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#### NOTICE.

In order to give those of our readers who are desirous of investing in property, and on the security of property, in the Province of Ontario, the benefit of thoroughly reliable legal practitioners, we give in our advertising pages the firms with whom it would be advisable to communicate. The utmost reliance can be placed on their judgment and honour.

We also give the names of loan and financial societies, debentures of which are offered in the British market. The companies mentioned are all of high standing financially, and are managed by gentlemen of the highest integrity in the Province.







## PREFACE.



THIN its limits as now settled Ontario extends over ten degrees of latitude and twenty degrees of longitude. Its breadth from Point Pelee on Lake Erie to Fort Albany on James bay is more than seven hundred miles, and its length from Point Fortune on the Ottawa river to Rat Portage on the Winnipeg is more than a thousand miles. It is larger than the

States of Ohio, Indiana, Illinois and Michigan by ten thousand square miles; larger than Iowa, Minnesota and Wisconsin by eleven thousand square miles; larger than the six New England States, with New York, New Jersey, Pennsylvania and Maryland, by twenty-five thousand square miles; and larger than Great Britain and Ireland by seventy-eight thousand square miles. It is only four thousand square miles less than the French Republic, and only eight thousand miles less than the German Empire. It is a country large enough to be the seat of a mighty nation, and its situation on the great lakes is one that any state or empire of the world might envy.

But Ontario has something more to boast of than a broad expanse. It has a fertile soil, an invigorating climate, vast forests of merchantable timber, treasures of mineral wealth, and waterpower of limitless capacity. Better than all these, it is peopled by a hardy and energetic race of men, born and reared under the ennobling and inspiriting influence of free institutions, free schools, free speech and a free press. It has extensive areas which grow a better sample and a larger average yield of the staple cereals the any other portion of the continent; and it has more extensive areas not yet brought under cultivation which may be converted into grazing fields of unsurpassed richness, suitable for the production of the best qualities of butter and cheese, beef and mutton. In a report on the trade between the United States and the British Possessions in North America, made by Mr. J. R. Larned of the United States Treasury Department in 1871, it was observed that—

"Ontario possesses a fertility with which no part of New England can at all compare, and that particular section of it around which the circle of the great lakes is swept forces itself upon the notice of any student of the American map as one of the most favoured spots of the whole continent, where population ought to breed with almost Belgian fecundity."

Similar testimony to the worth of the Province is borne by another American, who is well known on both sides of the Atlantic as a careful student of economic subjects. In an article in the *North American Review* for September, 1877, Hon. David A. Wells said:

"North of lakes Erie and Ontario and the river St. Lawrence, east of lake Huron, south of the 45th parallel, and included mainly within the present Dominion Province of Ontario, there is as fair a country as exists on the North American continent; nearly as large in area as New York, Pennsylvania and Ohio combined, and equal if not superior as a whole to these States in its agricultural capacity. It is the natural habitat on this continent of the combingwool sheep, without a full, cheap and reliable supply of the wool of which species the great worsted manufacturing interest of the country cannot prosper, or, we should rather say, exist. It is the land where grows the finest barley, which the brewing interests of the United States must have if it ever expects to rival Great Britain in its present annual export of eleven millions of dollars' worth of malt products. It raises and grazes the finest of cattle, with qualities especially desirable to make good the deterioration of stock in other sections; and its climatic conditions, created by an almost encirclement of the great lakes, especially fit it to grow men. Such a country is one of the greatest gifts of Providence to the human race; better than bonanzas of silver or rivers whose sands contain gold."

Of such a country it is something to say that the people who occupy it are proving themselves worthy of it. Highways and railways have been opened in all directions; mills, factories and markets are being established wherever settlement extends; and

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PREFACE.

the heat of the pulse of commerce is being felt in the remotest townships. In a word, this Province of Ontario is a veritable Land of Promise. It contains within itself all the elements which go to build up national greatness. In agriculture, manufactures, and the arts it has already attained a distinguished place, and each furnishes abundant evidence of advancement and prosperity.

The Province justly boasts of a stable government and beneficent laws. The burden of local taxation, never heavy, has been lightened by the distribution of several million dollars of surplus in the government treasury. Provision has been made for the necessities of the unfortunate and the afflicted by the establishment, support and management of public institutions. The public school system is at once practical in its operation and responsive to the requirements of the people. Agriculture is greatly encouraged by grants for the maintenance of agricultural societies, by the valuable work accomplished at the Agricultural College and Model Farm, and by a systematic effort to ascertain the agricultural status of the country and to record its progress from year to year. Efficient means have been provided for the care and improvement of the public health, and for weakening the force of those conditions which favour disease and tend to shorten the period of life. The labours of the pioneer have been lightened and cheered by the security of a homestead right in his land, and by the building of highways to give him ready access to the market towns of the older settlements. A great impetus has also been given to the manufactures and commerce of the Province by the large sums of public money granted as subsidies for the construction of railways, and the results of this policy have only begun to appear. What they shall be twenty years or even ten years hence the most sanguine citizen cannot venture to predict.

But, in addition to the measures taken by the Government to promote the moral, educational and material interests of the Province, mention should be made of the large tract of disputed territory which has recently been declared to be the possession of Ontario by a decision of the Judicial Committee of the Privy Council. By this decision the right to a territory of nearly one hundred thousand square miles in extent has been secured, which possesses a wealth of timber, minerals and fisheries that may be made a source of generous revenue for a century to come, if not for all time, and capable of sustaining in thrift a population equal in numbers to that of any state of northern Europe.

As the fruit of so much encouragement, endeavour and attainment on the part of its government and its people, it is not too much to say that Ontario should continue to be the most prosperous as well as the best governed commonwealth of the North American Continent. Indeed there cannot be a doubt in the mind of any careful observer that of all the States of America to-day Ontario is the most prosperous as well as the best governed.

In the following chapters it is proposed to present facts to show that the above is no fancy sketch, but that with respect to the land, the climate and the people Ontario does not rank second to any other portion of equal area in America, and that to all intending emigrants from the old world who possess some means and a fair share of energy there is no better or more attractive field for settlement in either hemisphere.



viii.



### CHAPTER I.

#### THE PEOPLE.



NE of the desirable things to be known of any country is, What of its people—their number, their race, their religion and their occupation? The people of Ontario will bear to be studied in comparison with the people of any other portion of the civilized world. As to numbers, the census records of them are as follows:—

YEARS.	MALES.	FEMALES.	TOTAL.
1842	259,914	227,139	487,053
1848	387,631	338,248	725,879
1851	498,131	452,052	950.183
1861	724,459	669,488	1,393,947
1871	827,277	790,968	1,618,245
1881	975,022	945,315	1,920,337

The above table does not include the population of the Indian reserve of the township of Tuscarora, in the county of Brant, but in all the following tables these are included. Considered by nativities the people are classified as follows:—

BORN.	1881.	1871.	1861.	1851.
England and Wales	139,031	124,062	114,290	82.699
Ireland	130,094	153,000	191,231	175,963
Scotland	82,173	90,807	98,792	75.811
Canada	1,493,509	1,178,510	910,476	558,555
Other British possessions.	2,606	2,599	1,752	684
France	1,549	1,751	2,389	1,007
Germany	23,270	22,827	22,906	9,938
Italy	378	89	104	15
Russia and Poland	444	296	161	188
Spain and Portugal	103	207	96	54
Scandinavia	852	245	261	31
Carried forward	1,874,009	1,574.393	τ,342,458	904,936

BORN.	1881.	1871.	1861.	1851.
Brought forward United States Other countries At sea Not given	1,874,009 45,454 1,298 256 <b>2,21</b> 1	I,574,393 43,406 I,176 306 I,570	1,342,458 50,758 1,158 323 1,394	904,936 43,732 1,586 167 1,574
Totals	1,923,228	1,620,851	1,396,091	952.004

NATIVITIES.—Continued.

The students of this table will not fail to notice the steady increase in the number of the people who are natives of the Province. The population indicates a steady rise during each decade being about 58 per cent. of the whole in 1851; 66 per cent. in 1861; 70 per cent. in 1871; and 80 per cent. in 1881. It is obvious, therefore, that there must be a steady growth of Canadian sentiment and nationality; no other result could be looked for among a people so many of whom have had the advantage of a training in the public schools of the Province, as well as in the principles of government which obtain under its free institutions.

Intimately connected with the classification of the people by nativities is their classification by origins; but the census is defective as regards this information, except for the years 1871 and 1881. The figures for those years are as follows:---

ORIGIN.	1881.	1871.
English and Welsh Irish Scotch Dutch French	542,232 627,262 378,536 22,163 102,743	444,711 559,442 328,889 19,992 75,383
German Italian. Russian and Polish Scandinavian Spanish and Portuguese.	188,394 687 787 1,521 285	158,608 304 392 686 213
Swiss. African Indian Other origins. Not given	2,382 12.097 15,325 1,546 27,268	950 13,435 12,978 360
Totals	1,923,228	1,620,851

THE	PEO	ΓLE.
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The leading nations of Europe are well represented as to the origin of the people, and there are few or none of the western peoples of Europe who would not find in Ontario a goodly number of the representatives of their race.

Next as to religions. It is often a matter of first consequence with persons who intend leaving their own for a foreign country to know the religious persuasion of the people among whom they propose to cast their lot. For the information of such persons the following table is given:—

DENOMINATIONS.	1881.	1871.	1861.	1851.
Adventists	696	I,449	1,050	663
Baptists	122,731	86,630	74,671	55,647
Brethren	7,714	3,800		
Roman Catholics	320,839	274,162	• 258,151	167,695
Church of England	367,528	330,995	311,559	223,110
Congregationalists	16,340	12,858	9.357	7,747
Jews	1,193	518	Ő14	106
Lutherans	37,901	32,399	24,299	12,089
Methodists	591,503	462,264	350,373	213,365
Pagans	I,499	1,884		
Presbyterians	417,749	356,442	303,374	204,148
Quakers	6,307	7,106	7,383	7,461
Õther denominations	13,529	25,829	22,246	15,622
No religion	1,756	4,908	17,373	
Not given	15,943	19,607	15,641	44,271
Totals	1,923,228	1,620,851	1,396,091	952,00.4

In connection with this table may be given the following, which shows for the same years the number of places of worship of the principal denominations:—

DENOMINATIONS.	1881.	1871.	1861.	1851.
Baptist Catholic Congregational Church of England Lutheran Methodist Presbyterian Other churches	43 <sup>1</sup> 3 <sup>6</sup> 7 7 <sup>1</sup> 680 89 2,375 852 210	279 294  511  1,924 696 389	70 93  136  398 182 59	119 126  228  500 286 215
Totals	5,075	4,093	938	I,47.4

3

The next and last classification of the people is by occupations, being the most important of all as information to the people of other countries who have emigration in mind. It is given in detail as follows:—

Occupations of the people in Ontario according to the Census Returns of 1851, 1861, 1871 and 1881, and in the Dominion according to the returns of 1871 and 1881.

OCCUPATIONS.	1881.	1871.	1861.	1851.
Agricultural Class:				1
Dairymen	810			
Farmers and farmers' sons	200 551	226 882	43	\$6.224
Farriers and veterinary surgeons	300,334	220,003	132,004	00,224
Gardeners and purserymen	2/5	109	00	40
Various agricultural occupations	2,5/1	1,310	524	301
various agricultural occupations.	301	320	1,042	53
Totals	304,630	228,708	134.333	86,637
Commercial Class				
Accountants and bookkeepers				6
Agents	2,441	1,225	492	50
Auctioneers	2,40,	975	551	179
Bankers and monoy brokers	107	1 20	80	41
Brokers and money blokers	891	159	67	35
Bookeellers and stationers	174	120	77	13
Boombooners and stationers	221	316	116	72
Boot and house and	• • • • • •	12		
Coheren and d	144	156	68	37
Cabinen and draymen	1,081	2,625	604	265
Commercial clerks	12,474	8,290	4,262	3,100
Commercial travellers.	1,053	344		5,
Dealers and traders.	1,155	655	426	223
Express employés	206	53	4-0	-=)
Fruiterers	153		21	
Grain dealers	321	212	~1	Ū
Hawkers and pedlars	627	507		
Insurance employés	4.15	224	4-0	200
Livery stable keepers	355	2-4	•••••	
Mariners and sailors	3 3 5 0		82	32
Merchants	3,339	2,945	808	580
Pilots	- / / 20	5,939	1,057	2,681
Railway employés	39	32	17	II
Shopkeepers	5,074	1,931	855	
Stage owners and drivers	2,494	1,699	3,661	435
Stevedores	79	•••••	4	139
Telegraph employés	3	3	i	
Various commercial occurrent	1,305	543	115	16
t arrous commerciar occupations.	75		233	263
Totals	44,548	29,088	14,023	8,452

#### THE PEOPLE.

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OCCUPATIONS-Continued

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OCCUPATIONS.	1881.	1871.	1861.	1851.
Domestic Class:				
Barbers and hairdressers	<b>0</b> 64	420	218	0.1
Barkeepers	527	510	07	94 71
Hospital attendants	77	230	57	74
Hotel and boarding-house keepers	4,094	4,124	3,100	2.108
Laundresses	551	208	215	186
Midwives and nurses	359	21	18	17
Servants, male	5,424	4,469	3,783	3,180
" female	21,635	16,715	13,778	12,274
Various domestic occupations .	173		485	80
Totals	33,804	26,805	21,784	18 <b>,013</b>
Industrial Class :				
Aerated water makers	54		7	26
Bakers	1,938	1,118	653	462
Blacksmiths	10,030	<b>7</b> ,897	<b>5,</b> 431	4,235
Boat builders	187		18	14
Boiler builders	360		79	38
Bookbinders	532	257	86	51
Boot and shoemakers	6,961	6,716	6,419	5,898
Box and trunkmakers	158	67	10	21
Brewers and distillers	480	399	369	407
Bricklayers	1,431	831	549	252
Brickmakers	913	595	240	210
Brush and broom-makers	332	348	65	42
Builders	1,057	015	293	00
Butchers	3,223	1,910	1,055	000
Cabinet and furniture-makers	2,799	1,910	1,322	1,005
Car and locomotive builders	00		5	
Carders and weavers	2,999	2,095	1,209	1,000
Carpenters and joiners	2,586	14,993	10,393	0,122
Carriage-makers	3,300	J 3.023	2,000	1,415
Chemists and druggists	407 1 275	811	39	108
Confectioners	1,2/3	262	300 162	86
Coopers	2.404	2.472	1708	1.035
Dressmakers and milliners	0.747	3 867	1,790	T 235
Edge tool makers	177	185	13	
Engineers and machinists	5.063	1.612	I.104	603
Engravers and lithographers	187	70	42	20
Factory operatives	3.108	,-		6
Fishermen	766	920	258	96
Foundrymen	2,785	2,010	771	483
Gasworks' employés	21	8		
Gold and silversmiths	117	•••	20	19
Grocers	1,650	1,384	1,010	476
Hatters and furriers	295	233	121	150
Carried forward	83,910	57,638	37,159	30,045

·····				
OCCUPATIONS.	1881.	1871.	1861.	1851.
Industrial Class_Continued				
Brought forward	82.010	57 628	27 150	20.045
Hosiers and glovers	262	57,030	3/1-39	50,045
Lime burners	202	03	5	12
Locksmiths and gunsmiths	1/		7	50
Lumbermen and raftsmen	120	142	90	
Manufacturers	1,007	1,929	4,114	993
Meat curers	1,300	3,309	490	595
Mechanics	1 426	2 7 2 7	700	22
Millers	2 204	2,/21	700 7.876	T 082
Millwrights .	5,294	3,4/2	1,010	1,003
Miners	51/		392	490
Musical instrument makers	493	200	240	
Nail-makers	39	•••••	42	10
Opticians and mathematical in-	41	•• ••	14	9
strument makers	27	10	10	2
Painters and glaziers.	4 104	2 2 2 2	10	545
Plasterers	4,104	2,290	1,124	045
Plumbers	527	100	527	345
Potters	182	100	70 86	14 66
Printers and publishers	3 086	100	00	430
Quarrymen	3,000	1,5/1	930	439
Riggers and caulkers	15	54		
Saddlers and harness-makers	2.222	1.070		872
Sail makers	48	1,9/0	1,152	075
Saw and file-cutters	144	5~	75	15
Sawyers and millmen	1.083	т 268	726	881
Seamstresses	3,180	2.616	050	331
Ship builders	454	581	939	23
Ship chandlers	35	2	49	-5
Shirt and collar-makers	109		-	12
Soap boilers	50			30
Steam engine builders	6	24	77	
Stone and marble cutters	986	102	475	237
Stone masons	3,196	2.613	1.650	i.466
Tailors and clothiers	7,339	4,495	3.140	3.118
Tanners and curriers	995	997	767	561
I in and coppersmiths	2,284		851	497
1 ODacco workers and dealers	879		76	48
Watchmakers and jewellers	1,120	707	L 418	188
Vorious industrial and	254	318	261	380
various industrial occupations	2,743	3,136	1,989	1,395
Totals	129,982	93.871	60.441	44.950
Buofamional Class				
Artists and litterations	1			
Architects	359	<b>′</b> 334	148	42
Christian Brothern	163	104	62	17
Christian Diotners	30	12	••••	
Carried forward	552	450	210	59

#### OCCUPATIONS-Continued.

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#### THE PEOPLE.

#### OCCUPATIONS -- Continued. 1881. OCCUPATIONS. 1871. 18бі. 1851. Professional Class-Continued. Brought forward ..... 552 450 210 59 Civil engineers 223 261 87 27 Clergymen ..... 2.87č 2,211 1,725 967 Court officers..... 471 537 . . . . . Dentists ..... 365 36 230 114 Government employés. Judges ..... Land surveyors ..... 2,428 1,199 . . . 68 63 53 53 260 224 117 102 Lawyers ..... 1,099 632 302 1,331 Militia officials ..... 47 43 . . . . . . . . . . Municipal employés..... 370 261 . . . . . . . . . . . Musicians..... 245 126 134 93 Notaries ..... 19 27 17 32 Nuns ..... 97I 453 .... 886 . . . Physicians and surgeons ..... 1,778 1,565 385 Photographers ..... 440 48 18 341 Policemen and constables ..... 496 72 117 154 Professors ..... 66 53 **. .** . . **. .** . . . Stenographers ..... 38 • **•** • • Ι . . . . **. .** Students-at-law..... 674 201 . . **. . . .** . . . . . Students in medicine 215 169 . . . . . . . . . . . . Teachers, male ..... 4,379 2,956 2,120 6,118 female ..... 302 4,643 \ 1,119 Various professional occupations. 2,242 398 1,043 1,049 Totals ..... 6,798 23,356 16,754 9,438 Miscellaneous : Articled apprentices ..... 719 568 407 Contractors ..... 612 381 183 77 Gentlemen of private means 4,062 1,568 1,116 **. . .** . . Hunters ..... 1,038 13 914 4<sup>1</sup>3 Keepers and guards..... 580 732 . . . . 134 78,584 78,122 62,179 96,543 917 239 509 . . . . . . Packers ..... 38 119 . . . . . . . . . . Pensioners ..... 220 263 . . . . . . 257 Teamsters and drivers ..... 2,486 749 845 . . . . Various indefinite occupations ... 1,346 592 5,690 1,235 81,613 Totals ..... 100,192 68,198 94,442 Summary by Classes: Agricultural ..... 86,637 228,708 304,630 134,333 44,548 33,804 8,452 Commercial ..... 29,088 14,023 Domestic ..... 26,805 21,784 18,013 93,871 44.950 Industrial ..... 129,982 60,441 Professional ..... 9,438 6,798 23,356 16,754 Miscellaneous ..... 68,198 100,192 81,618 94.442 246,468 Totals ..... 463,424 340,211

630,762



#### CHAPTER II.

#### THE GOVERNMENT.



the Imperial Act relating to the consitution of Canada known as the British North America Act, 1867, a federal union of Provinces was established under the name of the Dominion of Canada and with a form of government similar in principle to that of the United Kingdom. The Parliament of the Dominion consists of a Senate and a

House of Commons—the members of the former body being a fixed number for each Province nominated for life by the Governor-General in Council, and the members of the latter a representation of each Province based on the last decennial census and elected by the people for a term of five years. In the Senate the Province of Ontario is entitled to twenty-four members out of a total of seventy-eight, and in the House of Commons it is entitled to ninety-one members out of a total of two hundred and ten. This Parliament has jurisdiction over all matters of general interest to al! the Provinces, such as the regulation of trade and commerce, the postal service, militia and defence, navigation and shipping, currency and banking, bankruptcy and insolvency, the criminal law and the establishment and management of penitentiaries, and such subjects as are not exclusively assigned to the Legislatures of the Provinces.

The Legislature of Ontario consists of the Lieutenant-Governor, and one House styled the Legislative Assembly. The Lieutenant-Governor is appointed by the Governor-General in Council for a term of five years, but is removable for cause assigned. His advisers, known as the Executive Council, are composed of six persons selected from the members of the Assembly, and to this body they are responsible for every act of the Executive power. The Assembly itself is composed of eighty-nine members, elected for a term of four years to represent the eighty-nine electoral districts into which the Province has been divided. It has exclusive power, with the advice and consent of the Lieutenant-Governor, to make laws in relation to matters coming within the following classes of subjects:

1. The amendment of the constitution of the Province, except as regards the office of Lieutenant-Governor.

2. Direct taxation in order to the raising of a revenue for Provincial purposes.

3. The management and sale of the public lands of the Province and of the timber and wood thereon.

4. The establishment, maintenance and management of Reformatory Prisons, and of Hospitals, Asylums, Charities and eleemosynary institutions other than Marine Hospitals.

5. Municipal institutions and the regulation of shop, saloon, tavern and other licenses.

6. Local works and undertakings other than such as connect the Province with any other Province or foreign country, or such as are declared to be for the general advantage of Canada, or for that of two or more Provinces.

7. Property and civil rights, and the solemnization of marriage.

S. The administration of justice, including the constitution, maintenance and organization of Provincial Courts, both of civil and criminal jurisdiction, and the punishment of offences against any Provincial law.

9. Legislation respecting education, providing that nothing in any such law shall prejudicially affect any right or privilege with respect to denominational schools which any class of persons had by law at the time of the Union.

10. Laws in relation to agriculture and immigration which are not repugnant to any Act of the Parliament of Canada on the same subjects.

11. Generally all matters of a local or private nature in the Province.

Briefly stated, the Province possesses a full measure of home rule; the people through their representatives govern themselves; and in any matter affecting the local rights of the Province the courts are careful to give ample protection. Whatever Act of the Federal or Local Legislature is contrary to the provisions of the British North America Act the courts may declare to be invalid, and in this way a just measure of security is provided alike for the Provinces and the people.

There may be, as there sometimes has been, a clashing of authority between the Federal and Local powers; but in every matter of dispute the legal rights of Governments or parties are interpreted and finally decided by judicial authority.

The qualifications of an elector are various, but all classes and interests are given a voice in choosing a representative to serve them in the Legislature. Those entitled to vote are:

1. Persons assessed as owners, tenants, or occupants of real property to the amount of four hundred dollars in cities, of three hundred dollars in towns, and of two hundred dollars in townships and incorporated villages.

2. Persons assessed for an annual income of not less than four hundred dollars, derived from some trade, calling, office or profession, and for which the municipal tax has been paid; and

3. Farmers' sons living with their fathers, and rated on the assessment roll for the homestead at an amount of not less than two hundred dollars.

