successful agriculture. There is abundance of excellent land for farming and stock raising purposes, but the country, especially that adjacent to the lake shore, is much broken, and the fertile tracts so scattered among rocky and barren stretches that the real richness and productiveness of the arable tracts have not been properly appreciated.

The general conformation of the country is undulating, its surface being at an elevation of from 600 to 1000 feet above the level of the sea. The uplands frequently display an outcropping of rock belonging to the Huronian and Laurentian formations. These ridges and escarpments of rock on the higher ground impart an aspect of wildness and sterility to the landscape which is frequently very misleading, as the low-lying tracts and valleys lying between them are usually rich in alluvial soil, and many times as extensive in area as the rocky bluffs and projections which from their more conspicuous position are regarded as the most characteristic features of the country. This false impression as to the great proportion of barren land is especially likely to be formed from an inspection of the land in the neighborhood of portages on the rivers, as the break in the general level of the ground rendering a portage necessary always brings the rocky substratum to the surface.

The prevalence o' ridges and rising ground of a non-arable character is by no means such a disadvantage as is generally supposed, having counterbalancing advantages which may ultimately be found to outweigh all supposed drawbacks. They afford a protection from the winds and storms to the valleys below, where cattle can be much more easily taken care of than in a level country. These rocky uplands are naturally covered with timber although in some localities much of it has been burned away. If this growth, where it still exists, is carefully preserved, and the forest allowed gradually to reproduce itself in places which cannot be tilled to advantage, the waste land will furnish the settler with timber for building purposes and fuel for all time to come. The comparatively large proportion of the soil where trees are the only vegetation that will flourish to advantage, if kept in forest will moreover ensure the continuous fertility of the adjoining fields, and its presence will prevent that loss of productive power which is so frequent a characteristic of districts where the uniformly arable nature of the soil has resulted in extensive tracts being entirely stripped of timber.

Again the alternation of hills and valleys provides a natural drainage by which surface water speedily finds its way to some of the numerous lakes or water courses, the presence of which in every direction greatly tempers the climate and regulates the supply of moisture. In a country of lakes and hills the rain precipitation is much more frequent than in an unbroken plain. The constant evaporation from these large areas of water keeps the atmosphere moist, and the condensation of masses of vapor, over the forest-clad heights results in plentiful summer rains, rendering unknown these long continued droughts which at times cause such loss to farmers on the plains.

The water in the lakes and rivers is pure in quality and usually soft, though sometimes of a dark tint, which however does not affect the taste disagreeably or render it unhealthful. It has on the contrary a medicinal effect on those subject to rheumatism or disease of the kidneys induced by using hard water. Many invalids can testify to its healing qualities. The country abounds in springs of cold, pure water which maintain an even temperature throughout the year, and this fact and the nutritious quality of the grasses which are green as soon as the snow goes, remaining so the year round, render cattle disease unknown.

The soil of the valleys and other cultivable tracts varies greatly in its constituent elements and aspect. There are clay soils of different degrees of heaviness and shades of color, and loams both argillaceous and sandy, besides tracts of black mould of great fertility enriched by the decayed vegetation of centuries. Some stretches of sandy soil are too poor to repay cultivation unless heavily manured, but they are for the most part well timbered and capable of affording excellent bush pasturage in connection with the richer land adjoining. White clover is indigenous to the soil and abounds almost everywhere and tremendous crops of red clover are also raised.

Sault Ste. Marie Section.

The feature that from a purely agricultural point of view is regarded as the principal drawback of the district—the large quantity of rocky and sterile country to be found along the water front—is in fact a source of prosperity and a stimulus to an industrial influx, as these apparently valueless areas have been proved to be rich in mineral wealth. Gold, silver, copper and iron deposits have been discovered. The greatest known supply of nickel in the world is also contained in the formation found in the southeastern portion of the District, although the centre of the present development, Sudbury, is a few miles outside the boundaries of Algoma. Nickel mining nevertheless has an important bearing upon the opening up and development of this district. As the smelting and refining of nickel is a leading industry of the town of Sault Ste. Marie the commercial and manufacturing centre of the district, within a very few years this town has attained prominence as a rapidly growing and industrial community, where the raw material of the region tributary to it is worked up into finished articles of manufacture.

Sault Ste. Marie in the southwestern angle of the district is situated on the St. Mary's River which forms the international boundary between Canada and the United States. The water power furnished by the Falls and its accessibility by means of the navigation system of the great lakes, has contributed greatly to its development as the leading town in the district. The branch line of the Canadian Pacific Railway has brought it within 24 hours journey of either Montreal or Toronto. Ship canals on both the Canadian and American sides of the river constitute it an important point on the great international system of inland navigation. It has more than doubled its population in two years.