Under the third provision it may be said that practical manhood suffrage prevails, as far as concerns the agricultural class; and the results have been so uniformly satisfactory that a still wider extension of the franchise, embracing the young men of various other industrial occupations, will doubtless be provided for at an early day.\*

<sup>\*</sup> Since this was written an Act has been passed by the Legislative Assembly which enfranchises every resident male person domiciled within the electoral district for which he claims to vote, who is—

<sup>1.</sup> Rated on the assessment roll as owner of real property of the actual value in towns and cities of not less than \$200, and in townships and incorporated 2. Rated on the assessment 1

Rated on the assessment roll as tenant of real property of the actual value in towns and cities of not less than \$200, and in townships and incorporated villages of not less than \$100.
Rated on the assessment roll as occurrent of real

<sup>3.</sup> Rated on the assessment roll as occupant of real property of the actual value in towns and cities of not less than \$200, and in townships and incorporated 4. Residing at the first fir

<sup>4.</sup> Residing at the time of the election in the local municipality in which he tenders his vote, and has resided therein continuously since the last revised assessment roll, and derives an income from some trade, occupation, calling, office or profession of not less than \$250 annually, and has been assessed for such in-

#### THE GOVERNMENT.

Ontario is essentially a democratic country, and the problem of self-government has been effectually wrought out by its citizens. It is almost the only country in the world having a single legislative chamber, and an experience of eighteen years has revealed no weakness in the system. This in itself affords strong evidence of honesty and uprightness in the people, as well as in their representatives. The law against corrupt practices in elections is very stringent, and the judges who administer the law show no quarter where bribery has been established; yet the seats of members are seldom voided, and such a thing as general corruption is not known to exist. Great interest is always manifested in election contests, and party feeling frequently runs high; but the free schools of the Province have done a noble work, and where education is so generally diffused it is not to be wondered at that a high standard of political morality should be found to prevail.

come, or has been entered on the roll (but not assessed) as a wage-earner who for the twelve months next prior to being so entered derived or earned wages or income from some trade, occupation, calling, office or prefession of not less than  $\$_{250}$ .

6. Entered as a householder in the last revised assessment roll of the city, town, village or township municipality in which he tenders his vote, and has resided in the municipality continuously from the completion of the last roll to the time of the election.

7. An Indian, or person with part Indian blood who has been duly enfranchised, or if unenfranchised and participates in the annuities, interest, money, and rents of a tribe who does not reside among Indians, and possesses in other respects the same qualifications as other persons in the electoral district; and, where there is no vot.rs' list, only such persons may vote as does not partake of the annuities, etc., of any tribe, and does not reside among Indians.



<sup>5.</sup> Duly entered and named in the assessment roll as a landholder's son, resident at the time of the election in the local municipality in which he tenders his vote, and has resided in the dwelling of his father for twelve months prior to the return by the assessors of the roll on which the voters' list used at the election is based. Temporary absence, not exceeding in the whole six months in the years, shall not operate to disentitle a landholder's son to vote under this section.

make any appointment to office, or any arrangement for the discharge of the duties of an office, either by tender or to applicants at the lowest remuneration.

The jurisdiction of every Council is confined to the municipality which it represents, and subject to the Municipal Act it may make regulations generally for the good of the inhabitants of the municipality. But no Council has the power to give any person an exclusive right of exercising any trade or calling, or to impose a special tax on any person exercising a trade or calling, unless the statute authorizes or requires it so to do. In cases where the authority is given the Council has the power to pass by-laws for fixing the sum to be paid for a license, for enforcing payment of the fee, and determining the time during which the license shall run.

For the purpose of providing for payment of the current annual expenses of a municipality, and of all valid debts of principal or interest falling due within the year, the Council of every corporation is required to levy a sufficient sum on the whole ratable property within its jurisdiction; but no such Council may levy in any one year more than an aggregate rate of two cents in the dollar on the actual value, exclusive of school rates-the real and personal property of every person in the municipality being assessed for this purpose each year at its actual value by an assessor appointed by the Council. For all ordinary purposes it is assumed that expenditure is provided for out of the annual revenue, and strict provision is made against contracting debts unless with the express assent of the ratepayers. No debt can be incurred except under the formalities required by by-laws for that object, and each particular by-law must recite the amount and object for which the debt is to be created, the amount to be raised annually for payment of principal and interest, the amount of the ratable property of the municipality according to the last assessment roll, and the amount of the existing debt. Before the final passing of any such by-law it must receive the assent of the ratepayers in the municipality, by a vote taken in the usual way. For local improvement, such as drainage, pavement and like objects, equal care is taken to protect the rights and interests of all who are concerned.

The Council of every county, township, city, town and incor-

porated village may pass by-laws for the following purposes and objects:

1. For obtaining such real and personal property as may be required for the use of the corporation and erecting such buildings as the corporation may need.

2. For appointing all officers necessary in the affairs of the corporation, regulating their remuneration and duties, and fixing the securities to be given for a faithful discharge of all duties.

3. For granting money or land in aid of agricultural societies, or for the encouragement of manufactures, or for the construction of railways, or highways, and for other objects of like character.

4. For aiding indigent persons or granting aid to any charitable institution, or out-door relief to the resident poor.

5. For opening or improving, altering or stopping-up drains and water-courses, and establishing highways and drains across railway lands.

6. For purchasing wet lands from the Government, and for draining such lands.

7. For prohibiting the sale of intoxicating liquors and the issue of licenses therefor; for preventing the sale of intoxicating liquor to a child, apprentice or servant; and for seizing and forfeiting bread or other articles of light weight or short measurement.

8. For licensing and regulating the use of billiard and bagatelle tables, and for regulating victualling houses and limiting their number.

9. For preventing the growth of weeds detrimental to husdandry.

10. For preventing and restraining indecency, and abating public nuisances generally.

11. For providing for the public health of the municipality, and against the spreading of contagious or infectious diseases.

12. For constructing water-works and providing protection against fires.

13. For establishing, regulating and maintaining a police.

14. For acquiring landed property for a public park, garden or walk, and for improving and managing the same.

These are only a few of the subjects with which a Municipal Council has authority to deal, but they serve for illustration. The system has many advantages, and besides giving to the people a

#### PICTORIAL ONTARIO.

large measure of local control over local affairs, it is a valuable training school in political and business matters. Many of the prominent members of the Local and Federal Parliaments obtained their early training in the Municipal Councils, and were thus fitted to discharge with ability and efficiency the duties required of them in the higher sphere to which they have been called by the voice of the people. When the municipal system was first proposed for the Province, more than forty years ago, the opponents of the measure characterized it as one intended to establish "sucking republics" in a monarchical country; but with the experience of it now possessed by the people he would be a bold man who should advocate a return to the log-rolling which obtained under the old plan of managing local affairs and constructing local works by the Legislative Assembly and the Government of the Province.







#### CHAPTER IV.

#### THE EDUCATIONAL SYSTEM.



HE Province of Ontario has long been noted for the excellence of its educational system, which has no superior and but few equals in the world. The methods employed and the results obtained have been brought into comparison with those of other countries at various times in a variety of ways, and they have in the estimation of the most competent foreign judges

always stood the test without loss of prestige. The system has been created and is maintained at considerable expense to the community at large, but to the individual its benefits are obtainable, in the case of public elementary schools, without money and without price, and in the case of secondary schools and even universities at a trifling cost. The mere existence of a system of free public education is a standing proof of enlightened public spirit among the people, who impose burdens on themselves in order that no member of the community may have any excuse for being unable at least to read and write. It is only just to those who thus tax themselves for the benefit of the individual that the latter should be compelled to avail himself of the advantages offered, and therefore the School Law of the Province provides that every parent must send his children to a public school for a certain length of time between certain age limits, unless he is able to show that they are getting a sufficient education at a private school. There is always a remnant whom no compulsory law can reach-the children of those who are helpless paupers, chronic lunatics, or actual convicts; but though this class is not numerous an earnest effort is being made, under the authority of a public law of the Province, to establish in or near Toronto an industrial school into which "street Arabs" from all cities may be gathered.

Such a school is needed in order to prevent children who would otherwise become good citizens from drifting into the criminal class, but even after they have been convicted of crime they are not allowed to go without an effort being made to restore them. There is maintained at the sole expense of the Province an excellent reformatory for boys, located at Penetanguishene, and an industrial refuge for girls in Toronto. In these institutions are to be found only children who have been sent to them by way of punishment for crimes actually committed, and who would otherwise have been doomed to mingle with hardened offenders in the common jails. Nor is the education of even adult criminals neglected. The Central Prison for men and the Mercer Reformatory for women, both in Toronto, are essentially reformatory institutions in which the constant aim of the management is to facilitate the restoration of the convict to a respectable position in the community and impart to him a knowledge of some handicraft which will enable him to make his living more easily than he would be able to do otherwise. There are two other educational institutions maintained by the Province, which deserve more than a passing notice. One is the institute at Brantford for the training of the blind; the other the institute at Belleville for the education of the deaf and dumb. For these two schools ample accommodation is afforded for the unfortunate children who are afflicted with the loss of senses so important as those of sight and hearing, and from an educational point of view the results have been most satisfactory. The blind are taught to read and write, to become music teachers and pianotuners, to make baskets and other articles of wood, and generally to become self-reliant if not self-sustaining. The dumb, whose inability to speak is due to want of hearing, are taught to speak articulately themselves and to ascertain what others are saying by watching the movements of the vocal organs in process of utterance. In this way many of the pupils after a residence of some time at the institute have become able to converse freely even with strangers and to transact important business with ease and certainty.

In a community so largely agricultural it would be surprising to find no provision made for training scientific farmers, especially when agricultural colleges are to be seen in successful operation in many parts of the United States. The Ontario Agricultural College is located near the City of Guelph, about fifty miles from Toronto, on the main line of the Grand Trunk Railway. The farm attached to the College was for many years, before being devoted to its present use, occupied by Mr. F. W. Stone, a well-known breeder of Hereford cattle. It contains 550 acres, and is admirably suited for being used as a training-ground for intending farmers. The institution is the property of the whole people of the Province, and is managed entirely under Government supervision. The Legislature makes for its use a yearly appropriation for running expenses, in addition to the liberal expenditure of capital in permanent improvements. The farm is now well stocked with a great variety of thoroughbred animals, and its annual auction sale of surplus stock is becoming an important means of improving the quality of grade cattle throughout the Province. The students who attend the Agricultural College come very largely from Ontario, but the reputation of the institution draws many from abroad, and especially from England. From the latter a fee of one hundred dollars  $(f_{120})$ a year is enacted, while sons of the Province are admitted for onefifth of that sum. All the students are required, in addition to their literary and scientific course inside, to spend a large proportion of their time in the manual labour of the farm. The College course embraces a good English education, together with instruction in those sciences which have an intimate bearing on agricultural operations, especially chemistry and biology. The whole institution is growing rapidly in popularity, and has already produced a marked improvement in farm methods in those localities where its graduates have taken up their residence.

The agricultural education of the community is promoted in two other ways worthy of notice. The first of these is the holding of farmers' institutes. These are meetings of practical farmers at convenient points for the discussion of farming methods and appliances. With a view of making the proceedings as profitable as possible the meetings are held during the winter season, and are attended each by two or more members of the Agricultural College staff. This scheme of mutual improvement was inaugurated in 1884, and its results during the first year of its operation were most satisfactory. The other means of diffusing agricultural education referred to above is the use of examination questions prepared under the auspices of the Department of Agriculture, but used in connection with the Department of general education. It is believed that in course of time these questions will be the means of directing the attention of those entrusted with the local management of public schools to the subject of scientific agriculture. It would be no difficult matter for teachers in rural schools to impart to these pupils not merely useful agricultural knowledge but a liking for agricultural operations and a taste for farm life. This is the aim of the scheme, and there is no reason to doubt that in time it will have this result.

For imparting a more thoroughly scientific and technical training there is in Toronto another public institution maintained at the expense of the Province at large—the School of Practical Science. In it instruction both theoretical and practical is given in Chemistry, Biology, Mineralogy, Geology, and Civil Engineering. The course is very thorough, and the students who wish to do so can attend classes at a trifling cost in other subjects in the Provincial University College, which is in the immediate neighbourhood. The School of Practical Science is well equipped with chemical and mineralogical laboratories, and the engineering department is supplied with the models necessary for the illustration of principles. The School is closely affiliated with the University of Toronto, which grants to its successful students under certain conditions a civil engineering degree.

The university system of Ontario has for the past forty years been amply sufficient for the needs of the Province, and there is reason to believe that it will be kept abreast of the march of modern improvement. There are in the Province six universities authorized to grant degrees in arts, law, and medicine—the University of Toronto and the University of Trinity College in Toronto; the Western University in London; the University of Victoria College in Cobourg; the University of Queen's College in Kingston; and the University of Ottawa in the city of Ottawa. The first-named is a purely public and non-sectarian institution, supported entirely by an endowment set apart out of the public domain, and managed entirely under the authority of statutes passed from time to time by the Provincial Legislature. Trinity College and the Western University were founded under the auspices of the Church of England, Queen's of the Presbyterian Church in Canada in connection with the Church of Scotland, Victoria of the Methodist denomination and Ottawa of the Roman Catholic Church. The competition of these universities has greatly tended to keep down the cost of higher education, the annual fee in the Provincial College being for a full course of lectures in all the subjects of the curriculum only twenty dollars (£4). The fees charged in other institutions can never rise much higher, and the standard of excellence can never fall much lower than in the one belonging to the Province, otherwise it would draw to itself the That it has not whole of those seeking a university education. done so is the best proof that work of a high quality is done at a moderate cost in most of the other colleges.

In order to show what a good Arts education means in Ontario it will suffice to give a synopsis of the curriculum of the Provincial University, which differs from those of the other institutions rather in detail than in general scope. The course is arranged for four years, the entrance examination being of moderate severity and embracing Latin, Greek, French, German, History, English, Chemistry, Botany, Physics, Arithmetic, Algebra and Geometry. These subjects are not all compulsory, French and German being allowed as a substitute for Greek, and the sciences being entirely. optional. The first year of the course is similar in scope to the curriculum for entrance, but the work prescribed is less elementary in character. The remainder of the programme is divided into six departments-Classics, Mathematics, Physics, Modern Languages, Natural Sciences, and Mental and Moral Science-in any one of which a student may take his B.A. degree if in his second, third and fourth years he has taken the optional work in the selected department in addition to the prescribed work outside of it. He may also take a pass degree on a certain fixed course extending over a wider area of the curriculum. The tendency in this, as in all other American universities, is towards specialization, allowing the student even greater privileges in the way of choosing his work, provided he takes enough to afford a reasonable test of his powers. In the scientific department the students who make it a speciality

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are required to spend a large portion of their time in the laboratory, for which an extra fee is charged.

The number of students attending lectures at the Provincial College was about 400 in 1884. Most of these intend to proceed to a degree, but not a few of them are taking special courses preparatory to entering one or other of the learned professions. It should be added that women are allowed to attend lectures on precisely the same conditions as men in the Provincial and several of the other colleges, and that they are equally entitled with men to every benefit the universities can confer, whether in the way of academical standing, or rewards for proficiency. A liberal system of bursaries has been provided, partly on public, partly on private, foundations. The administration of the universities is largely in the hands of their own graduates, and the greatly increased interest displayed of recent years in their working augurs well for the future of higher education in Ontario. The facilities for obtaining professional training are of the best. There are four medical schools in the Province-two in Toronto, one in Kingston, and one in London, each in affiliation with one or more of the universities, from which their students obtain degrees. There are good theological schools maintained by the various denominations-two in Toronto and one in London by the Church of England, one in Toronto and one in Kingston by the Presbyterian Church, one in Toronto by the Baptists, one in Cobourg by the Methodists, one in Toronto and one in Ottawa by the Roman Catholics.

The secondary schools in the Province form an important part of its educational machinery. Most of them are public in their maintenance and management, but many schools on private foundations aid in preparing young people of both sexes for either entering one of the universities or taking up business or professional careers. Only one of the public secondary schools is endowed—Upper Canada College in Toronto. It was founded early in the history of the Province, and has had a long and useful career, many of the public men of Ontario having received in it their early training. It has a residence attached which is selfsustaining, the chief part of the cost of the school work proper being borne by the endowment, the revenue from which is supplemented by moderate fees from pupils. The other public secondary

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schools are divided into two classes--Collegiate Institutes and High Schools-the distinction between which is no longer of practical importance, as their courses of study are identical. These schools are over one hundred in number, running from one to three or four in each county. They are in many cases free, and in none of them is the fee much more than nominal. They are supported partly by a grant made annually by the Provincial Legislature, but chiefly by taxes imposed by the people of each locality on themselves through the medium of the municipal machinery. The amount granted by the Province in 1884 was \$\$4,900; the amount raised by local taxation was \$208,161; the amount raised from fees was only \$30,067. As the number of pupils enrolled was 11,843 it is evident that secondary education was on the average practically free to those who choose to avail themselves of the facilities so liberally provided. The Head Master of each secondary school must be a graduate in arts of some British or Canadian university. and, as a matter of fact, a large number of the Assistant Masters, of whom there are frequently four or five, have also had a university training. The average quality of secondary education in Ontario is therefore high, and it has for some years past been rapidly improving. The system is under the supervision of two inspectors, who are always chosen from the ranks of the teachers themselves. An examination is prescribed for entrance into the High Schools, and as the latter are scattered over the Province these entrance examinations have created a wide-spread standard for the elementary schools to train their pupils up to. The connection between the two is made closer still by the fact that the great majority of those who become teachers in the elementary schools get their non-professional education in the secondary schools.

The public elementary schools of Ontario are the crown and glory of her educational system. The aim of her statesmen for more than a generation has been to make it possible for every child in the Province to obtain a fair English education without paying anything for it in the shape of fees, and this has been the condition of things for the past fifteen years. When the public school system was established nearly forty years ago it was left optional with the people of each local district to make their school free or levy a rate on the pupil. As the chief part of the expense had to be borne by the district in any event, and as the fee, however small, was a valid excuse in many cases for allowing children to grow up without education, the schools were one after another declared free until the number charging rates became so small that all were declared free by general statute. Whatever may be said on one side or the other of the free school question as a matter of theory or practice in other lands, no one ever proposes in Ontario to go back to the old system. Under the present one the number of children unable to read and write is very small, and those who are so are confined chiefly to the larger cities and towns. The difficulty of enforcing the attendance of the remnant of the children of school age has been found to be very great, the compulsory clauses of the law being practically inoperative. The number of free Public Schools in the Province in 1884 was 5,284, of which 4,755 were in rural districts. The number of pupils enrolled was 464,369, and the average attendance 215,561. The number of teachers employed was 6,911, of whom a considerable majority, 4,082, were women. The highest salary paid for a male teacher was \$1,200, and the average \$422; the average female teachers' salary was \$271.

The public elementary, like the public secondary schools, are maintained partly by Provincial and partly by local funds. The amount granted by the Province in 1884 was \$265,468, which was distributed amongst municipalities according to population, and then amongst the schools according to average attendance. The amount raised from other sources, but chiefly by direct taxation, was \$3,305,263, a total over three and a half million dollars spent in free education of the masses. The bulk of the money raised by taxation is levied directly on the taxpayers of each school by vote of the people themselves, and as the average salary of the teacher is steadily increasing it is quite clear that the Public School system has obtained a firm and lasting hold on the general public of the Province. The school districts are for the most part so small in area that no child can be more than a little over two miles from the Occasionally natural obstacles interfere with this schoolhouse. general design, and especially in the more recently settled portions of the Province-Muskoka, Parry Sound, and Algoma districts. To meet this case a special grant is made annually by the Legislature, the amount being divided amongst the poorer districts according to their necessities. In a few cases there are no local districts smaller than the township an area of about 100 square miles. In these instances the location and maintenance of the school houses are managed by a board for the whole township. In other cases each little district elects its own school board and manages its own educational affairs.

During the past fifteen years the quality of the school buildings has rapidly improved, the old log-houses, which served a useful purpose in their day, having been replaced by substantial stone, brick or rough-cast edifices, which at intervals of a few miles greet the traveller as he passes along the public highways.

The qualifications prescribed by the Education Department for entrance into the teaching profession are now of a high order. Teachers are divided into three classes-the third or lowest, the second, and the first or highest. Each third-class teacher must have passed an examination in the ordinary branches of an elementary English education, and must have spent a few months in a local training school, of which there is at least one in each county. In order to obtain entrance into the second-class the candidate must pass a more stringent examination in a larger number of subjects, and must either have taught for a certain number of years or have spent one year in a Provincial Normal School, of which there are two—one in Toronto and one in Ottawa. For a first-class certificate of qualification the conditions are still longer experience, and a very severe examination comprising all the subjects covered by the school course. The schools are subject to careful oversight by inspectors, who are appointed by the County Councils and are always drawn from the ranks of the teachers themselves.

The Public School system is non-denominational, with this exception, that where Roman Catholics are sufficiently numerous within a certain area they may establish a school of their own, to the support of which they may contribute the sums they themselves pay in taxes. No one is allowed to escape taxation, however, for those who do not elect to support Separate Schools must pay for the support of the ordinary Public Schools of their own districts. The number of Roman Catholic Separate Schools in 1884 was 194. Their share of the Provincial grant was \$14,400, and the amount raised from local sources, chiefly by direct taxation, was about \$150,000. Separate Schools are kept up with great difficulty in rural districts, but are more numerous and efficient in towns and cities.

The whole system of public education is under the management of a Department at the head of which is the Minister of Education, who has a seat in the Legislature. The various Departmental examinations, including those for entrance into the secondary schools and for teachers' certificates, are conducted by examiners appointed by him. This central management secures for the whole system from the elementary foundation to the university cope-stone a unity of plan and a degree of efficiency which could be maintained effectively in no other way. Each part of the edifice contributes to the strength as well as the harmony of the whole. Culture of the most liberal kind is diffused from the university as from a centre of illumination, and on the other hand the material on which the university must operate is supplied from the schools by the ordinary operation of the laws of natural selection and the survival of the fittest.





#### CHAPTER V.

The Administration of Justice.



the emigrant seeking for a new home nothing can be of more importance than the nature of the laws and the manner in which they are enforced by the powers of state. The Province of Ontario is very fortunately situated in both respects—the legal system is good and it is wisely administered by a judiciary of very high standing. The laws may be classified in various ways,

but it will suffice here to describe them as relating (1) to crime, (2) to property and civil rights, (3) to local municipal government, and (4) to education.

The definition of crimes and the regulation of procedure in the courts of criminal jurisdiction are both within the sphere of the Parliament of the Dominion, but the duties imposed on that body in this connection have been well discharged. The list of indictable offences is added to from time to time as the tendency of public opinion may be found to warrant such extensions, and changes in the manner of trying these offences are also introduced as experience shows them to be necessary for the more certain conviction of offenders. The duty of maintaining courts of criminal jurisdiction rests upon the Provincial authorities and that duty has been admirably discharged. In all parts of the Province there are justices of the peace who are authorized to hear evidence against persons charged with the commission of crimes, and to commit for trial at the next higher court of competent jurisdiction those against whom a prima facie case can be made out. In towns and cities there are salaried Police Magistrates who have, in addition to the jurisdiction of a justice of the peace, the right to try summarily those who elect to be so tried, and to award sentences up to five years in a penitentiary. In the newer and more sparsely settled districts of the Province criminal justice is administered by Stipendiary Magistrates, who are clothed with civil as well as criminal jurisdiction, and are in point of fact judges under another name. Their salaries are paid by the Province at large, the localities being relieved of the burden. The higher criminal courts are the General Sessions of the Peace, of which the County Judge is Chairman, and the Courts of Assize, which are presided over by Superior Court judges. There are two sittings of each court each year in each county, making in all four sessions for the trial of alleged criminals, the more serious charges being in all cases reserved for the Assizes, whenever the person charged declines to be tried by the summary process above described. An Assize judge can sentence to imprisonment for life, and in the case of wilful murder, to death. The crime of murder is comparatively rare, and as a general rule when the death sentence has been pronounced the Executive allows the law to take its course.

Property and civil rights, in cases not specially provided for by legislation are dealt with by the courts of civil jurisdiction under the Common Law of England. The local magistrates have a certain amount of jurisdiction in other than criminal matters which enables them to settle many disputes between parties who would otherwise be tempted to enter into costly lawsuits for the purpose of asserting what they believe to be their rights. This is true also of Police and Stipendiary Magistrates, whose jurisdictions are still more extensive. All important civil cases, however, are carried to the County Courts or to the Courts of Nisi Prius, which, like the criminal courts of the same order, are held twice each year in each county. The jurisdiction of the County Courts is limited to cases where the amount involved in the way of debt or damages is under \$200. Except where the amount is ascertained by the signature of the defendant, in which case the limit is \$400. Each County is also divided into three or more districts in each of which the County Judge is required to hold a local court once at least in every two months, for the settlement of claims involving sums up to \$100, except where the amount is ascertained by the signature of the defendant, in which case the limit is \$200. The Superior Court Judges in Courts of Nisi Prius can try cases involving debts or damages to any amount, subject to appeal, and without a jury except where one is demanded. The administration of justice is thus made more summary and less costly than it formerly was, and than it still is in many other highly civilized countries, and the comparatively small number of cases appealed are a sufficient proof of the care with which the judges perform the onerous and responsible duties devolving upon them.

The Superior Court Judges of the Province constitute the High Court of Justice and the Court of Appeals, the former consisting of nine Judges, the latter of five, the two courts forming together the Supreme Court of Judicature for Ontario. The High Court of Justice is divided for the sake of convenience into three branches, known as the Chancery Division, the Queen's Bench Division, and the Common Pleas Division, in all of which the jurisdiction is concurrent. All the judges of the High Court of Justice and of the Court of Appeals are liable to be required to take Nisi Prius or Assize circuits, and also to try petitions in cases of contested elections of members of the Provincial Legislature or Dominion Parliament. Any case tried before a judge at Nisi Prius may be reheard on application of either party to the suit in one of the divisions of the High Court of Justice, subject to appeal to the Court of Appeal and further to either the Supreme Court of the Dominion or to the Judicial Committee of Her Majesty's Privy Council. The Superior and County Court Judges of the Province are appointed and paid by the Dominion Government, though the courts themselves are all under Provincial jurisdiction as to both constitution and main-The judges hold office during good behavior, as in tenance. England, and those of the Superior Courts can be dismissed only on an address from both Houses of the Dominion Parliament to the Governor-General in Council. This system renders them perfectly independent of local influences, and tends to keep the members of the judiciary above the necessity of intrigue. The appointments to the Superior Court Branch have generally been most unexceptionable and the administration of justice has been free from scandals of any kind. The concentration of the Superior Courts at Toronto has had the effect of making the practice in them uniform, and of keeping up a high standard of legal attainments amongst members of the bar. No other country of the same population has produced more eminent lawyers, more distinguished pleaders, or more learned jurists than the Province of Ontario.



#### CHAPTER VI.

#### THE CLIMATE OF ONTARIO.



E Province of Ontario affords a greater variety of climate than any other non-mountainous area of equal extent on the continent east of the Rocky Mountains; but, wherever settlement has yet reached, it is highly salubrious, and adapted to the production with great success of the fruits and grains of temperate regions. Not merely, or perhaps chiefly, are the differences

of climate due to differences in latitude and elevation. More noticeable are the effects of situation with regard to the great lakes, which afford a very varying measure of protection to different parts of the Province from the cold and hot winds borne eastward from the interior of the continent. The prevailing winds are from the west : only in early spring do winds from other quarters predominate; and the prevailing wind of April is from the east, a quarter whence little variation of temperature and no extremes of heat or cold can proceed.

To the great lakes Ontario owes its exceptionally temperate climate, and the comparative freedom from excessive extremes of heat and cold enjoyed by a large portion of its area. Extending southward to the 42nd parallel—the latitude of Rome in Italy—its. summers, without the cooling effects of these large bodies of water, would be excessively hot, rivalling in this respect the Mississippi valley in similar latitudes. In winter the opposite effect is produced. On the great plains of the Mississippi and Missouri rivers, as well as of the Canadian North-West, the usual influences of the interior of a great continent attain their maximum effect in the development of cold. The cold western winds, however, passing over the great unfrozen lakes are greatly elevated in temperature, and the lake region of the Province is thus subjected to much less extreme cold than prevails in Minnesota, Iowa, Illinois, or even Missouri. The lake waters reach their greatest warmth in August and Sep-
tember, and their greatest cold not till March. Hence spring in the lake region is retarded, but not with unfavourable effects on vegetation which usually does not reach a sufficient stage to be injured by frost, till the general warming-up of the continent has almost precluded the recurrence of severe cold. In autumn, on the other hand, the warmth of the lakes prolongs the season till long after winter has been established in the western States. The effect of the great lakes is such that in January the temperature is as high as in central Illinois or north-western Missouri, two to three hundred miles further south; and in July the heat is no greater than in northern Minnesota and Dakota, several hundred miles further north. Even in eastern Ontario and in the Ottawa valley, which are beyond the lake region, the lake influence suffices to make the waters warmer than in northern Iowa, and the summer somewhat less intense than in corresponding latitudes in the Mississippi and Missouri valleys.

The winters of Ontario, compared with those of western Europe, are cold, though, owing to the comparative dryness of the atmosphere, the cold causes less discomfort than in many parts of England and Scotland. The winter climate is bracing, full of sunshine, and generally enjoyable. In eastern and northern Ontario, and in the highlands of the western peninsula snow covers the ground from two to four months, and sleighing makes not only one of the most enjoyable of winter pastimes, but greatly facilitates the carriage of grain to market. In south-western Ontario the snowfall is light, and the ground is covered in an average winter for only a few weeks; in some winters the ground is bare throughout the whole season. Extremely cold weather prevails usually for not more than two or three days at a time, mild periods, often of thaw or rain, succeeding. At Ottawa the temperature falls occasionally to 20° or even 30° below zero, but usually that temperature is enjoyable out of doors, the air being dry and calm, and the sunshine usually intense. In south-western Ontario the thermometer rarely falls to zero. The average lowest point reached in January in Toronto is only 3° below zero, and in Hamilton zero. The absolutely lowest temperature recorded in a period of twelve years at Cornwall, in eastern Ontario, was 28°, at Toronto, in central Ontario, 18.4°, and at Windsor, in south-western Ontario, 19.5°. In parts of the Niagara district the mercury never fell below 12°. In the western and south-western States in the same period the mercury fell to 39° below zero; at Champayn, Illinois, to 19.5°; at Louisville, Kentucky, to 17°; in Arkansas to 21.5°; at St. Louis, Missouri, to 32° below zero, and even lower over much of northern Missouri. The average temperature of Ontario differs greatly throughout the Province. The coldest month, January, has a mean of about 11° above zero at Ottawa, 17' at Kingston, 18° at Peterborough, 16° at Gravenhurst in Muskoka, 23° at Toronto, and 25° at various points in southern Ontario. The winters, however, vary greatly. Sometimes even in southern Ontario snow lies for two months, while in other winters it is absent excepting for a few hours. The coldest year on record in Ontario closed with a day on which the mercury rose to nearly 70° in the shade over much of the forenoon, and in a few localities to nearly 80°, a temperature which would be considered high in July in the south of England.

Spring usually opens in the end of March, sometimes not till April, but everywhere, and generally in eastern Ontario, it is very short. The return tide of summer heat advances vegetation with astonishing rapidity, so that from bare pastures and leafless trees only a week or a fortnight suffices to afford abundant grass and to clothe the forests with the full verdure of summer.

The Ontario summer is scarcely surpassed by that of any land. The storm rains of the rest of the year cease almost entirely from May to September, leaving vegetation to be refreshed by the brief and copious showers that fall during thunderstorms which are grand and impressive to a degree unknown in Britain. The skies are Italian in their beauty, of an intense blue, and of seemingly immeasurable depth. Sometimes day after day passes of uninterrupted azure, but more often the blue is intermingled with huge piles of fleecy clouds, displaying an<sup>•</sup> indescribably glorious cloud-land, through which the sun sets with a magnificence rarely approached even in Italy.

The summer season, judged by a British standard, is long, usually lasting from the middle of May till near the end of September. It has been known to extend several weeks into October, during which month temperatures of nearly 90° in the shade have been recorded. The latter half of May is as warm as an English midsummer. The month of September in some localities averages higher than a London July. July is a little warmer over most of the Province than at Vienna in Austria. Under the general and steady warmth vegetation advances apace. Wheat harvest begins in southern Ontario in the middle of July; it has been known to commence as early as the first of the month. In the coolest parts of the Province fall wheat is usually harvested before August. The other grain crops rapidly follow winter wheat, and over most of the Province harvest may be said to end by the middle of August. Maize or Indian corn is harvested in September and October; apples, a very important crop, and peaches are gathered from August to October; grapes, which succeed almost anywhere, are usually gathered in September.

Notwithstanding the high average heat of summer, the weather is rarely oppressively warm. In some districts temperatures of 95° to 100° degrees in the shade are sometimes registered as late as September, but the dryness of the atmosphere usually prevents any greater discomfort than is felt in England at a temperature of 80° to 85°, and extreme heat rarely lasts more than a few days at a time. The average daily maximum of the thermometer in July varies from  $78^{\circ}$  in the coolest to about  $8_{4}^{\circ}$  in the warmest localities. In the warmest summer nights the mercury almost always falls to 70° or 75° before morning, and the average nightly minimum is in most places as low as 60°. Along the lake coasts a lake breeze by day and a land breeze by night, in calm weather, temper the heat. Except in a few districts hoar-frosts are almost invariably absent from some time in May until the end of September or the beginning of October. Even when they do occur in June in exceptional years they are rarely injurious. The average temperature of July varies from about 67° in Muskoka to 73.5° at Hamilton and in various parts of southern Ontario. The Ottawa valley varies from 70° to 71°.

Autumn is scarcely less beautiful than summer. In October the days are of genial warmth, and the night cool and refreshing. The trees assume a brilliancy of colour unknown in Europe; and over the landscape, flashing a crimson, pink, green, and gold, the sun shines with a mellow radiance through the faint purplish haze which fills the atmosphere and imparts to the outlines of every distant object a softness in striking contrasts with the distinctness usually noticeable in fair weather throughout the rest of the year. Then the autumn winds rise and break from time to time the serenity of nature. The leaves fall, and as November passes, vegetation sinks into its winter rest. Sometimes the first snow falls in October, usually melting immediately. Sometimes the first flakes are not seen till the month of November. The month is often dull and comparatively gloomy but without fog; though quite as frequently the leaden clouds and long rains are banished by the genial Indian summer days which make the Canadian autumn so justly celebrated. In most parts of the Province the small ponds receive their first temporary coating of ice before the end of the month, but frequently fine, mild weather, especially in south-western Ontario, continues into or even throughout December.

To find European parallels to the various climates of Ontario is not easy. Individual districts will find united parallels, so far as temperature is concerned, in the Crimea, the banks of the Danube and Berlin on the one hand; or, on the other, in St. Petersburg, Moscow, Astrachan or central Russia. The summers of parts of the Province are paralleled in those of northern Spain and Italy, central and southern France, or the Lower Danube and Constantinople; while the cold parts of the Province have summers as cool as those of Berlin and Paris. The Ottawa valley and the central inland parts of the Province have the summers of Vienna. Toronto at all seasons differs little from Bucharist. July at Hamilton and Windsor is almost as warm as at Oran, in Algiers. In general it may be said that a line drawn from the Danube through Bucharist to Moscow would furnish parallels to the climate along a line from Windsor north-east to Ottawa, though the summers of Ottawa are much warmer than those of Moscow. The following monthly means of summer of a few Ontario stations will furnish interesting comparisons with European stations the averages of which are cited by "Bloodgett's." The records of the four Ontario stations given are for eight years, 1874-81.

ONTARIO.	May.	JUNE.	JULY.	Aug.	Sept.
Toronto	° 54 <sup>.</sup> 2	° 62 <b>°0</b>	° 69°0	°67 <sup>.</sup> 8	° 60'3
Hamilton	57 <sup>.</sup> 6	66°0	73°4	71 <sup>.</sup> 3	63'9
Windsor	60 <sup>.</sup> 8	67'9	73°4	71 <sup>.</sup> 4	63'8
Pelee	59 <sup>.</sup> 2	67'1	73°5	72 <sup>.</sup> 9	66'3

Europe.	May.	June.	JULY.	Aug.	Sept.
Edinburgh London Dublin Paris Berlin Munich Vienna Bucharist	50'3 55'8 54'4 58'1 56'5 57'6 62'1 56'3	56.0 58.7 60.2 62.7 63.3 62.1 67.5 62.5	58.7 61.7 65.6 65.8 64.7 70.7 68.1	56.8 58.9 61.4 65.3 64.4 64.1 70.0 65.2	53'4 56 6 56'5 60'1 58'4 58'1 61'9 58'3

MONTHLY MEAN TEMPERATURE—Continued.

The rainfall—rain and melted snow—varies in Ontario from about twenty-seven inches annually in the dryest localities to about fifty inches in the wettest.

Perhaps the best proof of the excellence of the Ontario climates is afforded by the vegetable productions. Its wheat-growing capacity is well known. The grape succeeds almost everywhere, allowing in some countries a yield not surpassed in America, or in the world. Apples are one of the great crops of the country, and grow well wherever settlement has reached. Peaches are abundant over several thousand square miles of territory. The water-melon and tomato grow everywhere and of fine quality. The sweet potato and peanut are cultivated. The apricot and the nectarine are grown in the warmest counties. In southern Ontario are the walnut, chesnut, pseudo-papaw, and the tulip tree. Cotton succeeds on Pelee Island; and with scarcely any winter protection, the fig and almond, raised as curiosities, bear heavily as garden trees at Niagara.





## CHAPTER VII.

# AGRICULTURE.



OOKS have been written on Ontario as an agricultural land, and so much that is valuable and important may truthfully be said of it in this regard that it is difficult to say what ought to be said within the limits of a single chapter. Europeans have long regarded the Province as an inhospitable region of ice and snow, where winter

prevails half the year, where the growing season is short and uncertain, and where the system of agriculture is crude and awkward. To disabuse people of rooted convictions of this sort is not an easy task; yet no one who will inform himself as to the facts can doubt that with respect to the capabilities of the country, the methods of agriculture pursued, and the results obtained, Ontario is unsurpassed by any other territory of equal extent in North America.

In 1884 the area of land assessed was 21,700,000 acres, and of this a little more than one-half was cleared and under cultivation. Taking the rural districts alone, the value of farm lands and buildings in that year was \$797,000,000, or an average of \$37 per acre; while the value of farm implements was \$48,000,000, and that of live stock \$103,500,000. The total value of farm property, exclusive of crops, was \$948,500,000 being an average of more than \$3,000 for each person making up the class of agricultural occupations. In 1867, the first year of Confederation, Ontario's assessed area was 18,975,000 acres, and the increase in growth and wealth since that year may be readily inferred from the increase of 4,260 square miles in settlement—an expansion more than one-third the entire area of Belgium, and nearly one-third of the whole of Denmark.

Concerning the crops and live stock of the Province no better idea can be gained than from an examination of the following statistics, given for the last three years:

		1884	1883.	1882.
Fall Wheat,	acres	864,740	1,091,467	1,188,520
Spring Wheat,		721,047	580,410	500,017
Barley,		700,472	757,150	040,017
Oats,	•••••••••••••••••••••••••••••••••••••••	1,481,828	1,418,309	1,387,487
Rye,	"· · · · · · · · · · · · · · · · · · ·	103,410	188,111	185.270
Peas,	"	570,928	542,717	560,770
Corn,	··	174,560	214,237	206,755
Buckwheat,	·· · · · · · · · · · · · · · · · · · ·	65,836	67,802	50,035
Beans,	"	24,878	25,907	19,787
Hay and Clover,	•• • • • • • • • • • • • • • • • • •	2,193,369	2,350,969	1,825,8 <b>90</b>
Potatoes,	·· · · · · · · · · · · · · · · · · · ·	168,757	166,823	160,700
Mangold Wurtzels,	**	18,34 <b>1</b>	17,219	15,791
Carrots,	"	10,987	II,270	9,955
Turnips,	"	104,199	98,429	78,823
Orchard and Garde	n,''	192,837	197,450	
Working Horses,	No	303,474	349,552	336,932
Breeding Mares,	"·······	93,910	87,380	70,596
Unbroken Horses,	··	138,569	123,201	76,076
Working Oxen,	·· • • • • • • • • • • • • • • • • • •	16,793	17,071	14,566
Milch Cows,	"········	710,519	690.437	665.382
Store Cattle, over 2	yrs. ''	384,453	321.471	272.208
Young and Other C	attle, ''	813,005	780.075	610.527
Sheep,	**	1,890,733	1.868.784	1.015.303
Pigs,	·· · · · · · · · · · · · · · · · · · ·	916.158	006.727	850.226
Turkeys,	······	445,532	355.635	310.058
Geese,		540,130	491.002	533,357
Other Fowls,	"········	5,251,944	5,000,616	4,508,705

CROPS OF THE PROVINCE.

The cattle have been greatly improved within the past twenty years by the importation of thoroughbred animals from Great Britain, and the climate is so favourable to the breeding and rearing of live stock that there is no perceptible deterioration in the quality of any of the breeds. The Durham or Shorthorn is a leading favourite, and at the present day there are many thousands in the Province, either imported animals or the offspring of such. There are many herds ranging in number from fifty to one hundred on a farm, and it is doubtless true that fully one-half of all the horned cattle of the Province are Durham grades. This gives to the Ontario farmer a great advantage in the export trade of live stock to England-a trade which had its origin less than ten years ago, and is now valued at \$3,000,000 a year. The breed of milch cows has also been greatly improved by the introduction of Ayrshires, and more recently of Holsteins and Jerseys, and in the manufacture of dairy products Ontario enjoys an enviable name in the British markets. This is more especially the case as regards cheese, the making of which has been carried to a high degree of perfection by the development of the factory system. The number of factories in the country during the past season was over six hundred, and the value of the total product is computed at \$6,000,000.

The sheep are chiefly of the long-woolled variety, and like horned cattle they have been very much improved by importations of Liecester, Lincoln and other breeds from England. More recently attention has been turned to the rearing of short-woolled sheep, as the South Down, the Oxford Down and the Shropshire. As a result of this attention to improvement of flocks, we find a marked increase in the wool-clip. Twenty years ago the average weight was not more than three pounds per fleece, while it is now a little over five pounds. At the same time this attention to breeding has prepared farmers to take advantage of the export trade to England, and within the short period of seven years this has expanded from less than 10,000 head a year to upwards of 100,000.

The superiority of cattle, sheep and horses bred in Ontario is so generally admitted that Americans are constantly making purchases in the Province for breeding purposes in their own country, and in this way the prices of good animals are maintained at a high standard. Nor does it seem likely that with the suitableness of its climate for the production of animals of a high class, Ontario will soon lose the important advantage which it thus possesses over almost every other portion of the continent.

As regards grain and root crops, the average production per acre of the last three years is given as follows:

		1884.	1883.	1882.
Fall Wheat, Spring Whea Barley,	bushels at, "	24°0 20°2 27°3	10.6 16.6 24.3	26·3 16·5 28·6
Oats,	"	38.9	38.5	36°4
Rye,		15.9	16.0	18°7
Peas,		24.0	19.7	19°6
Potatoes,	"	163·2	98.0	115 <b>.0</b>
Mangolds,		471·9	363.0	488 <b>.0</b>
Carrots,		382·0	354.0	403.0
Turnips,	" ver, tons	426·2	304.0	448.0
Hay and Clo		1'39	1.22	1.14

#### PICTORIAL ONTARIO.

The low average of fall wheat in 1883 was the consequence of an unusually unfavourable winter, while that of roots was caused by excessive rains in the early summer and a severe drouth in the fall. But these conditions were not confined to Ontario; they prevailed in many portions of the United States as well; and such being the case we are enabled to compare results in the Province and in the principal States of the Union. In the following table comparison is made of the average yield per acre of the staple cereals for the harvests of 1882 and 1884:

	F	ALL V	VHEAT	SPRING	₩н'т.	BAR	LEY.	OA	TS.
	1	1884.	1882.	1884.	1882	1884.	1882	1884.	1882.
Ontario, bush Ohio, " Michigan, " Indiana, " Illinois, " Missouri, " Kansas, " New York, " Pennsylvania. Jowa, " Minnesota, "	nels 1 1 1 1	24.0 5.3 4.0 13.2 12.6  16.5 15.0	26·3 16·7 17·8 15·7 16·0 14·6 19·5 18·7 15·5	20°2    12°5 16°1	16.5     II.0 I3.3	27 · 3 26 · 0 23 · 0 23 · 0 24 · 0  23 · 0 19 · 0 23 · 0 26 · 4	28.6 19.9 25.2 24.0 22.5 23.0 25.7 25.0 23.5 21.7 23.3	38.9 29.0 32.0 30.0 33.0  30.0 28.0 32.0 32.0 35.3	36·4 28·0 33·3 27·0 37·4 34·5 38·1 34·2 27·8 31·8 40·0

The United States averages are taken from the Report of the Department of Agriculture at Washington, and like those of Ontario they are computed from the returns of actual yield made by threshers and the careful estimates of practical farmers. The position of Ontario in the comparison is so obvious that it does not call for emphasis; at the same time it is a fact that deserves the thoughtful consideration of all in the old world who are looking forward to the finding of a home for themselves and their families on the American continent.

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## CHAPTER VIII.