The great cause of the recent development and industrial prosperity of the town and surrounding district was the selection of this locality in 1894 by Mr. F H. Clergue and a number of capitalists associated with him as the site for numerous interdependent manufacturing enterprises. The reasons which influenced this selection were the feasibility of securing enormous hydraulic power readily convertible into electric energy, and the quantity of raw material in the form of timber, pulp wood and minerals within easy access. The first step taken by the syndicate directed by Mr. Clergue was the organization of the Lake Superior Water Power Company and the enlargement of the power canal to a capacity of 20,000 horse power. The erection of large pulp mills followed. Experiments made with the object of perfecting the pulp manufacture showed that the sulphur wasted in the ordinary process of nickel smelting could be profitably utilized in the manufacture of chemical pulp. This led to the extension of the syndicate undertakings by the acquisition of the Gertrude nickel mine at

Naughton near Sudbury and the establishment of works at the Sault for the manufacture of ferro-nickel steel. In connection with the latter industry mining operations were undertaken at Michipicoten where a supply of red and brown hematite iron ore suitable for smelting with nickel was obtained. In the meantime large foundry and machine shops for supplying the machinery needed in the different industries inaugurated had been erected. Other branches were undertaken from time to time, as profitable means for utilising the by-products of the main lines of manufacture were discovered, economy in production being secured by the close association of these varied industries with each other and the avoidance of needless waste.

The group of companies by whom these operations are carried on has a total capital of $65,700,000 and has already expended the sum of $9,600,000 in factories, canals, railways, docks, and other features of their vast and varied undertakings. The projects in contemplation involve considerably larger outlays. The pulp mills at the Sault are the largest in the world and are capable of producing 150 tons of dry pulp daily. One of them is 600 feet in length by 80 feet in width and the other 300 by 100 feet. They were erected and fitted up at a cost of about $2,000,000. The mills, which employ 500 men exclusive of those engaged in getting out pulpwood, are kept running night and day and their output, valued at $17,000 a week, finds a market all over the civilized world. The farmers of the district find a ready market for spruce and poplar, and during the winter many of them find it profitable to cut timber for the supply of the mills.

Reduction works for the manufacture of ferro-nickel steel are now in course of construction at Moore's Point three miles above the entrance of the canal. They will employ about 500 men and from fifty to sixty others will be required at the nickel mine. In addition huge blast furnaces are to be established for the production of bessemer steel and works for the manufacture of armor plate, rails and structural material which, when complete, will give employment to many times that number.

Algoma Central Railway.

The Algoma Central Railway is one of the most important of the undertakings of Mr. Clergué and his associates so far as affects the opening up and populating of the district. It will run from Sault Ste. Marie to the Michipicoten mining district and thence north to the main line of the Canadian Pacific Railway a distance of about 150 miles, with a branch line connecting it with Michipicoten Harbor. It will eventually be carried on through the Moose River country to Hudson's Bay. Its completion will give access to the extensive forests of Northern Algoma which abound in spruce timber and the more valuable varieties of hardwoods. In the meantime its construction to Michipicoten will facilitate the transportation of ore from the Mount

Helen mine situated 12 miles from Michipicoten Harbor on the north east shore of Lake Superior to the works at the Sault.

It is estimated that the Mount Helen contains 30 millions of tons of red hematite yielding from 60 to 66 per cent. of pure Bessemer iron ore. Large shipments from this mine are also made by water to the blast furnaces at Midland, requiring a large fleet of steamers. A considerable section of the southern portion of the railway has been completed and is now in operation. From the extent and importance of the numerous enterprises recently set on foot centering in Sault Ste. Marie, only a few of the principal of which have been here specified, it will readily be understood that the population of the town has increased very rapidly. It is estimated at about 6,500 but will undoubtedly be largely augmented during the present year The steady influx of labor renders Sault Ste. Marie one of the best local markets for all kinds of farm and garden produce to be found anywhere, the local supply not beginning to equal the demand. Furthermore the constant demand for workingmen in a variety of occupations gives the settler who is under the necessity of securing a livelihood until his farm becomes productive, an opportunity to obtain temporary employment for himself or members of his family. There is no portion of New Ontario which offers equal advantages in this respect.