## MANUFACTURES.



T must not be supposed that because Ontario is comparatively a new country, the oldest settlements of which had their beginning only a century ago, no progress has been made in manufacturing industries. It is, indeed, far from being the fact that the people are mainly devoted to agricultural pursuits. Industrial life had its begin-

nings many years ago, and although it has had periods of adversity as well as of prosperity, its growth on the whole has been vigorous. The story of manufacturing development in the Province might easily be extended to many chapters, but the present object is to convey information in brief space and of a thoroughly trustworthy character. Europeans who may he influenced to make Ontario their future home should know the true condition of the country; and the experience of all colonies is that far greater harm than good is done by promoting immigration through any process of beguilement or deception. For this reason the facts concerning the manufacturing industries of Ontario are restricted to the productions of the following table, prepared from the Government censuses of 1871 and 1881: •

	ber.	oy'és.	Yearly	Wa	ges.	Value	Value
INDUSTRIES.	Numł	Empl	Am'nt.	Av'	ge.	Raw Material	Product.
	-		\$	\$	с.	\$	\$
A suptor making 1871	25	80	18028	225	35	38440	101010
Aerated water making 1881	51	174	42111	242	00	66053	181673
Agricultural Implements 1871	173	2143	745693	347	97	790073	2291989
Agricultural Implements1881	141	3201	1130475	353	16	1613093	3928411
Pakeries of all sorts 1871	385	1239	346254	279	46	2067001	2983740
Dakeries of all sorts	541	2029	596813	294	14	3033507	4291869
Paking pourder making 1871	I	5	500	100	00	1250	2500
Daking powder making 1881	I	2	100	50	00	100	400

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					_		
INDUCTOR	er.	oyés	Yearly	Wag	ges.	Value of	Value
INDUSTRIES.	Numl	Empl	Am'nt.	Av'	ge.	Raw Material	Product
	1			ş	с.		\$
Bank note engraving	I	82	35000	426	82	20000	60000
	••••	••••	1	200		12800	20750
Bark extract works	1		3000			12000	30/30
Basket making	15	48	7465	155	52	2930	17670
1881	22	99	14860	150	IO	9980	36810
Bell foundries	T T	4	1200	300	00	1128	4000
Belt and hose factories 1871			4500				. <b></b>
Delt and nose factories	2	13		346	15	34500	54000
Billiard table making	I	6	2200	366	66	9000	16000
1881	2	15	6400	420	66	17417	30827
Blacking manufactories		22	5250	230	03	12150	33500
Discharge it in a 1871	2804	4810	1400	215	77	740051	9000 2720760
Blacksmitning	3586	6026	1400322	233	87	1331730	3005500
Boat building. 1871	29	62	14767	238	17	5001	25140
1881	62	138	28097	203	60	17672	72178
Boiler making	II	179	67065	374	66	135900	274150
- 1881	17	260	8249 <b>2</b>	317	27	151700	271833
Bone crushing mills	1		400	400	00	120	625
Bookbinding 1871	21	365	74238	203	38	108610	353053
1881	35	651	151245	232	32	741829	1155458
Boot and shoe factories <sup>1871</sup>	1965	6354	1569087	246	94	2397498	5025155
1881	2042	5827	1536833	263	74	2447883	5045582
Breweries	105	530	174708	325	94	532137	1198919
Prick and tile worth 1871	300	935	301358	380	47	1556790	3372408
brick and the yards	400	2768	405211	110	53	00314	577904
Broom and brush making 1871	78	335	82278	245	60	190351	212820
1881 ind Studin making	58	552	116390	210	85	540248	180712
Butter factories 1871		• • • • •	• • • • • • • •				400/44
1881	23	94	21213	225	67	159828	212480
Button factories	2	34	5000	147	05	4500	11500
Cabinat and furnity 1871	526	418	58500	139	95	79250	163100
Cabinet and furniture	625	3460	799095	288	80	937096	2306076
Car and locomotive works 1871	2	60	18000	209	10	1127501	3013259
1881 1881 1881	12	1622	637460	303	00	1224826	204000
Carding and fulling mills. 1871	158	338	54190	160	33	415012	520857
1881	72	173	31648	182	93	160047	253106
Carpenters and joiners	553	1792	517178	288	60	447943	1284047
Corpot mobile a 1831	540	1032	471904	289	15	673914	1535737
Carper making	••••	•••••			•••		
1001	9	13	2798	215	23	4855	10040

# MANUFACTURING INDUSTRIES-Continued.

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Inductoria	ber.	oyés.	Yearly	Wages	Value of	Value
INDUSTRIES.	Num	Empl	Am'nt.	Av'ge	Raw Material	Product.
				\$ C	\$	\$
	1121	4780	¥ 1250700	262 55	887861	2078841
Carriage making	1600	5301	1527880	283 42	1 1644416	4319197
1871	13	74	19150	258 78	36136	81950
Carving and gilding $r_{18S_1}$	51	268	81619	304 54	143507	314495
Comont millo 1871	2	19	4000	210 53	5880	10500
Cement milis	4	46	13000	282 60	15450	44200
Charceal burning 1871	16	25	I545	61 80	1488	4 <sup>61</sup> 7
Charcoar burning	8	51	I 3759	269 78	26355	62410
Cheese factories	323	909	110763	121 85	1136078	1454702
	55I	1638	330139	201 55	3686710	4668078
Chemical establishments 1871	13	65	22800	350 77	133650	207100
1851	17	70	25880	1300 71	134200	203250
Chicory kiln	••••					250
1001		106	150	75 00	150	350
Cider making	40	220	5300 T2872	62 09	1903/ 55562	105231
- 1001	110	220	130/2	03 0.	JJJ05	10,5,5,1
Coffee and spice mills		42	T4550	338 3	83610	127450
1801	660	1837	478168	260 20	516676	1281868
Cooperage	640	1813	4/0100	245 00	510551	1282876
1871	41	86	11235	130 64	35358	65123
Cordial and syrup making1881	7	14	863	61 64	1500	3170
1871	Ĩ	2	900	450 00	360	1260
Cork cutting	3	ΙI	2928	266 18	3 7560	13100
Caract forthering 1871	••••	• • • • •			•••••	
Corserfactories	2	263	36500	138 78	110000	180000
Cotton factories	5	495	87400	176 50	280000	492200
1881	11	1683	381900	226 9	r 996100	1874800
Cutlery 1871	3	II	3100	281 8	3100	11520
Cuttery		67	25000	388 0	44000	100000
Distilleries	18	421	170590	1405 20		1 30/3/37
1881	11	200	105730	1200 0	87557	1020000
Dressmaking and millinery	493	12120	233907	120 5	1 1851004	3082736
- 1001	1001	4001	1 2/909/ 2129	217 2	1780	6530
Dyeing and scouring	20	85	20630	242 8	10227	50643
1871	22	223	82871	371 6	1 6199	204405
Edge tool making	13	337	144030	427 3	164280	411550
1871	6	508	19057	3375 I	4 289158	671000
Engine building $\dots \dots \dots$	8	560	216300	386 2	5 452900	808000
1Š7I	5	16	8200	512 5	2100	14200
Engraving and lithographing. 1881	17	170	6411	3 377 I	3   63500	167968
The most of a making 1871	3	56	20160	360 <b>0</b>	0   19640	50275
Fire-proof sale making 1881	2	82	42500	518 2	9 3200	88000
Fishing tackle making	¦ I	4	 1400	.   51350 0	.   	2050

MANUFACTURING INDUSTRIES-Continued.

Tupuapupa	ber.	oyés.	Yearly	Wag	ges.	Value of	Value
INDUSTRIES,	Numb	Empl	Am'nt.	Av	ge.	Raw Material	Product
			\$	\$	с.	\$	\$
Fittings and foundry working1871 in brass, iron, lead, etc1881	32 75	191 1084	55762 396021	291 365	95 33	81354 675458	191056 1388805
Floor oilcloth making <sup>1871</sup>	 I	 6	700	 116	 66	2200	5000
Flour and grist mills <sup>1871</sup>	951 1034	2759 3565	833959 2115411	302 340	26 92	22615814	27115796 29859118
Foundries and machineworking <sup>1871</sup> 1881	258 342	4686 5021	1587018 1867977	338 372	67 03	1576695 2219798	4631850 5839467
Furriers and hatters <sup>1871</sup> 1881	58 55	550 661	113041 152342	205 230	52 47	255085	513189
Gas works <sup>1871</sup> 1881	23	113 241	44492 107158	393 444	73 63	80974 152951	263206
Glass works <sup>1871</sup> 1881	3	98 333	48300 128380	492 385	85 52	34150 127700	112330
Glove and mitt making <sup>1871</sup> 1881	I 5	269	44222	164	 30i	122725	
Glue making <sup>1871</sup> 1881	5	17 48	2365 11050	139 284	11	3060 61600	6200
Gold and silver smithing <sup>1871</sup> 1881	3 14	18 62	6824 21062	179	11	7860	34900 81800
Gold leaf factory <sup>1871</sup>	· · · · · · · · ·			2.1.1			
Gun making 1871	20 24	32 38	10230	319	68	2831 8610	18587
Gunpowder mills <sup>1871</sup>	I	13	4000	307	69	26409	54095 60000
Gypsum mills <sup>1871</sup> 1881	15 8	124	21915	176 210	73	71700	96304
Hosiery manufactories <sup>1871</sup> 1881	10 66	244 1316	39113	160	93 29 12	92514	30550 198642
India-rubber factories	T T	2	1100 1100	550	45	2500	1253101 7000
Indian manufactories <sup>1871</sup>	13	42	1710- 1710-				1500 1710
Ink factories	····	····		••••		4000	t0015
Iron smelting furnaces and 1871 steel making	••••	••••		300 	00	560	950 ••••
Jewellers and watchmakers 1871	93 188	235	33007 83840	305 344	79 00	68760 66698	172150 210183
Lamp and chandelier making <sup>1871</sup> <sub>1881</sub>		2÷4+		32I	44	<sup>177932</sup>	450473
Last factories	4	35 24	5000 8410	142 350	85 41	5000 4710	18000 18787
Lime kilns 1871 1871	5 559 515	28 1099 1133	8305 94521 100200	296 86 88	60 00 43	3416 51159 85263	21400 265883 294724

### MANUFACTURING INDUSTRIES-Continued.

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			· · · · · · · · · · · · · · · · · · ·			
• Industries.	lumher.	imployés.	Yearly ————————————————————————————————————	Wages Av'ge.	Value of Raw Material	Value of Product.
	4	щ		. 1		
	_					
			, 4 <b>2</b>	PC.	R ,	47
Linseed oil factories	I	I	30	30 00	0	112
1881			•••••			
Lock making					· • • • • • • • •	
1881	I	95	13000	130 84	10000	50000
Match factories.	7	41	3950	90 34	_5135	14000
1881	5	124	10000	05 40	16550	37010
Mathematical instruments.	2	б	3450	+31 25	550	0000
1221	2	19	7200	378 94	3000	17000
Mattress making 1871	5	13	4734	304 15	6329	18100
1881	14	33	10000	304 84	16315	35424
Meat curing 1871	105	661	126020	176 42	2512268	3193122
1881 ISSI	94	485	136069	280 55	2101187	2763685
Miscellaneous wares	49	256	59875	233 89	129750	269386
Miscenaneous wares 1881	163	1232	241063	195 66	512213	1079207
Musical instrument making 1871	26	387	165539	427 74	169265	490012
Musical instrument making. 1881	29	817	364050	445 59	346846	983750
Nail and task factories 1871	I	16	4800	300 00	11550	22000
Nall and tack factories1881	2	80	35000	437 50	120000	185000
Nation making 1871						
Native wine making 1881	9	34	I0753	316 26	23070	5922 <del>0</del>
1871	46	433	184810	426 81	1266744	2845669
Oli renneries	32	379	165300	436 14	1933370	3667050
Dillard tab factoria 1871						
Pail and tub factories1881	3	35	3725	106 42	5200	12966
1871	2	6	1700	283 33	7900	12700
Paint and varnish works 1881	14	59	21348	361 83	195350	357100
1871	68	279	79964	286 60	73143	208304
Painters and glaziers	97	316	98486	311 66	96470	267844
1871	12	344	99270	288 57	236250	487500
Paper manufactories	19	690	217022	314 52	675483	1124300
- · · · · · · · · · · · · · · · · · · ·						
Paper bag and box making	II	177	24412	1137 92	56765	19424
	12	60	16150	269 16	32143	98750
Patent medicine manufactories 1981	15	101	34210	338 71	123700	313000
1871	97	194	69181	356 60	5594I	172084
Photographic galleries 1881	103	200	72566	362 83	44002	189812
1871			1			
Pickle making	2	26	4500	173 07	17200	25000
1871					‼. <b>.</b>	
Planing and moulding mills. 1881	57	520	152669	295 51	502300	797504
	4	29	13280	457 93	6100	24700
Plaster and stucco works	6	30	17676	589 20	15600	44265.
1871	267	298	96014	160 60	172079	391655
Pot and pearl asheries	157	373	72260	193 72	123600	286530
1871	58	207	57060	275 65	25117	186405.
Potteries	72	265	84594	319 22	71289	314645
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# MANUFACTURING INDUSTRIES-Continued.

# PICTORIAL ONTARIO.

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Tupuccoupe	ber.	oyés.	Yearly	Wa	ges.	Value of	Value
INDUSTRIES,	Numh	Empl	Am'nt.	Av	'ge.	Raw Material	Product
			\$	\$	c.	\$	\$
Preserved articles of food 1871	I	24	1000	_4I	66	1500	3500
1681	14	198	21900	110	00	33750	74040
Printing offices	248	3242	1070342	3/3	77	872704	2717702
Buln milla 1871							2/1//02
r up mins	1 I	9	4500	500	00	2100	11000
Pump factories <sup>1871</sup>	146	262	63515	242	42	31559	169335
1881	211	415	106404	256	39	106905	345190
Quartz crushing mills		22	0900	313	03	2496	7720
Di 16 ( 1 1 1871		19	4000	285	73	11000	18295
Rivet factories	3	27	10000	370	37	45000	72000
Rolling mulls 1871	2	425	152000	357	64	797000	1180000
1881	II	225	100000	444	44	250000	400000
Roofing felt factories	I	2	600	300	00	3500	4800
1881	2	12	5620	468	33	23000	45000
Rope and twine making	12	130	24020	179	89	85215	135740
Soddle and harmon and i I871	676	1773	39/15	242	10	70500	105000
Saddle and harness making 1881	836	1832	498689	272	24	732931	2022785
Salt works 1871	16	175	60990	348	51	1044013	110000
1881	26	243	78187	321	75	167700	395098
Sash, door and blind factories. <sup>1871</sup>	156	1548	485069	31 <b>3</b>	35	686558	1546898
1881	281	2286	778028	340	34	2208517	3982117
Saw and file cutting $\dots$ 1881	4	63	28375	45 <u>0</u>	39	49095	96 <b>150</b>
Som mille 1871	1827	105	2675200	418	78	147330	277400
Saw mills	1761	16846	2581225	193	15	7108234 8085505	12733741
Scale factories 1871	2	29	9000	310	34	6220	20750
1881	I	20	7000	350	00	18000	35000
Screw factories.	••••			••••			
1881	I	66	'I 3700	207	57	20809	5096 <b>0</b>
Scutching mills	24	480	_79010	164	60	125370	259653
Soming monthing facts i 1871	29 10	970	135270	138	31	203984	411162
Sewing machine factories 1881	7	604	272200	302	84	217000	790560
Shingle making 1871	414	1541	203335	22/	54 05	244178	517240
1881	204	910	123533	135	75	201521	451803
Ship material making	9	40	13600	340	00	26060	49745
1881	10	51	16202	317	68	50450	79202
Ship yards	19	400	168667	366	66	130100	359212
Shirt collar and tis making 1871	15	307	137140	373	67	113500	3053 <b>50</b>
onne, conar and the making 1881		230	41670	 г 8 т			
Shook and fish box making 1871			410/0	101	17	179740	20192 <b>0</b>
1881	4	Sol	20480	256	00	58000	87000

# MANUFACTURING INDUSTRIES-Continued.

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Industries.	Number.	Employés.	Yearly Am'nt.	Wag Av'g	es e.	Value of Raw Material	Value of Product.
				\$	c.	\$	\$
Soap and candle making 1871	38 28	154 153	47098 52337	305 342	83 07	395936 383656	524720 619766
Spinning wheel factories 1871 1881	7 5	11 18	1830 3360	166 186	36 66	385 10307	5058 17630
Spring and axle factories1871	4	119 139	36300 46500	305 334	04 53	57760 118300	158412 178500
Starch factories $1871$ 1871 1881	3	63 86	26500 25500	4 <b>20</b> 296	63 51	97900 113000	216184 161000
1871 Stave mills1881	····. 27	<b>2</b> 53	48308	 190	 94	<b>705</b> 50	163595
Steel barb fence factories 1871	<b>I</b>		1200	400	 00	4000	12000
Stone and marble cutting $\dots 1871$	98 187	577 859	177412 331618	307 386	47 05	159827 326527	459891 914725
Straw works	4 14	374 138	37600 18078	100	53 00	62705 24791	154250 59736
Sugar and syrup factories (from 1871 sorghum, beet root, etc.,1881		 62	9109	146	 91	20236	36630
Superphosphate works	 I	33	1 5000	454	 54	60000	85000
Surgical appliances <sup>1871</sup>	3	5 16	2100 7400	420 462	00 50	1290 6050	6820 22200
Tailors and clothiers	942	6248 8569	1257414	201 214	25 34	3117667 4506055	5425464 8012756
Tanneries	426 316	1584 1528	449043	283 315	48 42	2137337 2336386	3420218 •3555198
Tent and awning factories <sup>1871</sup> 1851	1	5 36	900 97 <b>0</b> 0	180 269	<b>0</b> 0 44	400 16100	2000 44000
Tin and sheet-iron working 1871 1881	440 670	1251 2049	366633 582024	292 284	99 05	592320 994654	1327276 2178629
Tobacco working <sup>1871</sup> 1881	42 59	707 1164	157423 284682	222	66 57	424382 501099	693387 1186043
Trunk and box making 1871	27 13	165 191	, 35799 42930	216	96 76	98403 72530	201740
Type foundries 1871 1881	2	5	1936 936	387	20 00	2900 3360	9000 5550
Vinegar factories	9	34 37	12586 12990	370	17 08	82200 110657	170312 159862
Whip factories	4	28 72	6745 12196	240	89 38	10238 26897	21618 53404
Wig making	8	24 40	6080 6081	253	33 02	5160 9550	14360 28746
Window shade factories	2	6	2780 6238	463	33 22	10400	14000 26100
Wire works	2	 	6900	5 363	 15	750	22000

### MANUFACTURING INDUSTRIES—Continued.

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•		oyés.	Yearly	Wag	es.	Value of	Value of Product	
INDUSTRIES.	Numb	Emple	Am'nt.	Av'ge.		Raw Material		
Wood turning establishments. 1871	52 38	120	\$ 31409 39261	\$ 261 295	c. 74 20	\$ 18604 35854	\$ 81041 110320	
Wool cloth making	233 993	3696 5221	761934 1072553	206 205	15 43	2706243 3515933	4589119 6077444	

MANUFACTURING INDUSTRIES-Continued.

The lines of industry are almost as numerous as in most countries of the European continent; certainly as numerous as in almost every State of the American Union. The rate of increase, too, has been very satisfactory in the decade, especially in the number of establishments, the number of hands employed, and the aggregate value of the manufactured product. The average rate of wages is not so high as to induce European artisans to leave good positions at home; and at the present time especially there are few, if any, lines of manufactures in which the home supply of labour is not sufficient for the demand.





## CHAPTER IX.

#### LABOUR AND WAGES.



EFERENCE was made in the last chapter to the rate of wages paid to skilled workmen. The following table gives by occupations the averages of time employed, wages earned, and cost of living in nineteen of the principal towns and cities of the Province for the year ending October 31, 1884, based on returns collected

from 2,853 work-people and published in the last annual report of the Bureau of Industries :

## LABOUR AND WAGES.

NOTE.—In this table figure 1, following the name of occupation, denotes a male under 16; figure 2 a female over 16, and figure 3 a female under 16. The unit of employé in all other occupations is a male over 16. The number of dependents in the first column does not include the worker.

Occupation or Sub- occupation.	No.of dependents	Hours employed per week.	Days employed per year.	Yearly wages	trom occupa'n.	Extra earnings.	Wife and child-	ren's earnings.	Total earnings		Cost of living	-9000000000000
Agricultural implement				ş	c.	\$ c.	\$	c.	Ģ	c.	Ş	c.
Blacksmiths	2.63	60.00	260.63	399	58				399	58	374	68
Drillers	2.00	60.00	223.50	245	75				245	75	245	75
Foremen	4.33	60.00	285.00	663	33		• • • • •		663	33	566	67
Machinists	2.86	59.11	248.58	401	97	4 17	8	67	414	81	394	92
Melters	1.33	58.00	296.67	355	00			•••	355	00	336	67
Moulders	2.00	58.64	239.16	460	24		4	00	464	24	381	48
Painters	2.68	59.36	238,00	33I	89		5	26	337	15	355	89
Vice hands	2.50	51.00	280.00	375	00	12 50	• • • •	• •	387	50	371	00
Wood workers	3.87	59.13	246.60	400	60	I 33			401	93	403	93
Apprentices (various)'		59.00	289.59	164	34	57			164	91	170	03

				_										
Occupation or Sub- occupation.	No.of dependents	Hours employed per week.	Dave employed	per year.	Yearly wages fr'm	occupation.	Extra earnings.	>	Wife and child-	ren's earnings.	Totol comined	T Utdi Calmings.	Cost of lining	
					j \$	С.	\$	c.	\$	c.	\$	c.	\$	с.
Axe factory workers:							]						F	
Axe makers	3.40	56.8	0 27	1,60	666	00 0		• •			660	00	520	00
Finishers	3.25	48.0	0 26	2.50	418	375		• •	18	75	437	50	315	00
Forgers	4.33	48.0	0 2 5	0.00	500	00			116	67	616	67	416	67
Grinders	1.67	48.0	0 2 5	0.00	396	567				• • •	396	67	308	33
Polishers	2.38	55.0	5 29	7.00	454	138	5	oc			459	38	403	50
Temperers	3.50	54.0	0 26	8.00	50	5 00	l				505	00	405	ဝိပ
Barbers	2.80	69.6	o130	0.00	1464	00			5	00	160	00	1282	00
Bakers	2.53	68.8	2/28	0.20	380	0 7T		•••		۵- ۸ T	204	12	228	82
Blacksmiths, (general)	2.43	57.7	125	3.10	1418	8 6T		~~		80	1394	20	220	22
Boiler and Engine works:		57.7		J	14+0	. 01	1	90	9	00	+49	39	300	22
Blacksmiths	3.00	57 7	= 20	2 50	1.61	- 25					.6-	~ -		
Boiler makers	2 71	5/./.	2/29	7 46	401	~ ~ 7	[••••	••		60	401	25	303	13
Machinists	2 15	50.4	120	/ • 4 c	449	0/	••••	•••	2	00	451	75	404	75
Moulders	2 07	50.70		0.95	494	20	7	25	2	00	503	45	392	60
Wood workers	2.03	55.9	/ 23	9.79	430	2 41	5	24	• • •	•••	44 <u>3</u>	65	385	79
Box makers	3.33	50.00	30	1.33	508	33	•••	••	• • •	• • •	508	33	445	00
Bookbinders	1.75	59.00	29	9.5C	1390	75	• • • •	• •		• • •	390	75	385	75
	0.25	57.05	5 30	0.25	600	) OO	31	25	52	50	683	75	518	75
Book koopera		58.00	27.	5.33	139	17	• • • •	• •	· · ·		I 39	17	145	83
Broos fraishers	1.50	57.75	5 29:	2.50	481	25	· • • •	• •			481	25	370	00
Drass minsuers	.60	60.00	230	0.00	317	00				• • •	317	00	285	00
Drewers	2.29	66.00	27	3.71	472	43	11.	43	7	14	491	00	346	20
Dricklayers	3.59	60.00	18:	r • 94	394	24	22 (	65	II	76	428	65	358	76
Brickmakers	2.28	60.00	298	3.89	432	11		. 1		I	132	TT	356	04
	· · · .	бо.ос	300	0.00	150	00					150	00	150	94
Butchers	2.86	58.20	26:	2.86	426	Id	40 0	00	IO	71	176	85	105	21
Cap makers	. 50	57.00	300	0.00	175	00				1	175	05	405	/1
Carpenters	3.11	57.45	240	).72	1396	28	2		· · · ·	64	1/3	72	105	00
Carriage shops :		•7 10	1 '		55-		J .	-9	9	¥	409	11	375	40
Blacksmiths	1.78	59.33	201	. TI	431	Tol	<b>TT</b>		~	66				0-
Carvers	1.33	60.00	1300	0.00	166	67	** .	-9	9	90	452	34	303	81
Painters	2.38	50.62	277	00	400	62			••••	•••	400	27	200	07
Trimmers	2.87	57.60	270	87	447	60	-40				401	oç	379	19
Wood workers	2.04	50.44	280	22	122	00	6.	50	24	33	505	73	ίοι	13
Cigar makers	.70	54 50	205	- 22	434	99	0.5	99	30	13	474	81	359	13
" <b>I</b>	.75	60.00	269	. 57	304	75	17	71	4	43	390	8ç	292	00
" 2,	26	58 m	200	.33	137	87	••••	•• •	• • • •	•••	<sup>I</sup> 37	67	159	33
Clerks	67	50.74	2/1	•79	107	84	• • • • •	•	5	26¦:	73	IC	179	79
" 2	/	59.00	302	•25	309	50	••••	•	20	83	390	33	350	83
Coachmen		60.00	203	•33	198	33	• • • • •	•	• • • •		t 8 <b>8</b>	33	175	oŏ
Coal-heavers		09.00	332	· 50	377	00	<b>.</b> .	.	· · <b></b>		377	oc	356	50
Confectioners	.40	07.20	234	.20	356	30	12 5	50	10	50	82	30	332	50
" 2		00.00	294	•36	504	94	••••		13	och	517	7:1	127	27
4	•33'	59.33	254	•94'	111	94		J.,		. li	íı,	۱ که	120	72
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LABOUR AND WAGES-Continued.

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LABOUR AND WAGES-Continued.	
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Occupation or Sub- occupation.	No.ofdependents	Hours employed per week.	Days employed per year.	Yearly wagesfr'm occupation.	Extra earnings.	Wife and child- ren's earnings.	Total earnings.	Cost of living.
				φι.	j\$ c.	\$ c.	\$ c.	\$ c.
Coopers Coppersmiths Corset-makers, 2 Cotton mill operatives :	2.83 1.50	60.00 54.00 60.00	251.64 275.00 266.67	355 91 478 50 216 67	· · · · · · · ·	• • • • • • • •	355 91 478 50 216 67	34 <sup>8</sup> 45 325 00 200 00
Carders	2.80	61.40	298.00	385 00			385 00	379 00
" helpers, 2	1.50	60.00	232.50	186 25		20 00	206 25	206 00
" 3		62.50	290.00	127 50		<b></b>	127 50	127 50
Drawers-in, 2		60.00	267.50	270 50		<b></b>	270 50	210 50
Dyers	1.00	<b>61.6</b> 6	280.00	380 00		· • <i>•</i> • • •	380 00	315 56
Finishers, 2	2.00	57.00	177.00	153 00		5 00	158 00	175 00
Loom fixers	2.43	60.71	272.14	569 29		<b></b>	569 29	420 00
Spinners	2.00	60.00	233.75	399 50		. <b></b> .	399 50	357 50
	•33	60.83	270.00	191 67		<b></b>	191 67	184 17
Spoolers, 3		62.50	290.00	108 38	· • • • • •	· · • • • •	108 38	108 39
Slasher tenders	2.67	60.67	273 <b>·3</b> 3	371 07	• • • • • • •	· · · · ·	371 07	335 00
Wareroom hands	<b>I</b> .75	60.50	277.50	400 25	••••		400 25	343 75
" " 2	.50	44.50	270.07	244 03	••••	• • • • • •	244 03	225 03
Warpers, 2	.25	00.03	270.00	202 00			202 00	105 50
Weavers, 2	•53	61.00	257.20	1209 40	1 <b></b>	2 07	292 07	142 47
Winders, 2	· .25	- 01.25	275.00	199 00	2 27		199 00	101 50
Dressmakers	.0.	50.91	240.02	105 2/	2 2/		103 34	1/1 10
Engineers:			276 80				000 10	002 00
Locomotive	13.20	84.00	200.00	1909 10	57 67	50.00	1909 10	1101 67
Marine	2.03	62.00	209.17	437 50	7 40	22 86	1446 32	271 51
Stationaly	12.00	60.00	290.37	410 00	1 7 40	22 00	440 3-	
Fanning mill makers	3.00	62 42	262 42	311 58	A 17	8 33	357 08	314 67
Fifemen (wright)	1.4~	60 12	281.18	3 8 3 T 50	20 41	7 39	868 3	654 88
Foremen (various)	4. VJ			1 - 5 - 5 5	1 -2 1-	, , , , , ,	1	<u>'</u>   ''
Machinists	3.25	50.50	302.17	469 92		15 00	484 92	374 42
Moulders	2.93	58.14	250.60	429 0	2 00	3 75	434 80	415 33
Woodworkers	3.25	60.00	293.7	5 508 00		100 00	608 00	425 00
Furniture factory work'rs	:	!		1	i			
Finishers	1.17	58.50	300.50	428 58	3		428 58	3 303 58
Machine hands	2.40	58.65	231.55	5 340 35	5		340 3	5 330 60
Upholsterers	1.41	55.41	283.12	2 443-58	3¦ 12 06	11 76	5'467 40	389 11
Varnishers & Polishers.	1.33	56.00	275.00	391 00	»  <b>.</b>	66 67	457 67	7 387 33
Gas fitters	3.60	62.40	302.40	486 80		•••••	486 80	1416 00
General servants (with			-			1		1
board), 2		70.50	365.00	0 84 75	5 I OC	'  • • • • • ·	85 7	5 63 00
Glass packers	. 50	60.00	250.00	100 00	·····		100 00	oo 87170
Glove makers	3.00	60.00	299.00	0 040 00	)'	50 00	0,090 0	500 00
Harness makers.	2.32	56.84	205.47	7'309 42	4 · • · • • •	9 22	370 0	3 347 °4

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#### Ħ No of dependents. Hours employed per week. and child-i's earnings. employed earnings. £ Yearly wages fr occupation. earnings Cost of living. OCCUPATION OR SUBper year. OCCUPATION. Days Extra Total , Wife ren' 50.00 251.67 441 67 ..... \$ c. \$ c. 56.57 252.00 300 3 \$ \$ С. c. .83 1.82 Hat makers..... 411 67 320 83 Helpers (blacksmith's,etc) 56.57 252.99 300 32 ..... 3 70 304 02 293 37 Horse shoers..... Jewellers ..... Knitting factory oper'tiv's Finishers, 2.... 1.... Knitters, 2.... Menders, 2..... . . . . Labourers ..... 2.79 Lamplighters ..... 2.88 umber mill operatives: 5.50 72.00 255.00 550 50 62 5c 537 50 Cullers 1.50 (3.00) 300.00 478 50 478 5c 375 00 Jointers 3.00 54.00 281.00 389 c0 55 50 444 c2 43 c0 244 c2 45 c375 c0 Measurers .75 63.00 275.00 448 25 6 25 .... 454 50 375 c0 Sawyers 4.56 65.00 248.89376 20 45 cc 694 421 9443 670 250 250 252</td 66.67 302.28 515 83 ..... 20 22 536 05 430 28 56.00 186.67 65 33 ..... 65 33 t28 67 60.00 260.00 540 83 ..... 540 83 383 33 ····· 374 oc 326 oo Painters : Paper mill operatives :

#### LABOUR AND WAGES-Continued.

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LABOUR AND WAGES-Continued.

Occupation or Sub- occupation.	No.of dependents	Hours employed per week	Days employed Feryear	Acarly wages Ir in occupation.	Extra earnings	Wife and child- rea's errnings.	Total earnings.	Cost of living.
				- S C	8 (	\$ C.	8 c	<u>\$</u> c
Paper mill operatives: Machine tenders Pattern makers Photographers	1.00 2.57 1.67	59.00 59.00 56.00	303.00 267.43 304.33	450 00 558 71 451 00		14 29	450 ( 0 573 OC 451 OC	375 00 449 43 316 67
Piano makers Picture framers Plasterers Plumbers	-++3 5.07 1.40 3.50	57.43 56.00 59.60 59.25	285.71 320.00 231.53 252.88	592 71 503 33 459 87 374 63		57 14 16 67 13	649 85 520 00 460 CO 409 63	389 1.1 416 67 326 20 416 00
Porters Potters Pump makers Railway shop workers:	3.00	68.80 60.90 60.00	284.71	340 00 451 80 306 00	0 100 00	15 00	340 oc 466 80 406 co	341 86 372 70 406 00
Blacksmiths Car builders Car repairers Drillers Fitters Iron turners Painters Planers.	2.30 4.00 2.50 2.30 2.36 2.67 3.20 2.67	54.00 58.50 63.00 54.00 53.78 53.83 54.80 55.00	295.00 295.75 273.00 262.80 264.42 237.87 279.16	475 27 518 75 443 75 283 80 478 47 495 00 378 80 336 83	4 44	6 25 3 33	475 27 518 75 443 75 283 8c 482 9J 501 25 382 15 382 15 336 85	3°5 73 5°8 75 418 75 275 00 381 04 425 92 3 <sup>8</sup> 9 47 314 17
Strippers Railway employés,general: Baggagemen	···· 3.00	54.00 62.00	273.co	294 OC	,		294 oc 504 67	<sup>248</sup> 75
Brakemen Cleaners Foremen of departments Station agents	•77 1.71 2.43 1.80	65.33 60.86 58.29 50.40	242.56 309.43 291.71 309.67	384 89 337 86 668 57 780 0	5 56	· · · · · · · · · · · · · · · · · · ·	390 4 337 86 668 57 780 00	358 44 298 57 492 86 490 00
Yardmen Riveters, bridge works. Saddlers	3.20 2.83 3.33	64.80 60.00 54.00 60.00	315.20 286.00 300.00	384 80 420 83 438 00	3	35 OC 25 OC	419 80 420 83 463 00 483 33	382 80 391 67 420 00
Salesmen Sash, door and blind mkrs. Scale makers Screw makers	4.00 4.17 4.92 1.67	65.82 58.50 60.00 60.00	304.50 259.17 253.17 230.00	486 00 459 33 431 42 287 CC	8 33	33 33	527 66 459 33 431 42 287 66	456 50 474 33 423 08 287 00
Seamstresses Sewing machine operators Shippers	 .16 3.86	60.00 69.c0 58.00 60.71	230.00 300.00 273.5 301.86	125 71 292 50 181 33 559 86	6 67		125 71 292 50 188 00 559 80	125 71 247 50 169 50 457 14
Ship carpenters Shirt makers, 2 Shoe fitters	3.40  .74	53.00 60.00 56.27	237.80 300.00	390 40 196 50 125 27		20 00	196 50 125 27	159 00 159 00 163 40

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### LABOUR AND WAGES-Continued.

Occupation or Sub-	endents	nployed ek.	nployed r.	uges fr'm tion	nings.	l child. trangs	nings.	ving.
OCCUPATION.	d	5 3	เล	pa pa	car	es e	ear	
	pjq	ILS.	s L	cu cu	5	l s a		5
	0	pe lou	pe	oc ea	> tr	/ift	ota	ost
	Z	Ξ	<u> </u> _	X	ഥ	14	Ĥ	Ŭ
				\$ c.	\$ c.	\$ c.	\$ C.	\$ c.
Shoe makers	2.66	58.34	280.55	412.00	17 23	33 00	462 32	354 18
Soap makers	4.33	59.67	304.00	483 67	-/		483 67	416 67
Stokers	3.50	60.00	320.00	455 00			455 00	300 00
Stone cutters	3.00	57.40	224.00	482 00			482 00	130 00
Stove foundry employés :	Ŭ,		,				1	1 2
Assorters	1.67	59·33	241.33	284 00		20 00	304 06	209 00
Core makers	3.33	56.67	215.33	315 17		<b></b>	315 17	368 50
Finishers	2.56	59.33	256.11	381 56		· · <b>· ·</b>	381 56	360 78
Grinders	3.00	59.co'	216.00	230 <b>00</b>	25 00		255 00	255 00
Melters.	3.50	59 · 50	254.59	421 25			421 25	368 75
Mounters	1.63	59.21	249.00	337 68	16		337 84	301 37
Moulders	2.40	57.65	254.50	409 95	I 75	10 00	421 70	374 75
Folishers	3.33	59.00	208.00	400 00			400 00	383 33
Street-car drivers	2.27	81.60	310.20	373 87	•••••	· • • • • •	373 87	345 20
Tailorogage	2.00	57.10	225.87	366 97	I 29	· • • • • •	368 26	327 87
Tanoresses, 2	• 32	58.41	250.66	19I 43		•••••	191 43	183 36
Termstere	3.07	59.33	290.00	390 50	· · · · · · ·	• • • • • •	390 50	386 33
Telegraph operators	2.30	64.30	300.54	348 94	7 80	4 5°	361 24	327 I4
Tile makers	1.57	69.92	311.93	475 93	12 14	•••••	488 07	409 71
Tinsmiths	2.50	5% T.	300.00	391 07	••••	•••••	391 67	316 67
Trunk and tray liners 2	1.49	50.14	200.09	390 23	5 14	• • • • • •	403 37	312 86
Trunk makers	2 2 2	- 00.00 	290.00	177 00	•••••	•••••	177 60	241 20
Turners (wood)	2 22	57.55	-/4.47	307 32		•••••	367 32	343 63
Waggon makers	2 70	56 40	274 00	421 92	1 92	15 38	439 22	355 18
Watchmen	2.80	72 20	241 60	120 00	2 00	5 00	418 00	365 50
Wheel makers	2.75	55.00	225 00	282 50	20 00	•••••	449 00	300 00
Whip makers	t.40	60.00	230 00	205 50	•••••	•••••	302 50	318 75
Woollen factory oper-			- 50.00	303 30	•••••	•••••	305 501	278 00
atives:			1					
Burlers 2	· • • • أ	59.00	262.50	152 50			150 50	
Carders	3.50	60.00	275.00	425 00			132 50	152 50
Drawers-in, 2		59.00	250.00	132.50			122 50	125 00
Drum tenders		59.00	275.00	175 00			175 00	132 50
Dyers	1.67	60.00	276.67	386 67			286 67	252 22
Finishers	· 57	60.00	275.86	403 29	4 28		107 57	222 22
Dialars for 1	1.50	59.50	275.00	456 00			156 00	287 50
Reelarce		60.00	300.00	192 50	[]		192 50	200 00
Spinnere	·33	58.00	250.00	150 00	16 67	33 33	200 00	175 00
Weavers	••••	60.00	283.33	363 33			363 33	266 67
	••••	58.00	266.67	191 б7	.		191 67	175 00
		-	-	1	1		. /	, ,

The average time employed by workers in the year was 265.17 days, of nearly ten hours each; the average of yearly earnings from occupation was  $\$_{372,29}$ ; and the average cost of living was Adding the extra earnings of work-people and the \$334.47. earnings of wives and children the total average income of a workman was  $\$_3\$_3.31$ , which would leave a surplus of earnings over the cost of living for the year of  $\$_4\$.\$_4$ . But it will be observed that while in some occupations the earnings were large as compared with the cost of living, in others they were not enough to provide for the cost of living. For instance, of the total number of 1,342 who earned more than they spent, there were 889 whose average savings exceeded \$50, and 556 whose savings exceeded \$135. On the other hand there were 1,265 whose earnings and cost of living were equal, and 246 whose earnings were less than the cost of living. The following table gives the statistics for each class-No. I column for employés whose earnings were more than cost of living, No. 2 for those whose earnings and cost of living were equal, and No. 3 for those whose earnings were less than the cost of living:

	No. 1.	No. 2.	No. 3.
No. of workers Average number of days employed Average yearly earnings Average cost of living Average surplus* or deficit	1,342 278'49 \$454.75 338.75 *116 00	1,265 26079 \$331.51 331.51	246 214.97 \$259.96 326.42 66.46

The average number of dependents in the first class was 3.09, in the second class 3.47, and in the third class 3.82. The average rate of wages for workers in the first class was \$1.63 per day, in the second class \$1.27, and in the third \$1.21. Had workers of the first class received only the rate of wages of the third, they would have had a deficit of \$1.77, instead of a surplus of \$1.16; and had workers of the third class received the rate of wages of the first they would have had a surplus of \$24.40 instead of a deficit of \$66.46. in the Counties of Peterborough, Hastings, Frontenac, Lanark and Renfrew. Mines have been opened and worked in all these counties, and there is a prospect of the works being carried on with steadily increasing vigour. The great bulk of the ore is magnetic, yielding sixty to sixty-eight per cent. of pure iron, and capable of making the best grade of Bessemer steel.

Mines of gold, lead, plumbago, etc., are being worked in the eastern counties of the Province, and the mineral riches of that district are unquestionably of great value. What is chiefly required is capital and experience for its development. In the north-eastern part of the Province also, which is now being opened up by the construction of the Canadian Pacific Railway, important discoveries have been made, especially of copper.

The Lake Superior district is famous for its stores of mineral wealth. Concerning this district Judge Laird, of Port Arthur, writes as follows:

"A very erroneous impression generally prevails as to the natural resources of Thunder Bay, particularly in regard to the extent of its mineral resources. Its mineral wealth is doubtless the richest on the American Continent, and would have long ago attracted more general attention but for its isolated location. The following metals and minerals are found in very large paying quantities, and those heretofore properly developed have proved a source of immense revenue to the owners. The Silver Islet Mine took out over \$3,000,000, at very little expense.

The Rabbit Mountain Mine proves to be richer than the Silver Islet. It is of black Silurian slate formation; large nuggets of solid black silver weighing several pounds have been found. The vein is forty feet wide, and only one wall found as yet; a great quantity of ore is in sight.

Standing first among the richest discoveries of precious metals is the Jack Fish Gold and Silver Mine. It is operated by the Huronian Mining Company, who work it not as a speculation but as a rich paying industry. The working-vein is eight feet wide, and consists of free gold, or what is known as Sylvanite ore, the richest ore known to miners; \$49 is the lowest assay to the ton, and \$5,971 the highest.

In 1871 free gold was discovered at the Height of Land, but,

owing to the impossibility of getting in machinery or away quartz, it was not worked. The diorite dyke from Silver Islet to McKellar's Point on the main shore extends for thirty miles, and all veins crossing it are rich in silver. McKellar's Point is being operated by a company with a capital of \$1,000,000. Pie Island is stocked for \$5,000,000.

Native copper is found in large quantities, and is worked by an English company. The copper is similar to that found on the south shore of Lake Superior, and is already increasing the wealth of the operators.

Iron is found in endless quantities forty-two miles from Port Arthur, and as coal can be laid down at this port for \$3.20 per ton it will not be long until all the iron and castings used in the North-West will be manufactured in this district.

Zinc, massive iron pyrites, suitable for sulphuric acids, are found in great quantities; also baryta or heavy spar for paint, plumbago, soapstone, and a superior quality of old red sandstone owned by the Nepigon Sandstone Company.

The property of this company is a very valuable one and contains an almost inexhaustible quantity of fine old red sandstone. The island is about a mile and a half in length by half a mile in width; when one sees the immense mountain of brown free-stone it strikes the beholder with astonishment, for right there in plain sight is enough beautiful stone of the very best quality to build up one of the largest cities in the world, and indeed this wonderful quarry must be seen to be fully appreciated. The rock face is from sixty to one hundred feet high in places, and there is the further advantage that it does not require any stripping. Large amounts of the same have already been shipped to Chicago for substantial building purposes and ornamentation. It is believed that this Nepigon stone can be delivered in Toronto or any of the lake cities at a much lower price than the New England stone, and nearly, if not quite as cheaply as the Ohio sandstone, while in lasting qualities as a building material it is far superior to both these stones."

Public lands which are open for sale may be sold under "The General Mining Act" at the rate of one dollar per acre cash. The patent is issued upon payment, and contains a reservation of all

# PICTORIAL ONTARIO.

low stretch of graceful stone and iron railing with its massive gates of fine iron-work which encloses Parliament square and the magnificent pile of the Government buildings. Immediately in front of the two bridges is the new post-office and custom house a large and elegant stone edifice in the style of the Renaissance which is one of the architectural features of the city.

Reverting to our stand at the junction of the bridges, and still



PRINCESS LOUISE'S SKETCHING BOX.

turning our backs to the post-office, there lies on the immediate left the entrance to the public gardens-a long stretch of prettilyplanned walks, grass and flower beds, with frequent rustic seats-which, though still in incomplete form, is one of the favourite summer evening lounges of the citizens. Below runs the deep gorge through which the waters of the canal. by a magnificent series of locks, have been led to join the Ottawa, and beyond the locks rises the precipitous wooded slope of Parliament Hill and the vast pile of the "buildings," whose graceful outline. sharply marked out against the bright sky of the on-

coming evening and the western sun, is a never-ceasing charm to the eyes of the strollers on the garden cliffs.

Crossing the Sappers' Bridge and passing the post-office on our right, we come upon Elgin street—whose name, as befits the capital, is a memorial of an ex-Governor—and the new city hall, a large building of blue limestone, containing the various city offices and the machinery for carrying out the civic system. Following Elgin street a few hundred paces, a fine piece of open ground is met with—Cartier square. \* \* On one side of the square stands a very extensive pile of buildings in stone, of graceful design—the Normal School—one of the apices of the Government Educational System of the Province of Ontario; and close by is the collegiate institute. In this neighbourhood is found the rising "west end" of the community. Villa residences of fine proportions and design, surrounded by well-kept gardens, have sprung up in all directions. \* \* \* \*



PARLIAMENT HOUSES, OTTAWA.

But the centre—the heart—of Ottawa lies, of course, in its Parliament and Departmental buildings. Commenced in 1859, the first stone was laid by the Prince of Wales in 1860, and they were occupied in 1865, though much remained to be done after that date; the library and an extension of one of the blocks, the grounds and the surrounding walls and railings, having been subsequently added. In their present form they cost fully five million dollars, and cover an area of about four acres. They form three sides of a huge square, which is laid down in grass, beautifully kept, whose fresh,

## PICTORIAL ONTARIO.

Multitudinous piles of symmetrically arranged lumber form a peculiar feature on the outskirts of many Canadian cities. The forest products exported from Canada during the last ten years, have amounted to over twenty million of dollars annually. These have consisted almost entirely of square timber, and the more marketable sizes of sawn lumber, called deals. Nearly one half goes to Great Britain. No other country by itself receives so much. Next to Great Britain come the United States, which take the greatest part of the Ontario export. British Columbia sends to South America, China, Japan, and the Pacific islands. The Atlantic Maritime Provinces send to Europe, Africa and South Atlantic States. Almost equal to this vast export is the amount consumed for domestic use. The traveller in Canada cannot fail to be struck by the way in which lumber is used, for the bridges on our rivers, the fences that divide our fields, the side-walks in our villages and cities, and for almost every conceivable purpose. In the country, and in many towns, the buildings are of wood, the roads have their foundation of wood, and the newest method of paving our city streets is with wooden blocks. And in nearly every part of Canada outside the towns wood is the only material used for fuel.

# THE LAURENTIAN TRACT

rising on the Labrador coast and forming the northerly wall of the St. Lawrence valley; withdrawing from the river some miles below Quebec, and passing north of Ottawa; sending down a spur to cross the St. Lawrence near Kingston into the State of New York, where it towers into the Adirondack range; continuing their progress in Canada to the Georgian Bay; thence around its shores and the north shore of Lake Superior; leaving Lake Superior to take a majestic sweep northward and westward and sink into the icy sea. The Laurentians form a mysterious mountain chain whose age and origin are wrapped in obscurity; and in this Laurentian country is found, what is distinctive in the scenery of the eastern half of the Dominion, the crag hewn and planed into every romantic shape; the fir rooted in the crag; the stream pursuing its way between walls of living green, now foaming down a boulder-strewn bed, now widening into a tranquil lake; the island-rock clothed with verdure and surrounded by countless companions. These characteristics of Canadian scenery belong to the Laurentians. Broken up into astonishing diversity, the Laurentian tract abounds in the picturesque, and affords the people of Quebec and Ontario opportunities for pleasant and healthful summering which few countries enjoy. Hence, also, come the vast supplies of timber which create the greatest of Canadian industries. 'Stores of minerals of inculculable value lie in the bosom of the hills, and extensive tracts of good land in the river valleys and other depressions. True, the tiller of the soil has a



HUNTING PARTY ON LAKE NIPISSING.

hard fight with Nature before she yields a fair return, but such struggles produce men of strong wills and earnest natures. "What do you raise here?" asked a stranger, with something of a sneer, as he surveyed a stony field in New Hampshire. "We raise men, sir," was the proud reply.