The land in the neighborhood of Sault Ste. Marie at Goulais Bay, along the Sault Branch of the Canadian Pacific Railway and on St. Joseph's Island has been largely taken up, but there remain a number of lots fit for settlement, though not of course equal in uniform fertility to those in occupation. They contain from 30 to 60 per cent. of fairly good arable soil. At Goulais Bay in Vankougnet township a portion of the land belongs to the Dominion Government. About two-thirds of Vankougnet however, belonging to the Province, is open for settlement. The distance from Sault Ste. Marie is about 26 miles and the town can be reached by a wagon road. The land about Goulais Bay is of variable character and the country considerably broken. The valleys between the rocky heights have a soil of clay or sandy loam, the latter being the most productive and yielding well under judicious treatment.

The timber is principally hard maple, ironwood and black and yellow birch which are found on the higher ground, while the lower levels show in addition, balsam, spruce and some tamarac. The price obtainable for this timber pays the settler for the labor expended in clearing his land and sometimes leaves a profit in addition. The porous character of the soil renders drainage unnecessary except for unusually low-lying tracts.

St. Joseph's Island, containing about 92,000 acres, lies about twenty-five miles south-east of the Sault, at the entrance to the St. Mary's River. The soil is generally fertile though stony in some parts, and the island well watered and timbered. It is all taken up

with the exception of about 4,000 acres, but partly cleared farms can be purchased at reasonable prices, according to quality of soil and extent of improvements.

Settlement in the townships along the line of the Sault Ste. Marie branch of the Canadian Pacific Railway has extended from five to twenty miles back from the road. There are flourishing settlements at Bruce Mines, Desbarats, Thessalon, Nairn Centre, Massey and other points, and recent accessions of colonists have been numerous, the influx in this excellent grazing and dairying section having been not a little stimulated by the demand for provisions created by the growth of Sault Ste. Marie. The establishment of an extensive pulp mill by the Spanish River Pulp and Paper Company near Webbwood will considerably increase the demand for the small farm produce of this section.

The Manitoulin Islands contain much excellent arable soil, but it is now nearly all taken up, and the population numbers from 10,000 to 12,000 The building of the Manitoulin and North Shore railway from Little Current to Sudbury will give the inhabitants of the Manitoulin Islands winter communication with the mainland and improve farming conditions.

The Townships of Korah, Park, Prince, Plummer and St. Joseph's Island are open for location under the Free Grants and Homesteads Act but very little good land remains unlocated in them. Various other townships are open for sale and settlement at 50 cents per acre, one half cash and the balance in two equal annual instalments, three years' residence being required before the patent issues.

There are Crown Land Agencies in the district in charge of D. M. Brodie, at Massey; G. Hamilton, at Richard's Landing, on St. Joseph's Island; and W. Turner, at Sault Ste. Marie.

If more detailed information concerning any of the districts mentioned than is contained in this pamphlet be required, write to the local Crown Lands Agents or to

HON. E. J. DAVIS,
Commissioner of Crown Lands,
Toronto, Ontario.