Lake Nipissing is in the centre of one of the most promising tracts in the Laurentine district. Until lately but little has been known of the character or capabilities of this unoccupied region, but the active explorations of the Government of Ontario have brought to light much important information. The total area of unsettled Crown lands between the Ottawa and Georgian Bay, south

of Lake Nipissing, is little short of twelve million acres, or more than half the area of Ireland. At least half of this is well suited for settlement, a country capable of sustaining, at a moderate estimate, a hardy population of five hundred thousand souls. Of the three sections into which this region is divided—the red pine, the white pine and the hardwood country-the latter is much the best adapted for agriculture. This tract, commencing at the headwaters of the Mattawan, and extending sixty miles to the west, contains some seven thousand superficial miles. It is a singularly isolated region. Between it and Lake Huron, and bordering French River on both sides, lies an expanse of barren country, terminating in bare rock towards the shore of the lake. On the south, also, along or near the division of the waters of the Ottawa and St. Lawrence, it is girded by a belt of rugged, stony land, about twenty miles in breadth, utterly unfit for settlement. To the east it is separated from the inhabited country on the Ottawa by the timber district. Within these boundaries, for the most part in primeval solitude, is an extensive tract of excellent farming country. Here are found, also, numerous water-powers of value, and timber of the finest description. The forest is full of game-moose, cariboo, red deer, and bears, of the largest sort; and of smaller game-hares, swans, geese, ducks, wild turkeys, partridge and quail. Of furbearing animals, there are the silver-grey, red and black fox, the otter, martin, mink and beaver. The lakes and rivers swarm with fish. The climate is clear, bracing, and healthy.

There is no testimony to the character of this region more interesting than that of the German-Swiss Delegates who visited it and have already promoted thereto a Swiss immigration. One describes the soil on the slopes of the south river of Lake Nipissing, as much resembling that of the vine-growing hills encircling the lakes in the French Cantons of Switzerland. It is his conviction that in the course of time vine culture will be successfully carried on in this part of the Nipissing district. "The striking resemblance which that district bears to the north-west Cantons of Switerland, with its numerous fine lakes, the mildness and great wholesomeness of its climate, and the extraordinary fertility of its soil, would make it a splendid new home for Swiss immigrants to Ontario, in whose hands would soon flourish a 'new Helvetia' in Canada."

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A visitor from Wurtemberg to the "free grant" territory pleasantly relates his experience of "the bush." He travels on the colonization road from Rosseau to Nipissing. To the right and left of the road there are thousands of acres of the best land. The soil improves as the lake is approached. Now and then a log-house is passed, erected a few months ago, but even now surrounded by a "clearing" of ten or twelve acres, with splendid potatoes, wheat and oats, corn and vegetables. Wherever a stoppage is made the settlers are able to offer a good meal. The cattle are in excellent condition, pasturing partly in the woods and partly in the fenced lots. In the midst of the forest a cart is met, the farmer walking behind it. He stands still, with the words, "You are surely also a Swabian?" "Yes; and whence are you?" "Half a mile from Oppelesbohm is my home;" and the visitor listens to an encouraging tale of contented industry.

North and west, also, of Lake Nipissing the land is good. The agents of the Hudson's Bay Company, the only white residents, have seen an unwonted sight, the surveyor, with his theodolite, making townships in the wilderness. There is reported to be more fertile, arable land on the west bank of the Ottawa, above the Mattawan, than on the banks below it. A line drawn from Lake Nipissing to the lower end of Lake Temiscaming, with the Ottawa to the north and west, and the Mattawan to the south, forms a rough triangle, within which is a large area of hardwood land. It is in every way well adapted for settlement. On one side it touches a great navigable reach of the Ottawa, and on the other a large lake, which, at a small cost, could be rendered easily accessible from Lake Huron, and on the very route which must be used for the timber trade, now extending to Lake Temiscaming. North of this tract to Lake Abbitibee, a distance of eighty miles, soil for the most part favourable to cultivation is found to exist, being a level alluvial over a limestone formation. The timber is a heavy growth of beech, maple, elm and pine. Where these woods grow wheat will also grow well. The climate will not be an obstacle to settlement. It is certainly not as rigorous as that of the North-West.

#### PRINCE ARTHUR'S LANDING.

Prince Arthur's Landing, so named by the officers of Colonel Wolseley's expedition to the Red River settlement in 1870, is a town of six thousand people and large hopes. Between the Landing and the town plot of Fort William, once intended for the Lake Superior terminus of the Canadian Pacific Railway, there exists a deadly rivalry. The former stands on the north shore of Thunder Bay, on ground that rises gradually, and offers an excellent site for a city. What there is of the place is business-like. The six miles of railway which connect it with the Canadian Pacific road at the Kaministiquia, were originally built by the people of the town. The landing will probably become one of the chief watering-places of the people of Manitoba and the west—a spot where they may meet, amid beautiful scenery and bracing air, their fellow-countrymen of the east.

One forgets that the Landing is within the limits of Ontario, over seven hundred miles from the capital of the Province, as it is. The ideas of the people are not those of Ontario. Mining is the chief topic of conversation, and the expected source of wealth. Just outside of Thunder Cape the traveller sees a few wooden structures standing on a pier or crib about a mile from the shore. This is the famous silver islet, originally a few feet of rock above the surface of the lake, offering the only avenue of approach to vast stores of hidden wealth. Ten years ago an excavation was made in the little protrusion of rock, which disclosed a rich pocket of silver. The lumps of quartz first taken out seamed with silver ore served, for the time, in the construction of cribs to protect the mouth of the shaft from the inroads of the waves. Farther mining revealed the fact that under the water there was a silver mine of unknown extent and value. Three million dollars in silver came out of it in the first ten years, though the expenses of working and protecting the mine are said to have about equalled that sum. To-day the root of the mine contains a fortune in silver, which-oh, bitterness to the cupidity of man !---cannot be touched without admitting the waters of Lake Superior, to the conclusion of all farther operations.

Mining locations and prospectings, quartz and blende, amygdaloid and mica, occupy a large space in the thoughts of most of the Landing people. We found three silver mines in active operations, with any number of abandoned shafts. What the extent of the silver deposit on the north shore may be it is impossible to guess. The world may be dazzled some day by the discoveries of sanguine "prospectors" whom one is sure to meet in the country. Up to this, however, the universal experience has been that there is nothing truer than the Spanish proverb: "It takes a mine to work a mine."

# LAKE OF THE WOODS.

The Lake of the Woods has been long famed for its beauty. Except towards the south-west, where a wide "traverse" of open



LAKE OF THE WOODS.

## PICTORIAL ONTARIO.

water makes the Indian scan the sky before he ventures out in his canoe; it is so filled with islands that to the tourist it appears a wonderously beautiful river rather than a lake. Land and forest are near and round him all the time. In some places fires, thoughtlessly left burning at camps, have swept over the islets, revealing the gneissoid rocks-unpromising to the husbandman-of which they are composed. But enough are left in all their varied beauty of form and colour to make a sail from Rainy River down to Rat Portage as charming as a sail among "the Thousand Islands" of the St. Lawrence. Gliding over the unruffled waters, the eye gets fairly cloyed with picture after picture of a somewhat monotonous type of sylvan beauty. At Rat Portage the River Winnipeg issues from the lake in two divisions. The railway from Lake Superior to Manitoba crosses the river here, bridging each division just above the falls. The traveller who has taken the train at Thunder Bay now gets a glimpse of the beautiful, after hundreds of miles of unutterable dreariness. He is near the dividing-line of the Laurentian and alluvial regions, and before he bids farewell to the Laurentides, they burst into scenes of rare picturesqueness. At the eastern fall, the river, compressed between beautifully stained granite rocks, rushes impetuously into a boiling caldron, at the side of which is a quiet eddy where an Indian is generally found with a hand-net scooping up magnificent white-fish almost as easily as a housewife takes them out of a barrel. The western fall is a long, broad rapid with a drop of four or five feet at one point. These falls are only the first of an almost interminable series of rapids and cataracts down which the river leaps over primeval rocks on its way to the great Lake Winnipeg, running between these rapids, in long stretches and windings, among green islets of inconceivable loveliness. A canoe trip with Indians from Rat Portage down to Lake Winnipeg, or a steamboat excursion in the opposite direction up the lake to Fort Francis on Rainy River, ought to content grumblers otherwise incurable. Rat Portage, in spite of its unpromising name, has a future more certain than most of the ambitious places in the North-West styled cities, on the strength of a railway station or a blacksmith's shop. It is the nearest summer resort for the Winnipeggers, and, as the water power is practically inexhaustible, it may also become a great lumber and

milling centre. Men of faith speak of it as the Canadian Minneapolis, just as half a dozen villages in Ontario are styled Canadian Birminghams.

#### THE NIAGARA DISTRICT.

The Peninsula jutting out between Lake Erie and Ontario, and divided from the State of New York by the Niagara River, constitutes what is known as the Niagara district. It is unrivalled in all North America for its genial climate and the cultivated beauty of its fertile and richly-wooded soil, and is closely knit to the hearts of its people by its noble, historic memories—memories indissolubly blended with the beautiful river which glorifies the region through which it flows and to which it has given its name. These memories and associations of the brave days of old ought not to be less sacred and guarded possessions because the foes that once dyed the Niagara's crystal waters with blood are now friends, and hold its joint ownership in peaceful rivalry. Through the heroic valour, suffering and sacrifices of the men who defended Queenston Heights a nation was born, destined, we may all believe, to live as long as the famous river on whose banks the first touch of national life was felt.

The River Niagara, from its rise in Lake Erie till it enters Lake Ontario at the beautiful old town to which it has given its name, is thirty-six miles in length, following the course of its many bends and windings, but when measured in a straight course the distance it traverses is only twenty-eight miles. It is a mere pigmy compared to the gigantic rivers of this continent, but through it flow the mighty currents of those western inland seas which are said to hold half the fresh water on the globe. No piece of water of so small an extent has so many attractions for the lovers of picturesque scenery and the scientific students of nature; and from beginning to end it is closely intertwined with historic events, tragic incidents, and the deepest interests and emotions of human life.

To stand on Table Rock on some lovely summer's day, and watch the rapids madly rushing down; to see the grand ocean-like wave rising twenty feet in thickness over the Horse-Shoe Fall, so massive that it retains its smoothness unbroken for some distance


after its fall, and so close to where you stand that your outstretched hand might almost touch it; to look down into the caldron where the water lies strangled and smothered by its own weight, only showing the fierce convulsions beneath by the faintest stirring, its crystalline clearness changed into a mass of slowly seething. curdled, white foam, which wraps it like a winding-sheet; to see the vast volumes of vapour continually rising and falling, now hiding, now revealing a cataract, while in its deepest curve and centre volcanic-like jets of water breaking into clouds of spray and soaring into the air forever hide its face; to listen to "that vast and prodigious cadence, ' that melody of many waters, which stirred the soul of Father Hennepin to awe and admiration, and still excites the same emotions in all who are capable of feeling them; will give the truest conception one view can give of the various elements of beauty and grandeur combined in Niagara Falls. Here those incongruous and disturbing concomitants, which elsewhere are perpetually intruding, are put aside and hidden, or, at any rate, absorbed and dissipated in the magnitude and sublimity of the scene, and the oftener we behold this magnificent sight the more wonderful and beautiful we discover it to be. The true lovers and constant companions of Nature know how infinite in variety she is, and that every day, every hour, her fairest scenes assume fresh phases of beauty. How, then, can all that makes this cataract the wonder of the world be grasped and comprehended in one hurried visit? It is with it as with all master-pieces. The mind of the spectator must be gradually uplifted to feel and understand its greatness; and it is only to those who come to it again and again, in sunshine and cloud, by day and by night, in summer and in winter, that its wonders are fully revealed.

A quarter of a mile lower down is the whirlpool, a scene of extraordinary beauty and attraction. As the river approaches this place, its rapid descent and the narrowness of its curved and rocky bed force the stream, which here runs at the rate of twenty-seven miles an hour, into a piled-up ridge of water, from which liquid jets and cones, often rising to the height of twenty feet, are thrown into the air. Here the river's course is again changed, and it makes an abrupt turn to the right, while the strength and violence of its current, as it sweeps round the cliff on the American side, produces so strong a reaction as to press part of the stream into a recess or basin on the Canadian shore, the struggling and counter-working currents thus forming the great vortex of the whirlpool. But it is a hidden vortex; and the contrast between this lovely little lakelet, calm and smooth as a mirror except for a few swirls of foam at its outer edges, as it lies clasped in the embrace of its encircling and richly-wooded cliffs, and the furious, white-tossing rapids from which it seems so miraculously to have escaped, adds the charms of surprise and mystery to its exquisite beauty. Nor is its witching spell marred by any incongruous surroundings. It lies in a lonely and quiet spot, girdled by rocky walls and shadowing trees, and is It is beautiful almost equally lovely at every season of the year. when its banks are dressed in the fresh transparent green of spring leaves; when they wear the rich foliage of summer, or are robed in the brilliant tints of autumn; and perhaps even more beautiful when only the sombre hues of the dark pines and cedars are reflected on its gleaming surface in winter, or when their branches are laden with snow-wreaths, or glittering with fringes of silvery frost. As we first look at it, it seems an emblem of peace after tumult, calm after strife; but as we continue to gaze, the still, dark-green water takes another aspect; strangely gyrating circles rise and spread and vanish, and reappear again, signs of the mysterious currents beneath. Everything which comes within reach of these resistless currents is caught and dragged into the vortex below, held there for a while, and then thrown to the surface, where it is slowly and ceaselessly whirled round and round. Trees blown into the river, logs from broken rafts carried over the cataract, a dead bird or an ear of Indian corn, are all drawn out of their course down the stream, and perform their strange rotatory penance for days and even weeks before they are released from the pool. Here, if ever, emerge the bodies of those unfortunate ones who have gone over the falls, and here they are found, extricated from their weird dance of death, and, if not claimed by friends, given charitable burial.

From Queenston to Niagara town the broad river flows gently on between banks of red argillaceous strata striped with green. The banks rise from forty to fifty feet in height, shaded on the Canadian side by magnificent trees, and the graceful bends and

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wide reaches of the stream give a series of charming pictures all the way to the lake. Especially attractive is the scene in approaching Queenston from Niagara, the lofty heights coming gradually into view, now standing out as if to close all farther passage, now slowly receding as the river winds about, and then again advancing till the lovely expanse of Queenston Bay, guarded by the cliffs on which Brock's graceful monument stands, opens fully out, and satisfies the beholder's expectation in a perfect climax of beauty. The drive along the river's bank between Queenston and Niagara is charming. On one side of the road the bank sweeps down to the water, clothed with all that splendid variety of woodland foliage which is specially characteristic of the woods of western Canada, and the river flows on in gentle majesty, reflecting in the distance the red hue of the American bank and the houses and trees on the level above; on the other side of the road are comfortable farm dwellings, with orchards and vineries, succeeded, as we near Niagara, by handsome houses with bordering lawns and gardens where, in spring and early summer, blossoming trees and shrubs overhang the railings and fences, and all the flowers of the season show their loveliness in a blaze of brilliant colours. A little way from the town, the decayed trunk of an old tree was for many years shown as the remains of the "hollow beech tree" on which Moore wrote his ballad of the "Woodpecker"; but partly from natural decay, and partly because bits were carried away by reliclovers, every vestige of the old tree has disappeared.

Properly speaking the Niagara district is confined to the Counties of Lincoln and Welland. This famous old district is bounded on three sides by the waters of Lake Ontario, Lake Erie, and the Niagara River. It is traversed by the Chippewa River, and by many smaller streams or "creeks," and by the Welland Canal; everywhere it is intersected by railway lines, with stations at or near each town or village, so that every farmer has quick and easy communication both by water and land with all parts of the Dominion and the United States. Its fertile soil is equally well adapted for grain and root culture, for raising stock or for dairy purposes. Every species of timber growsin perfection. Oaks and pines have been cut six feet in diameter: the oaks measuring from seventy to eighty feet in length, the pines from one hundred to one

hundred and seventy-five, and as straight as the mast of a ship. A few black walnuts still remain, but these most beautiful and valuable trees of the Canadian forest have been ruthlessly cut down everywhere, with that reckless disregard of the timber wealth of the country so common in Canada. In Stamford Park, once the favourite summer residence of Sir Peregrine Maitland, a former Governor of Upper Canada, one grand old Walnut measures fourteen feet in circumference four feet above the ground, its branchesspreading out in a wide umbrageous canopy; and in other places huge stumps show what majestic domes must once have towered above those foundations. The tulip-tree, sometimes called the tulip-poplar, a species of magnolia, is a common forest tree in this district, raising its graceful pillar-like stem, smooth and straight as a dart, sometimes to the height of a hundred feet, bearing a crown of pale green, nearly square cut leaves, and in their season sulphur-coloured blossoms, showing rich red spots at the base of their tulip shaped cups. The red mulberry, too, grows freely in the woods, attaining a height of sixty feet, and its fruit only requires proper cultivation to be equal in size and flavour to the mulberry of Europe.

In this favoured region nature is lavish of her most delicious fruits. Not only apples, pears, plums, cherries, and small fruits of every kind grow in rich abundance, but quinces, grapes, melons, and above all, peaches attain a size and perfection of flavour not to be surpassed in all America. In Niagara town, where in the severest winters the thermometer has never been known to fall more than three degrees below zero, fig-trees grow in the open air and bear two crops in the season, one in July and one early in autumn. The trees are kept short by cutting back to about six feet in height, and preserved from frost of winter by being laid down close to the ground in autumn and covered with a few inches of earth. Under similar treatment the most delicate grapes, Black Hamburg, Chasselas and Muscat do well, and produce splendid bunches every year. These tender fruits, which wither at the slightest touch of frost, need exceptional care and culture; but less delicate varieties of grapes, and the finest peaches only, require to be kept free from weeds by frequent ploughing between the rows to grow as readily and luxuriantly as apples and currants in less

favoured localities. The situation of the Niagara peninsula gives it peculiar advantages for peach culture, the large bodies of water by which it is surrounded protecting it from that extreme cold, which is fatal to the peach, and from the injurious effects of early frosts in autumn and late frosts in spring. A "cold-spell" is scarcely ever felt till after Christmas, and when it comes seldom lasts more than a couple of days at a time. Extremely mild winters —quite as mild as in New York—are the general rule, and in the severest weather known the temperature has never been lower in any part of the peninsula than six degrees below zero.



PICKING PEACHES.

The peach harvest begins towards the end of July and continues to the middle of October. Men and women gather the ripe fruit into baskets carried on the arm; children are not employed, as the peaches require careful handling. The baskets, when filled, are taken to sheds prepared for the purpose, where women pick out all damaged fruit and cover the baskets with coarse pink gauze. They are then sent in waggons to the nearest railway station, where a "peach car" is always provided, in which they are despatched to their destination. Every day the platforms at the stations are crowded with piles of pink-covered peach baskets, in waiting for the trains which are to carry them to all the large towns in the Dominion-Halifax and St. John included. The demand for this delicious fruit far exceeds the supply, and, early in the season, baskets of twelve quarts bring two dollars each, the price gradually falling to seventy-five or even sixty cents a basket, till later in the season, when peaches begin to get scarce, and the price rises again. The baskets in which they are packed furnish a special industry, and the factories for making them are kept busy all the year round. They are supplied to the peach-growers at three and a-half cents each, and are always thrown in with the peaches. Great quantities of this favourite fruit are preserved by canning, and canning factories have been established in the district and at Toronto which are doing a considerable trade, domestic and foreign.

Grapes are cultivated in this region to a large extent, and clusters a foot long, each grape measuring from a quarter of an inch to an inch in diameter are frequently produced. The crop never fails, and four, five, and even six tons to the acre are raised.

Niagara district has always been famous for its apple-orchards, but now that peaches and grapes grow in such profusion, and every farmer's wife lays in a supply of canned fruit for winter use, apples are rather thrown into the background. Yet nothing can really take their place, and in spring, when other fruits are not to be had, well-kept winter apples become valuable.

## THE CAPITAL OF ONTARIO.

To the traveller whose brain has been stunned by the sights and sounds of Niagara, and to whom the restful passage of the lake has brought relief, the view of the "Queen City of the West," with its array of dome and turret, arch and spire, and the varied movement of its water-frontage, is one that cannot fail to evoke pleasure and create surprise. The length of the passage, and the fact that the steamer in crossing the lake is steered by compass, remind him that he is on his way over one of those inland seas that separate the great Republic from the new Dominion; and as he nears "that

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true north" that Tennyson speaks of, he looks out with a curious interest for the homes and hives of the people whose history and lineage, if he be an American, strangely recall his own.

Toronto has neither the history that attaches to Quebec, nor the position that has given to that city its fame. But her past, nevertheless, is not lacking in incident, though her annals, since the stirring era of 1812-15, are mainly those of peace. She has seen little of martial life, save the displays of her citizen soldiery in times of civil embroilment, or in connection with the volunteer corps of recent days. During the time when the Imperial troops were quartered in the town. King street saw many a pageant which would have quickened the beat of the British heart; but the sights its walls have mainly looked upon have been the column march of industry and social progress, occasionally varied by the fevered outbreaks of a chafing but restrained democracy. To scan the thoroughfare to-day, with its stream of life, its almost congested traffic, and the stores and magazines of commerce that line its either side, is to recall an earlier epoch, and, with a smile of amusement, to contrast it with the rude aspect of its first beginnings. Who that now looks upon its metropolitan characteristicsits civic dignity upborne by ulstered and helmeted constables, making nocturnal notes by the glare of an electric light; its great newspaper offices ablaze with the flame of fevered journalism; its theatres turning a stream of fashion into the streets; the cabs and street-cars-can fail to cast a thought backwards to the hugger-mugger life of an earlier social era, and to the forlorn condition, with its abounding pitfalls, of the same thoroughfare in the primitive days of "Muddy Little York"?

In the centre of St. James square is the pile of buildings, of white brick, with stone dressings, devoted to the purposes of the Department of Education for Ontario, including the Normal and Model School buildings. On the Gould street front are tastefully laid out grounds, parternes bright with flowering plants, relieved by trees, shrubs and statuary, with convenient approaches from the south, east and west. The main building has a frontage of one hundred and eighty-four feet, with a depth at the flanks of eightyfive feet, and is two stories in height. The *façade* is in the Roman Doric, order of palladian character, having for its centre four stone pilasters the full height of the building, with pediment, surmounted by an open Doric cupola. The corner-stone of the edifice was laid in July, 1851, by His Excellency the Earl of Elgin, the then Governor-General.

The University buildings are the glory of the city. An English writer remarks that "the University of Toronto is perhaps the only piece of collegiate architecture on the American continent worthy of standing-room in the streets of Oxford." Admittedly, in its architectural features, it belongs to the old world, and it deservedly ranks next to the Parliament Buildings at Ottawa. It is a Norman pile of noble proportions and of exquisite harmony. There is a massive tower and a richly-sculptured doorway. The hall and corridors are in keeping with the academic character of the buildings, and great joists and rafters are freely exposed to view. On the ground floor are the lecture-rooms and laboratory, and on the upper floor the museum and library. To the rear, on the east, is the convocation hall, and on the west are residences for students. The buildings were erected in 1857-58, at a cost of over half-a-million of dollars. They have a frontage of three hundred feet and a depth of two hundred and fifty. The tower is one hundred and twenty feet in height.

Facing the University, across a spacious lawn, is the School of Practical Science. Here, also, is the chief seat of astronomical observation for the Province. In rear of the School of Practical Science, and facing the College avenue and McCaul street, is Wycliffe College, the Divinity School of the evangelical section of the Anglican Church. The College is affiliated with Toronto University.

Finely situated, at the head of Spadina avenue, is the new home of Knox College, a handsome building devoted to the training of students for the Presbyterian Church. The College was founded in 1846, and long had its habitation in Elmsley Villa, to the northward of the Central Presbyterian Church on Grosvenor street, and what was once the viceregal residence of Lord Elgin. It has a partial endowment, and an able faculty, whose zealous work will always secure for it hearty support. The new buildings were erected at a cost of \$120,000.

Turning westward on Queen street and passing St. Andrew's Market and the Denison avenue Presbyterian Church, we come upon the beautiful grounds and ecclesiastical-looking edifice of Trinity College. The University was founded in 1852 by Bishop Strachan, and, by Royal Charter, it is empowered to confer degrees in Divinity, Arts, Law and Medicine. Convocation consists of the Chancellor, the Provost and Professors of Trinity College, together with those admitted to the degree of Master of Arts, and all graduates in the other faculties. The building is of white brick with stone dressings, and has a frontage of two hundred and fifty feet, with deep, projecting wings. It has numerous class-rooms, a convocation hall, chapel and library, and stands in a park of twenty acres, with a background of romantic beauty.



HEINTZMAN'S PIANO MANUFACIOL ..

## AT THE HEAD OF LAKE ONTARIO.

Hamilton is nobly endowed, not only for commerce, but for grand scertic effects. The high escarpment of the Niagara formation, over which the great cataract takes its plunge, closely follows the shores of Lake Ontario from the Falls to the edge of Burlington Bay. A finer natural site for a great city could scarcely be imagined. Then the irregular plan of the early village has been most happily turned to the best artistic effect. George

Hamilton opened a straight thoroughfare east and west, called it Main street, and attempted to make his village crystallize in regular blocks along this thread. An older nucleus, however, existed in the Gore or trivium, towards which converged King street, James street and the York (Toronto) road, now York street. Fortunately the crystallizing forces of the village were stronger than its founder and first lawgiver; an air space was secured to the future city. The Gore is one of the most striking and delightful features in Hamilton: it is a truly refreshing surprise to find a beautiful public garden in the very heart of the business part of the city. This triangular enclosure is laid out in parterres of rich flowers and foliage plants; a noble fountain diffuses a grateful coolness, and restores to this changed landscape the old music of the running brooks that once used here to sing merrily on their course to the Bay. A graceful . drinking-fountain invites the thirsty wayfarer; and when the city is en fete and the lamps of the Gore are all lit up, one given to musing recalls his early readings of Bagdad and the gardens of the It was surely a happy inspiration to thus soften the Khalifs. austerity of business, to mellow the dryness of finance, by the gentle, refreshing influence of fountains and flowers. Those merchants and manufacturers and bankers and lawyers that look out on such scenes must, consciously or unconsciously, be elevated in their tastes. Such influences were deeply considered and carefully provided in the old Greek cities, but our minds are only just beginning to recognize these powerful, if silent, forces.

Now mark the buildings—especially the newer buildings—surrounding or neighbouring on the Gore. Every citizen in this neighbourhood seems to feel the sentiment *noblesse oblige*; our buildings *must* be worthy of the place. This artistic sentiment is clearly seen in such buildings as the new offices of the Hamilton Provident and Loan Society and those of the Canada Life Assurance Company. And the feeling has inoculated the County Council, who have joined hands with the city and erected in Prince's square a Court House which does signal honour to both corporations. The educational institutions of Hamilton have always been among its chief glories. The Public system of schools commences with numerous well equipped ward schools, and is crowned by a Collegiate Institute, which is the largest organization of the kind in the Province. There is a Young Ladies College, conducted under the auspices of the Methodist Church, and an extensive system of Roman Catholic Separate Schools.

Hamilton is the seat of two Bishops' Sees—the Anglican Bishop of Niagara, and the Catholic Bishop of Hamilton. The lofty cathedals and churches lead up the eye as well as the mind above the smoking steeples of industry. The merchants have built for themselves princely homes on the terraces of the Mountain. Then, looking down upon all from the mountain brow, and piteously gazing out on a landscape of unsurpassed beauty, is a vast Asylum for the Insane, that mysterious, inseparable shadow of modern civilization.

## IN THE GRAND VALLEY.

Along the Grand River valley from Brantford to Fergus we have a long series of picturesque seats of industry. The chief are Brantford, Paris, Galt, Preston, and Elora on the main river; Ayr on the Nith, which joins the Grand River at Paris; and Guelph on the Speed, which joins the Grand River at Preston.

Among the leading industries of Brantford are manufactures of engines and boilers, portable saw-mills, grist-mill machinery, agricultural implements, stoves and ploughs, cotton and stoneware. Amidst these engrossing interests the education of the young has not been overlooked. The Public educational system includes, besides the ordinary equipment of Central and Ward schools, an extensive Collegiate Institute. The Young Ladies' College is under the oversight of the Presbyterian Church. In the vicinity of Brantford are two special educational institutions—the Indian Institute, under the control of a benevolent corporation, constituted 'in 1649, and the Ontario Institution for the Blind, which is administered by the Provincial Government.

Between Brantford and Paris river-views of great beauty reward the adventurous canoist. Paris, like Quebec, has an upper and lower town; the dividing line here is the Nith or "Smith's Creek," which, after winding through deep, romantic glens, joins the Grand River. The settlement was originally called "The Forks of the Grand River" until Hiram Capron, locally dignified as "King" Capron raised the standard of revolt. He called a public meeting (about 1836) and protested against having to head all his letters with "The Forks of the Grand River." He recommended the word "Paris," both for shortness and because there was so much crude plaster of Paris in the neighbourhood.

The novelist John Galt is responsible for many of the geographical names that are found within or near the old domain of the Canada Company. Many puzzling names of townships become abundantly clear by reference to a list of the Company's directors during the years when Galt was their superintendent. Many names were bestowed by him as a compliment to others, or by others as a compliment to him. Among the latter was "Galt," first designating a postal station, and afterwards successively the village and town.

The town is now a prosperous centre of industry. There are large flouring mills driven by the fall of the river, and numerous machine shops, factories and foundries driven by steam. The raw materials that feed these busy hives are wood, iron, wool and leather. Galt has won its way through some severe ordeals. In July, 1834, the cholera, introduced by a travelling menagerie, swept away in four days nearly a fifth of the population, and followed out to their farms in the vicinity many of the rural sight-seers. The violence of the plague was so great that robust men died in some cases within an hour of seizure. In 1851 and again in 1856 the town suffered appalling losses from fire; but indomitable courage "out of this nettle Danger plucked this flower safety." The fires found Galt built of wood and left it built of lime-stone and granite.

Guelph enjoys the triple honour of having a royal name, a literary parentage, and a distinguished historian. Mr. Galt tells us, how, after mapping out a block of more than forty thousand acres of the choicest land in the Company's broad domain, he had the rich woodlands and river banks explored, and that by a gratifying consensus of reports the present site of Guelph was selected.

The success predicted for the new settlement by its founder was already more than half won by the very site he had chosen. From its throne on the hills the "Royal City" would command

one of the choicest of agricultural realms-a succession of alluvial bottoms, pastoral streams, and fruitful hill-sides. Water-power came rushing and bounding down the heights, neighing for its master like a high-mettled charger, eager to champ the forest trees into lumber and the golden grain into foamy flour. The rolling landscape early suggested pastoral farming. The way thither was well led more than half-a-century ago by Roland Wingfield, a young gentleman from Gloucestershire, who stocked his hill-sides with Southdown and Leicester sheep, besides importing Short-horn cattle and Berkshire hogs. Mr. A. D. Ferrier, in his " Reminiscences," recalls the landing of this choice stock at Quebec, and the sensation there produced. It was an "object lesson," not only for the habitans, but for the best of our Western farmers. The first Guelph fairs exhibited not the glossy fat beeves and the grunting pork-barrels of to-day, but often the most shadowy of kine and the most saurian of "alligators." Experimental farming took early and deep root in this district, enriching by its results not alone the district, but the entire Province.

These valuable experiments received official recognition in 1873, when the Provincial College of Agriculture and Experimental Farm was located about a mile south of Guelph on a tract of five hundred and fifty acres, which had previously formed the stock farm of Mr. F. W. Stone. The old farm-house has rapidly grown into an extensive pile of buildings, including, besides quarters for a hundred and forty students, a good library, a museum, lecture rooms, laboratories and conservatories. The design of this admirable institution is to apply to agriculture the principles, the methods, and the discoveries of modern scientific research.

The Grand River, rising sixteen hundred feet above the sea, wanders moodily through the fens and dark forests of the northern townships, and then at Fergus suddenly plunges into a deep gorge, from which it emerges about two miles below the Falls of Elora, the whole descent of the river within the ravine being about sixty feet. A little below Elora the Grand River is joined by the Irvine, which bursts through a gorge similar in depth and rivalling the other in beauty. The lofty rock-walls of these ravines are of magnesian limestone, which, through the solvent action of springs and the disruptive force of frost, has been burrowed and chiselled into endless caverns and recesses. The romantic retreats have lately been made accessible and inviting by stairways and walks and seats; but in primeval times they could only have been reached by some secret pathway.

### IN THE SOUTH-WESTERN PENINSULA.

The development of St. Thomas into a railway centre has carried with it great material prosperity; the haunts and homes of commerce and industry are fast overgrowing the city's limits. The religious edifices have kept abreast of this material advance. Higher education, as well as elementary, has received careful consideration. An excellent Collegiate Institute furnishes an academic and professional training. Alma College, a fine pile of buildings in modern Gothic, occupies a commanding site of six acres in the middle of the city. The college is designed to give young ladies a training, artistic and musical as well as literary; it is conducted under the auspices of the Methodist Church.

At St. Thomas we are in the heart of the "Talbot country." The city's main artery is the same Talbot street which seventy miles eastward crosses the Grand River at Cayuga; and which, westward, we should find traversing the counties of Kent and Essex, finally running out on the Detroit River at Sandwich. Both the "street" and St. Thomas itself take their name from the young lieutenant who with Governor Simcoe explored a site for London in the winter of 1793. As in St. Catharines and some other places locally canonized, the "Saint" has been thrown in for euphony. Perhaps, too, the voluntary hardships to which Colonel Talbot devoted himself may have suggested a comparison with his famous namesake of Canterbury.

Six miles to the south of Pointe Pelee lies Pelee Island, which —with the exception of an islet of forty acres two miles still farther out in the lake—forms the most southerly possession of the Canadian Dominion. The temperature is so warm and equable that sweet potatoes are grown, cotton has been found to thrive, the delicate Isabella and the late ripening Catawba here reach their highest flavour and perfection. Six miles to the south lies another famous vineyard, Kelley's Island, which territory belongs to Ohio. In Charlevoix's time two of these islands were specially known as Rattlesnake Islands, and all bore a viperous reputation, apparently with excellent reason; for Captain Carver, in 1767, and Isaac Weld, thirty years later, found them fairly bristling with rattlesnakes. The very islands that in our time are the most delightful of health resorts were in the days of the early travellers held to breathe an envenomed atmosphere. Carver, with charming credulity, tells of a "hissing snake," eighteen inches long, which particularly infests these islands; "it blows from its mouth with great force a subtile wind," which, "if drawn in with the breath of the unwary traveller, will infallibly bring on a decline that in a few months must prove mortal, there being no remedy yet discovered which can counteract its baneful influence."

## IN THE HURON TRACT.

The old Huron tract, erected politically into the "Huron District," and subsequently divided into the counties of Perth, Huron and Bruce, has been settled so recently that the oldest inhabitant full of the folk-lore of the first settlers—is to be found in every district. Goderich, fronting the mighty lake, was its first capital; but while Goderich, with all the advantages of water communication, will probably remain a town, Stratford, forty-six miles inland, has, thanks to railways, attained to the proportions of a city. Less than half a century ago the whole of this magnificent north-western section of the peninsula of Ontario, now rejoicing in thousands of homesteads filled with the bounties of a veritable promised land, was covered with dense forest, the silence of whose solitudes was broken only by the bark of the wolf. So short was the time needed to convert the forest into the fruitful field.

Stratford is situated at the junction of five townships, and is the centre of a beautifully rolling and fertile country. Fields waving with golden grain, and rich, deep-green pastures on which flocks and herds are contented browsing, tell of those resources that are the true basis of a country's material growth, because their most abundant giving develops and does not impoverish. Extensive orchards, principally of apples and plums, and fringes of fine, hard-wood trees, add to the general air of warmth, and,

almost everywhere, farm-houses of stone, brick, or first-class frame, tell that the people have got beyond the mean surroundings with which of necessity the first decades of settlement are associated. The barns are even more full of promise than the residences; for, let no traveller in the country ever forget the advice of the clockmaker of Slickville, to select as his quarters for the night a homestead dwarfed by huge barns, and to avoid big houses beside small or dilapidated barns as the gates of death. In the whole country there is no stony, rocky, or hilly land. Its characteristic feature is a softly-sloping fruitful valley. As a consequence the county town has grown steadily and surely, and has become an important market for farm products and a home of growing industries. Its merchants and manufacturers ship directly to England and other countries beyond seas, as far as Australia; and as it is now a great railway centre, its producers have every facility for communicating with distant markets. The Grand Trunk, the Port Dover and Huron, the Stratford and Huron, the Wellington, Grey and Bruce, and the Buffalo and Lake Huron Railways run through the county; and its pleasant valleys have thus all the life and movement that constantly passing and repassing trains give to the great relief of what would otherwise be the dullness and monotony of rural beauty. \*

Proceeding by rail in the direction of Lake Huron, and passing the flourishing towns of Mitchell, Seaforth and Clinton, we come to Goderich, situated at the mouth of the Maitland River. The lake, whose modern name is taken from the *sobriquet* of *hure* or wild boar, given by the French to the Wyandotte Indians on account of the manner in which they dressed their hair, is now before us; a practically inexhaustible reservoir of sweet water of crystal purity, without a rival on earth but the mighty rivals, or the mightier Superior in its own neighbourhood. Including the Georgian Bay and the Manitoulin Bay, it has an area of about 22,000 square miles, so that European kingdoms like Holland and Belgium might be dropped into it, and, as the average depth is 860 feet, they would leave "not a wrack behind."

Goderich leaped into temporary importance a few years ago as the centre of a new industrial interest in Ontario. The Geological Reports of Sir William Logan early announced that the Onondaga

group of salt rocks of the Silurian series underlay the drift and limestones of a part of Western Ontario; but not till 1866 was salt actually discovered. In this, as in a thousand other cases, searchers sought one thing and found another; the moral-that cannot be too earnestly impressed on the citizens of a country, a great part of which scientific prospectors have not yet explored—being, search and you are sure to find something. In this case, the discovery was made by a man of resolute spirit who, in the face of doubts, fears, and disappointments, was boring, on the north bank of the Maitland, in the neighbourhood of Goderich, for oil, without thought At that time, people were boring for oil in almost every of salt. likely spot in the western part of the peninsula. At the depth of one thousand feet, he came upon brine of the finest quality. Three beds, respectively of nineteen, thirty, and thirty-two feet, were found, with slight intervals between, of pure crystalline salt, and others were subsequently reported of sixty and eighty feet in thickness.

The area of salt rocks has been found to stretch from Sarnia to Southampton, and east to a point beyond the posperous town of Seaforth. They are the deposits of an ancient land-locked lake, embracing a part of Michigan in the west, the Ontario peninsula on the east, and stretching south as far as Syracuse in New York. The salt was solidified, under conditions hard for us to imagine, and in quantities sufficient to supply this continent for ages.

In 1880 an Ontario Agricultural Commission was appointed to inquire into the agricultural resources of the Province, and matters connected therewith, and the Commissioners found that salt now enters so largely into the business of the producer, especially as regards cheese and butter-making, pork-packing, and the fertilizing of the soil, that its consideration could not well be ignored by them. They therefore made inquiries into its manufacture, the extent to which it is used, and the prejudices against Canadian and in favour of English salt. The result of their inquiries was, that if properly manufactured and carefully dried, the well-known purity of Canadian salt is fully equal by its adaptability to all dairying purposes and its excellence as a factor in the work of fertilization. To show how extensively it is now being used in the west of the Province, it was stated that a Seaforth firm had in three months of the then current year sold 63,000 tons for fertilizing purposes. The evidence, with scarcely an exception, was also completely in favour of the use of salt as an agent in enriching the farm, promoting the growth, and protecting the early plant of the root crops against the ravages of the fly, and as a remedy for some of the enemies that assail the spring wheat crop. It is no small tribute to the purity of Canadian salt that, notwithstanding the high fiscal duty of the United States, it is used in immense quantities in the great American pork-packing centres.

Few counties in Canada are so generally fertile and so splendidly adapted for farming as Huron, and its rapid and steady development is simply what might have been anticipated from the class of people by whom it was settled. Everywhere it presents a gently undulating, well-watered and well-wooded appearance. In the south, the character of the land is a very rich vegetable deposit, underlaid by the strongest of clay subsoils. As we go north, it becomes lighter, but everywhere the crops are excellent, and evidences of increasing wealth and comfort may be seen on every hand. Towns like Seaforth, Clinton and Wingham are already important centres of trade, although almost every house looks as if it had come recently out of the builder's hands. Half-a-dozen rising villages are likely soon to "evolve" into towns, although no county has given a larger contingent of young men and the very cream of its population to the North-West than Huron. As the traveller drives along the well-made gravelled roads, lined with bright-yellow golden-rods, and the purple Michaelmas daisy, he sees broad acres of waving corn and luxuriant meadow stretching far away on each side, a stump-dotted patch here and there alone reminding him that all this has just been won from the wilderness, and that the settler's arrival dates from yesterday.

# IN THE NORTH-WESTERN COUNTIES.

Bruce is a very new county, the settlements, excepting a few on the lake shore, not dating back more than thirty years. The first settler built his shanty, it is said, as recently as 1848. Nowhere are we more surprised at being told of its extreme youth than when we see Walkerton, a beautiful little town, pleasantly situated n a saucer-shaped valley formed by the windings of the Saugeen. Its main street was "blazed" through the unbroken forest as the ine of the Durham road in 1854. The people of Bruce are largely mmigrants from the Western Highlands and Islands of Scotland, ind the children of immigrants who settled in more easterly parts of Ontario a generation earlier. In many of the townships Gaelic s the prevailing language, and it is regularly used for the conduct of divine service in many of the churches.

The southern part of Bruce is rolling, the undulations being so ong and gentle as hardly to admit of our using the terms hill and valley. Clear, beautiful running streams wind through the depressions, the majority of them feeders of the Sable and Saugeen, which flow north-westerly into Lake Huron. The whole county is magnificently watered, and the growth of timber is very heavy. Pine is scarce, except on the Teeswater and other tributaries of the Saugeen. There is a large proportion of gravel in the soil, but the land is good, and the farms are well fitted for either arable or grazing purposes. Strangers often express astonishment at the sight of excellent farms with houses and outbuildings of log or inferior frame, but the explanation is that many of the people have only reached the stage of putting their land in order for the plough. Some have advanced to the point of building good barns, and a few have reached the third stage of having superior dwelling Fruit growing is yet in its infancy. Peaches can be houses. cultivated successfully only on the lake shore, but apples and plums have shown astonishing results in the size and beauty of the specimens sent to the Agricultural Exhibitions. The long range of the Indian Peninsula seems naturally fitted to become one of the finest portions of the Dominion for the growth of apples, plums and grapes. That the soil is good, though largely rocky or stony, the immense sugar maples and elms witness. The temperature is kept low in the spring months by the ice in the Georgian Bay, and thus the blossoming of the trees is retarded, while the large body of water on each side secures exemption from summer and early autumn frosts.

The ancient occupation of fishing is a more profitable industry to the people of Kincardine than salt manufacture. Large and substantial wherries leave the harbour at early dawn, and return

about noon from their favourite resorts, which lie about twenty miles distant. The ordinary catch varies from one to two thousand pounds. The fish are generally cleaned on the lake, and on the boat's arrival in port they pass into a contractor's hands, by whom they are shipped to the markets of Canada and the United States, either packed in ice or-according to a new plan-frozen, unless when they are pickled or barrelled. The fish usually caught in the northern lakes are :--- the salmon trout, from twenty-four to sixty inches long, and sometimes weighing forty pounds; the white-fish, the pride of Canadian waters and by many gourmets considered the finest of the fishy tribe; the lake herring, very abundant at certain seasons in shallow waters, and not unlike the herring of the ocean; the lake sturgeon and gar-fish, survivors of the ganoid and armour-clad fish of the palæozoic age. Bass, perch and the spotted trout-the joy of the sportsman-are caught by amateurs in the rivers and creeks, and by every boy who can lift a rod, and every loafer, when he can summon energy enough to take his hands out of his pockets, or a little more than he needs to fill his pipe. The farther north the better and the more abundant the fish. Hence, the more southern fishermen, after the spring catch, go north to Killarney, and as far as the fishing grounds and ports of Lake Superior.

If we visit Owen Sound by driving from Southampton, we see something of the character of the intervening country. The land gradually rises, frequent outcrops of limestone occurring, and about midway across attains its greatest altitude, the streams on one side flowing to the east, and on the other to the west. In summer the fields are luxuriant with good crops, and the farms have an aspect of thrift and prosperity. The forests assume a slightly northern aspect, and delight the botanist with their rich undergrowth of mosses, ferns and flowering shrubs, amid fine specimens of maple, beech and ash. The road for a part of the way skirts the Pottawatomie, a small brawling stream that tumbles over Jones' and Indian Falls, a sheer descent of seventy feet, into dark ravines densely clothed with timber, before it empties into the Sound. On descending from the heights, the Sound is seen in the distance extending for miles away out to the Georgian Bay, and, as it approaches the harbour, gradually narrowing like a wedge.

As regards fruit-growing, the neighbourhood of Owen Sound is no exception to the rest of the splendid Lake Huron territory which we have been describing. Almost every kind of fruit succeeds well, and apples, pears, plums, and strawberries may be said to attain perfection. A reliable witness stated before the Ontario Agricultural Commission that so much attention is now being given to this fruit crop that, besides the supply of the home market, from three to four thousand barrels of winter apples had been shipped from Owen Sound alone in 1881, and that pear culture—which is beginning to attract more attention—could be carried on quite as profitably. The plums of the district are so remarkably fine that thousands of trees are being planted, and tens of thousands of bushels are already shipped annually, chiefly for the Chicago market.

But let it never be forgotten that all that is distinctive and noteworthy in Grey, as in most of the counties of Canada, is to be found not in its towns, not at railway stations, but in the townships along the gravel roads and the concession lines. There we meet the men and women who endured the rough welcome of the genius of the wilderness; the men and women to whom we owe the smiling fields and orchards, and all the promise of the future.

> This generation ne'er can know The toils we had to undergo While laying the great forests low.

### AROUND GEORGIAN BAY.

It is not quite thirty years since the first railroad was built to connect Lake Ontario with Lake Huron; and now, in addition to the "Northern," which was the earliest railway enterprise in the Province, we have to the east of it the "Midland," extending from Port Hope, *via* Lindsay, Beaverton and Orillia to Gloucester Bay, in the Matchedash Peninsula, and, as it happens, passing the very site of the old Jesuit Mission of Sainte Marie. On the west the "Toronto, Grey and Bruce" is seen stretching its long iron antennæ from the Provincial capital to Owen Sound. The "Northern," of Toronto, and its artery of connections with the "North-Western," of Hamilton, tap the Georgian Bay at Collingwood, Meaford and Penetanguishene, and put forth a shoot round the southern boundary of the old Huron settlements on Lakes Simcoe and Couchiching, into the Free Grant Lands of Muskoka at Gravenhurst, with early prospect of extension northward to Lake Nipissing and the line of the "Canada Pacific," and north-west to Sault Ste. Marie and Lake Superior.

From Meaford, in the county of Grey, to Collingwood is an hour's ride by rail. The road skirts the shores of the bay, and in the vicinity of Thornbury affords a delightful glimpse of the high bluffs of the Blue Mountains, which traverse the township of Collingwood and shoot off southward through the Province. There is some fine scenery in the neighbourhood of these mountains, which are largely composed of metamorphic rock, and are fissured and hollowed in a gruesome manner. Here was the home of the Tobacco Nation; and in the glens and caves of the region the hunted of the tribe, no doubt, often sought refuge from the Iroquois. Some of the fissures in the rocks which the tourist steps over are a hundred feet deep. In the southern portion of the adjoining township of Nottawasaga, the Mad River, a tributary of the Nottawasaga, pursues its headlong and erratic course, and supplies the motive power to many mills and other industries in the villages of the township. The other streams are the Pretty and the Bateau, both of which fall into Nottawasaga Bay. Throughout the township is a number of excellent school-houses, mostly of brick, a model of one of which, School Section No. 20, was on view at the Centennial Exhibition and attracted the notice of the representatives of foreign governments, some of whom had copies of it made. From the character and equipment of the school-houses of the district we would infer that education in Nottawasaga township fares well.