Map accompanies —
Ont. Bureau of Colonization.
Land settlement in New
Ontario


KEEWATIN
MINNESOTA
ENGLISH RIVER
WINNIPEG
CANADIAN
NORTHERN
TOWER


N
ALBANY RIVER
Boundary
S U P E R I O

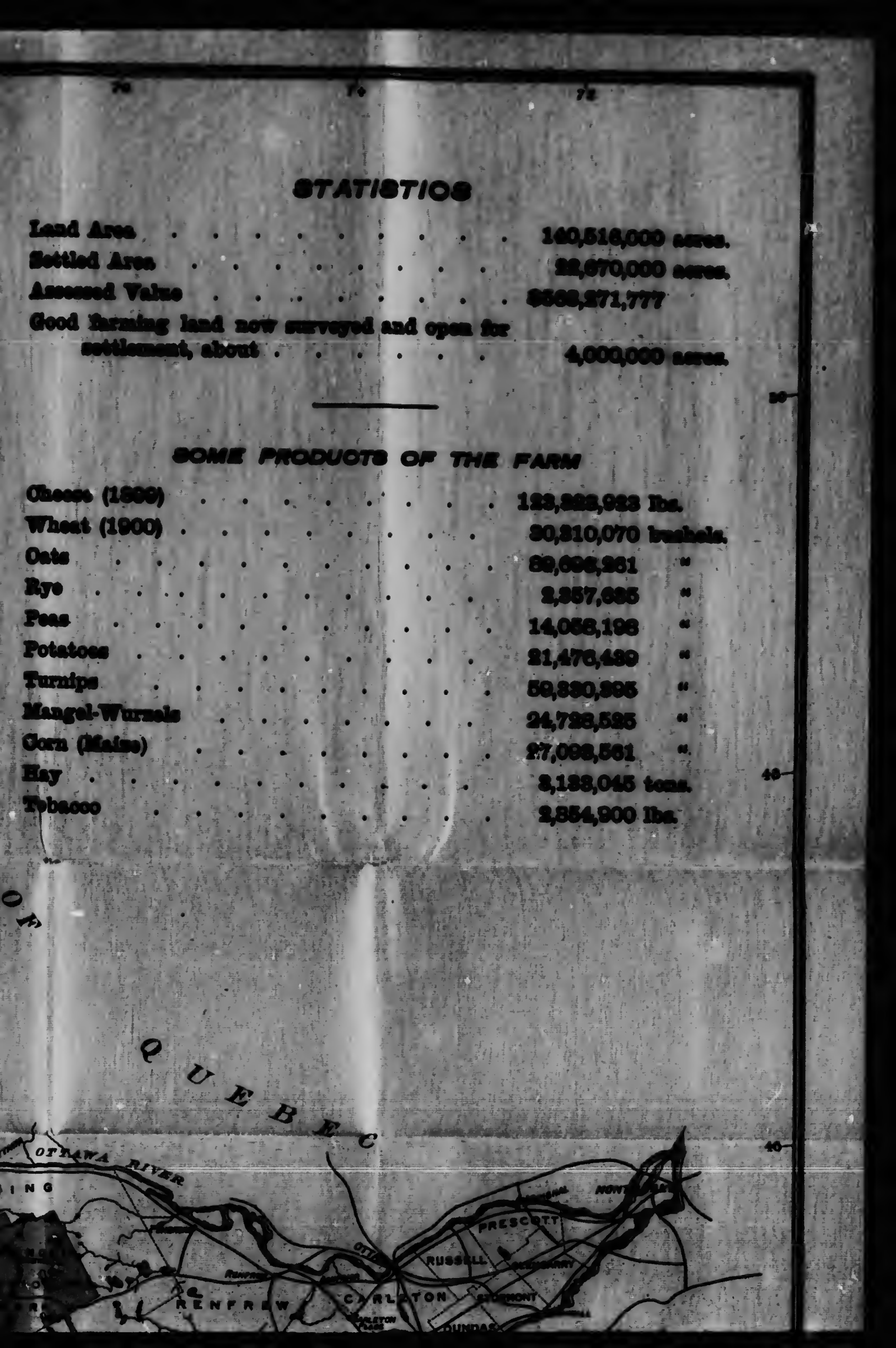
ALBANY RIVER
PROVINCE
of Gilead
GREAT

STATISTICS

Land Area	140,516,000 acres.
Settled Area	32,670,000 acres.
Assessed Value	$563,271,777
Good farming land now surveyed and open for settlement, about	4,000,000 acres.

SOME PRODUCTS OF THE FARM

Cheese (1900)	123,222,232 lbs.
Wheat (1900)	30,310,070 bushels.
Oats	82,696,251 "
Rye	2,257,625 "
Peas	14,056,198 "
Potatoes	21,476,489 "
Turnips	59,330,395 "
Mangel-Wurzels	24,728,525 "
Corn (Maize)	27,092,561 "
Hay	3,133,045 tons.
Tobacco	2,354,900 lbs.



Department of Crown Lands.
Honorable E. J. DAVIS, Commissioner.

MAP

OF THE PROVINCE OF

ONTARIO

CANADA.

SCALE OF MILES.

1901

THE COPP, CLARK Co LIMITED LITHO. TORONTO.

46

44

42

96 94 92 90


LAKE SUPERIOR
LAKE MICHIGAN
LAKE HURON
DETROIT
ESSEX
TOLEDO
86
84


HURON
LAKE
BRUCE
GREY
SIMCOE
YORK
PEEL
HALTON
WELLINGTON
PERTH
OXFORD
MIDDLESEX
ELGIN
NORFOLK
ESSEX
DETROIT
84
82
80


QUEBEC
OTTAWA RIVER
RENFREW
CARLETON
PRESCOTT
RUSSELL
GRENVILLE
DUNDAS
LEEDS
LANARK
HALIBURTON
VICTORIA
DURHAM
ONTARIO
LAKE
BUFFALO
46
44
42
75
76