But we now arrive at Collingwood, which derives its name from the great admiral. It is situated on Hen and Chickens Harbour, as it used to be called, from a group of small islands of that name a short distance from shore. The position of the town is not attractive, and any importance it has is due to the fact that it is the terminus of the Northern and North-Western Railroad and the chief port of departure for the steamers of the Upper Lakes. Its principal local trade is in fish and lumber, and in the latter, particularly, there is much money invested. During the summer season

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the wharves present a busy spectacle in the going and coming, the loading and unloading, of the various crafts engaged in the passenger and carrying trade of the North-West. Lofty elevators and capacious warehouses give facility for the handling and despatch of this through trade; while an extensive harbour affords accommodation for the mooring and transhipment of the great rafts of timber that come down from the Algoma and Parry Sound inlets. The port statistics in grain for a single season would surprise the "uncommercial traveller," and open his mind to the



FISHING ON LAKE MUSKOKA.

wealth of the Occident. The tonnage of the iron ore trom Lake Superior that passes this port in transit, would also be a revelation to him; and the shipments annually increase in volume and in value.

At the pretty station of Allandale, any fine morning during the months of July, August and September, one is likely to meet stray pleasure-seekers, or family or camping parties, with the *impedimenta* of canoes, camp stores and cooking utensils, bound northward for a few days' or weeks' relaxation in the labyrinth of waters that fill the hollows of Muskoka. Within easy hail of the Provincial capital there is no trip more delightful, or to the over-worked business or professional man more invigorating, than a journey northwards to the high latitudes and changeful scenes of Lakes Muskoka, Rosseau or Joseph. We here name these waters alone of the region simply because they are most reliably served by the steamboats on the lakes. The district, however, is in miniature, like the west of Scotland minus the mountains and heather, a land of lochs and isles, hills and dales, and, "barring" the black-fly and the mosquito, a veritable paradise for the devotees of the rod and gun. The view from the junction at Allandale of Barrie opposite, the long sweep of Kempenfeldt Bay, and the wooded shores of either side softly receding from the vision is one of the most perfect bits of nature the Province can boast.

The Free Grant Lands we are entering upon extend, or are designed to extend, from Severn Bridge on the south, to Lake Nipissing and the French River on the north. Their longitudinal area comprises a belt of varying breadth reaching from the Georgian Bay through Muskoka, portions of Victoria, Haliburton, Nipissing and Renfrew, to the Ottawa. For the most part it is only honest to say that the Free Grant territory is a wild region; but, though hitherto the abodes of solitude, the several districts are rapidly being brought within reach of civilization, and here and there under a fair measure of cultivation. The district we are at present concerned with affords the most convincing evidence of this. It is not many years since the rigours of residence in the district harrowed the heart of the humane, in British journals, to deter immigration hither. But the same journals that published the wails of English gentlewomen, who braved the early terrors of the region, have since given gratifying testimony to the improved conditions of its later life. "Misery loves company," says the old proverb, though the attractions of misery will hardly account for an increase in the population of the district from 300 in the year 1861 to 30,000 in the year 1882. But population has not been its only gain. Population, while giving the settler a neighbour, gives the neighbourhood the benefit of his work. The region has been opened up, clearings have been made, roads cut, mills started, boats chartered, and communication everywhere extended. The settler

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can now get not only into his clearing but he can get out to a market. He can even have his daily mail; and in many quarters the morning city papers are read by thousands in the district each day before dark. This circumstance goes a long way in reconciling the settler to his lot, for in lonely regions there is no cheer more potent than the passing steamboat or stage carrying the mail-bag.

Within the space of ten or twelve years men who have taken up land in the district and who brought little with them, save their families and their pluck, have each their homestead and clearing, and well-filled barns, and more or less stock. The climate is delightful, and, particularly round the lakes, has not the extremes of temperature experienced in the older settled portions of the Province. Wheat raising, it is true, is not always to be depended upon, but grasses grow luxuriantly, and coarse grains and root crops are an amazing success. The pasture, moreover, does not burn up in midsummer as it does to the south. Hence, for stock-raising and dairying, there is no portion of the Province so suitable. Cattle live and fatten in the woods for seven months in the year. In the woods, indeed, they find their most succulent pasturage, and from choice they will leave a clover-field to browse on the shoots of the young basswood and maple. For sheep-raising the rocky land of the district is also excellent, as vegetation is both nutritious and abundant.

Going south by the Midland Line the tourist can diversify the route which brought him to the district we have been describing, and, by way of Orillia, Beaverton and Lindsay, make a descent upon the picturesque scenery that lies to the north-east of the Provincial capital and in the lines of travel that wend seaward. In this new region, if our pen has been faithful, the reader of these pages will be slow to dismiss from his mind the beauties of Muskoka, or to forget, if he has ever visited the spot, the most attractive of Ontario's shrines, encircled

> By the laughing tides that lave Those Edens of the northern wave.

#### IN THE TRENT VALLEY.

On Rice Lake, the chief Indian settlement is Hiawatha—named after the Hercules of Ojibway mythology, whom the American poet has immortalized in his melodious trochaics. At Hiawatha and on Scugog Island, you may still find, in the ordinary language of the Ojibway, fragments of fine imagery and picture-talk, often in the very words which Longfellow has so happily woven into his poem. And the scenery of this Trent Valley reproduces that of the Vale of Tawasentha. Here are "the wild rice of the river," and "the Indian village," and "the groves of singing pine-trees, ever sighing, ever singing." (At Fenelon Falls we have the "Laughing Water,' and not far below is Sturgeon Lake, the realm of the "King of Fishes." Sturgeon of portentous size are yet met with, though falling somewhat short of the comprehensive fish, sung by Longfellow, which swallowed Hiawatha, canoe and all !

No part of Canada owes more to its pioneers than this charming and most healthful lake-land. Some of the finest towns were, two generations ago, jungles reeking with malaria, and infested by wolves, black-flies, black snakes, and black bears. All honour to the men whose hands or brain worked the transformation ! Their services were but seldom remembered in the naming of our towns. "Port Perry," by an after-thought, revived the memory of the founder of Whitby. Lindsay is named, well and worthily, after a poor axe-man, who perished in the survey of the cedar swamp, through the heart of which Kent street was carried. Peterboro' is now entering on the dignity of a city; but the name very properly takes back our thoughts to 1825, and to the condition of Scot's Plains, when Peter Robinson led thither his first band of Irish immigrants. After building a long-boat, he made a preliminary ascent of the Otonabee with twenty native Canadians and thirty of the healthiest of the immigrants. Mr. Robinson adds: "Not one of these men escaped the ague and fever, and two died."

Among its first settlers, Lakefield received no less than three of the literary Stricklands—Colonel Strickland and his sisters, Mrs. Moodie and Mrs. Traill. By their graceful contributions to our native literature, Lakefield and Rice Lake became known far beyond the limits of Canada.

### SKETCHES OF THE COUNTRY.

To the miner and metallurgist Madoc township became in the fall of 1866 an object of the keenest interest from the discovery of gold on the upper course of the Moira, at the point thenceforward known as the Richardson Mine. Over a tract following the river for sixteen miles gold has been found in considerable quantity diffused through arsenical iron pyrites, as at the gold mines of Reichenstein, in Silesia. This auriferous mispickel may well yield large crops; but the separation of gold from sulphur and arsenic, and iron and lime, is a process of great delicacy-one, therefore, not to be intrusted to bulls and bears. From wild speculation Madoc has most undeservedly suffered. A better time is coming. At the works of the Consolidated Gold Mining Company the scientific difficulties have been honestly grappled with, and, we believe, completely solved. The process employed is based on the chlorination method of Plattner, but carried to a degree of refinement never attempted by the famous Freyberg professor. Of the by-products the most important is arsenic, which is obtained in tons, and is in consequent demand for calico-printing, as well as for the manufacture of glass, Paris green and aniline dyes.

Iron mining in this district has long been associated with the township of Marmora, but deposits of either magnetite or hematite have been found in workable quantities at various points in the Laurentian rocks from the rear of Belleville to the rear of Kingston.

From the Seymour mine magnetic iron ore has been largely drawn to supply the Cleveland furnaces; for, unfortunately, Seymour's blast-furnace in Madoc has long been cold, and the proposed steel works at Belleville have not yet been erected. Cleveland also takes largely of the hematite of this Madoc district, which is found to yield iron of great purity and tensile strength. The ore occurs chiefly in red amorphous masses, but often inclosing specular iron in lustrous crystals. This mining district of central and eastern Ontario has hitherto been somewhat difficult of access; but, with the Ontario and Quebec Railway carried through the heart of the district, and intersecting railroads from Trenton, Belleville, Napanee and Kingston, there will be no difficulty in delivering minerals at × \* ¥  $^{*}$ any desired point.

A morning excursion down the bay from Trenton or Belleville to Picton and the Lake on the Mountain is one of those delightful

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summer memories that one likes to lay up for winter use. Among these winding and romantic shores the more destructive form of enterprise has happily stayed its hand, so that much of the primitive beauty survives. And, then, the charm of this famous bay is in no slight measure due to cloud effects and the changeful humour of the sun. An hour ago he rose without a cloud and even now " he fires the proud tops of the eastern pines," but presently he will be revealed only through rifts in the cloud-wrack, or by broken shafts of light, and in the afternoon we shall have a delightful season of dreamy, vaporous sunshine, like sweet hours stolen from Indian summer. These inlets and the wooded headlands, and the waving barley-fields beyond, keep time, like old Polonius, to the fitful humour of their prince. Sometimes, under the joyous sunlight, these wrinkled coves break into peal on peal of youthful laughter, as though they had not assisted in laying the very foundations of the world; at other hours they answer the uncertain sun with no more than a sad smile, while, in his hours of gloom, you may hear these ancient shores grieving and wailing over some mysterious and tragic sorrow.

# KINGSTON AND THE THOUSAND ISLANDS.

The War of 1812 brought Kingston to the front as the chief Canadian stronghold on Lake Ontario, and the rival to the American arsenal at Sackett's Harbour. The Government dock-yard occupied the low-lying peninsula opposite the town, which is now graced by the fine Norman structure of the Royal Military College and its dependent buildings. The dark-green reach of deep water between the College and the glacis of Fort Henry was the naval mooring ground. Where, in our days of pipingpeace, nothing more threatening than the skiffs of cadets training to be future Hanlans are seen, lay formidable battle-ships. One of them—the St. Lawrence—built here in 1814, cost the British Government half-amillion sterling. In all probability the wood was sent out from England.

Kingston has long had a just preëminence as an educational centre. The first Grammar School in Canada was established here in 1786 under Dr. Stuart—the first teacher as well as the first

## SKETCHES OF THE COUNTRY.

clergyman in Upper Canada; and the schools of Kingston are noticed by Rochefoucauld on his visit in 1805. There were elementary schools, on the Lancasterian principle, for the poorer classes long before our Common School system was organized. In higher education it has an honourable record. The University of Queen's College, whose new local habitation is one of the architectural adornments of the city, was founded in 1840 by a number of clergymen and laymen of the Church of Scotland in Canada. "Queen's," as it is affectionately termed by its sons, has grown



FORT HENRY, KINGSTON HARBOUR.

with the growth of Canada, has a noble record of work done in the past, and, in its new halls and the throng of eager students who fill them and its largely increased and distinguished staff, it rejoices in greater usefulness in the present, and has still brighter hopes for the future.

Kingston is the seat not only of the Royal Military College and of Queen's University, with its Faculties of Arts, Science, Law, and Divinity, but also of the Roman Catholic College of Regiopolis,

## PICTORIAL ONTARIO.

which has been closed since the withdrawal of the Government grant in 1869. Two other excellent institutions, the Royal College

of Physicians and Surgeons and the Women's Medical College, are affiliated to Queen's University. The Collegiate Institute represents two older High Schools, and among the school-boys

educated in them Kingston boasts the Premiers of the Province and the Dominion.

From the French explorers—it is said from Champlain—the archipelago took its name of "Lac Des Maille Isles," though the "thousand" is far under the real number. Recent travellers, however, including the Duke of Argyll, have been disappointed in the comparative tameness and monotony of the "Thousand Islands" as cursorily seen from the deck of a steamer. And, indeed, forty miles of them is apt to produce the *toujours perdrix*  $f \in ling$  which attacks the traveller even on the Rhine, after a long,

CHAPEL, WESTMINSTER P THOUSAND ISLANDS.

## SKETCHES OF THE COUNTRY.

unbroken course of ruined castles. The beauty is that of a succession of charming vignettes, rather than of any one grand picture, and the way to see and feel it is to sojourn among them, watch their ever-changing aspects from day to day. You should see them glorified in the exquisite ethereal tints of dawn before they "fade into the light of common day," and watch that, again, deepen into the rosy sunset glow, which often makes the placid river reflect their beauty from "a sea of glass mingled with fire,"



LONG SAULT RAPIDS, RIVER ST. LAWRENCE.

ere it merges into the purple gloaming through which the fire-fly darts its living light, and the plaintive refrain of the whip-poor-will adds pathos to the beauty of the summer eve; or, when the full moon rises behind one of the dark islands, throwing its mysterious *chiaroscuro* over the scene, making a broad, quivering pathway of fretted silver, on which the islands show like silhouettes—their wavy outlines of foliage marked out in shadow on the silver sea below. Better still, if you can wander day after day among the hidden rocks and recesses of the island labyrinths, exploring the

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myriad beauty of lichened granite, and moss, and vine, and flower, and berry, as well as of the foliage that clusters in rich masses of verdure, or dips into the glassy wave; or, guiding your tiny skiff through the narrowest of channels, or the most fairy like of coves, where the limpid water ripples over the pure white sand, or holds in its shaded and shadowy basin a cluster of deep green leaves and snowy water lilies. Then, indeed, their gentle beauty grows on you, and in the coup d'aul from any elevated point the eye unconsciously reads into the distant outlines the picturesque details with which it has already grown familiar. Nor must we forget the richer beauty which the mellowing touch of autumn throws over the scene, when it turns the delicate green of the birch to gold, and clothes the maple in flame colour and scarlet till it seems like the burning bush of Moses, and flushes the oak to a rich russet or winey red-while the deep blood-red hue of the low sumach marks some of the smaller islands with a line of crimson.

# NORTH SHORE OF LAKE HURON.\*

The north shore of Lake Huron presents an undulating country, rising into hills which sometimes attain the height of four hundred and seven hundred feet above the lake. These occasionally exhibit rugged escarpments and naked rocky surfaces; but in general their summits are rather rounded, and their flanks, with the valleys separating one range from another, are most frequently well clothed with hard and soft wood, often of large growth, and of such species as are valuable in commerce; in many places giving promise of a good arable land.

To the westward of Spanish River the coast is for the most part low; it abounds with safe and commodious harbours among its numerous islands and inlets, which can scarcely fail in many instances to become, in course of time, of commercial importance. To the eastward of the river the scenery is improved by the gradual approach of a high range of picturesque hills coming out upon the coast. They are known as the La Cloche mountains, one of their

\* This and the four following sketches are selected from official documents prepared under the instructions of the Honourable Commissioner of Crown Lands.

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highest points being four hundred and eighty-two feet above the level of the lake. This part of the lake is thickly studded with islands, and the coast is much indented with extensive bays and inlets which offer shelter and security during any storm to which the voyager may be exposed.

The general features of the country bordering on the River St. Mary and Lake Huron are very similar; at times, bold, rugged and declivitous, and scantily clothed with stunted spruce, balsam, pine, and birch, the coast affords but little land fit for agricultural purposes; at others, rising gently from the margin of the water, and covered with a fair growth of hardwood timber, beech, maple and iron-wood, it holds out inducements to the explorer to penetrate before condemning; whilst here and there, extensive tracts of level land are seen, in some places low and swampy, presenting an almost impenetrable thicket of black alder and sallow; in others, open prairie, covered with a luxuriant growth of wild grass.

Leaving the shores of the river or lake, at distances varying from two to five miles, the scene changes, and the topographical features of the country may be described as consisting of rich alluvial valleys, varying in width from a quarter to seven miles, heavily timbered with mixed timber; crossed at intervals by rock ridges, and traversed by small rivulets of excellent water. These ridges, with the exception of Gros Cap and La Cloche, form no regular mountain range, but are short escarpments of rock, seldom more than three-fourths of a mile in length, and varying in height from thirty to two hundred and fifty feet, rounded on the flanks, and although bold and declivitous on the southerly side, are, on the north, easy of approach, as the descent from the summit is regular, and the side generally well timbered with hardwood.

In the valleys the soil is, generally, decayed vegetable matter, or a rich sandy loam, with a subsoil of reddish blue or white clay; in many instances resembling limestone in a state of decomposition; the timber mixed, and consisting of birch, maple, iron-wood, cedar, elm, ash, pine, spruce, balsam, hemlock and poplar, according to the locality.

The series of rocks occupying this country from the connecting link between Lakes Huron and Superior to the vicinity of Shebanahning, a distance of one hundred and twenty miles, with a breadth in some places of ten and in others exceeding twenty miles, must be taken as belonging to one formation. On the west it seems to repose on the granite, running to the east of Gros Cap north of Sault Ste. Marie; on the east the same supporting granite is observed north of La Cloche, between three and four miles in a straight line up the Riviere au Sable, a south flowing tributary of the Spanish River; and again, about an equal distance up another and parallel tributary joining that stream eight miles further from its mouth, in both cases about ten miles from the coast. The series is to be divided into rocks of a sedimentary and rocks of an igneous origin.

The sedimentary portion consists of sandstones, conglomerates, slates and limestones. The sandstones are sometimes gray, but more generally white, almost purely silicious and principally fine grained, but the granular texture is often lost, and great masses assuming a vitreous lustre present the character of a perfect quartz rock which is met with of both the colours mentioned, and when white it sometimes exhibits precisely the aspect of the milky or greasy quartz of mineralogists. The quartz rock, in addition to white and gray, is not unfrequently of a reddish colour, and sometimes a decided red. In the granular varieties considerable masses of the rock sometimes present a white with a faint tinge of seagreen, which seems to arise from a small quantity of finely disseminated epidote. The rock often becomes coarse grained, assuming the character of a conglomerate, the pebbles of which vary from the size of duck-shot to that of grape and canister. These pebbles are almost entirely either of opaque white vitreous quartz or various coloured jaspers; some few are of Lydian stone, and some of hornstone and other varieties. The pebbles are often disposed in their layers at the top or bottom, or in the midst of finer grained beds; but they are sometimes arranged in thicker bands, which swell into mountain masses, and blood-red jaspers often disseminated in these to a preponderating degree on a nearly pure white ground, giving a brilliant, unique and beautiful rock, appear to characterize some ranges of considerable importance.

The igneous rocks may be classed, as a whole, under the denomination of greenstone trap. The masses they present are sometimes very great, and in such cases the trap usually consists of a greenish-white feldspar, and dark-green or black hornblende. The limestone has not been seen in contact with any of the greenstone overflows; but on Echo Lake there is a great body of greenstone over it to the south, with a thick band of syenitic conglomerate associated with quartz rock interposed between them and a range of quartz hills above. On the Thessalon Lakes, great mountain masses of quartz rock, with subordinate jasper conglomerates, appear to underlie the limestone, and at La Cloche a band of three to four thousand feet rests upon it.

Metalliferous veins intersect all the rocks that have been mentioned. Slips, or displacements, of the country on opposite sides of the veins occur when fissures are found that constitute their mould or receptacle. Numerous instances are observed where both granite and greenstone dykes, cut by the metalliferous veins, are suddenly heaved considerably out of their course. This fact may be deemed valuable as showing the probable great depth and distance to which the veins may run.

The metal which these veins hold in the greatest quantity is copper, and the ores in which it occurs are vitreous copper, variegated copper and copper pyrites. Iron pyrites is sometimes associated with them, but, in general, not in large quantity. Copper pyrites is in some instances accompanied by rutile, and in others by the arseniuretted sulphuret of iron and nickel, containing a trace of cobalt. The gangue, or vein stone, in which the copper ores are contained, is, in general, white quartz, and there is very often present, but not in very great quantity, white compact dolomite, which in druses assumes the forms of pearl spar, and brown or bitter spar; calc spar also appears occasionally in druses in dogtooth crystals.

The veins vary in breadth from a few inches to sometimes thirty feet, but when of this last great breadth, or even much less, they usually contain a considerable amount of brecciated wall-rock mixed up with the gangue; many of them range from one to three and four feet, and their slope, or underlie, varies from about 50° to 90°. From such as might be considered master lodes innumerable branches of various sizes start, some of which visibly diminish before proceeding far and dwindle to nothing, while others maintain moderate widths with much regularity for considerable distances, and may run to a junction with parallel lodes. The lodes have
a bearing agreeing with the general strike of the formation, which roughly coincides with the general trend of the coast. They are thus, in a rude way, parallel to one another, and run in a direction between west and north-west, more nearly approaching the latter.

In no part of the country, from the vicinity of Sault Ste. Marie to Shebanahning, is any great area wholly destitute of cupriferous veins, and it would appear singular if a region, extending over a space of between one and two thousand square miles, and so marked by indications, did not in the course of time yield many valuable results.

Six principal rivers, besides several of inferior note, flow through this country. The principal are the Thessalon, the Mississaga, the Serpent, the Spanish, the White Fish and the Wahnapitael, of which the mouths are from fifteen to thirty miles apart. The Mississaga and the Spanish are the largest two, the reported length of the former being one hundred and twenty and of the latter two hundred miles.

In the valleys of all the principal streams there are extensive flats of rich and deep soil, producing maple, oak, elm, birch and basswood, besides occasional groves of both red and white pine of large size.

From Sault Ste. Marie to Root River the surface is generally level, with a slight inclination to the eastward, or towards Garden River; the soil is here a fine sandy loam, and the subsoil a reddish blue clay.

Root River, flowing south-easterly, is a small stream, emptying into the St. Mary River on the westerly side of Little Lake George; it is shallow, with clear water, rapid current, and gravel bottom. The soil on both sides of the river is good. Northward of the river for six miles the surface is gently undulating, broken here and there by the rock ridges previously described, the soil and timberbeing the same as on the south side.

In rear of this, a valley of seven or eight miles in width extends eastward to the high land surrounding Echo Lake, and westward to the Gros Cap Range at the foot of Lake Superior, its regularity broken here and there by similar ranges of rock.

Garden River, flowing southerly and south-westerly, empties into the St. Mary River a short distance eastward of Little Lake.

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George. It is a fine stream, having a general width of about three chains. Here wheat, oats, maize, potatoes and grass grow luxuriantly. The soil on the banks of this river, and for a considerable distance inland on either side, is of the best quality, being a fine rich sandy loam, and the timber is large and thrifty.

The valley, entered northward from Root River, is again seen presenting the same appearance, and stretching eastward to the high land surrounding Echo Lake. Through each of these valleys there usually flows a pretty brook of clear water, taking its rise from one or other of the picturesque little lakes which lie on each side of the water-shed.

To the east of Echo Lake, and northward of the limestone point on the east side, there is a tract of fine land, heavily timbered with maple, elm and birch, interspersed at intervals with groves of hemlock and a few pines, with cedars in the hollows and swamps.

The Thessalon River, with its chain of lakes and mill-sites, flowing from the north-west, empties into Lake Huron about twelve miles eastward of the Bruce Mines.

The land on the margin of the river is of good quality and heavily timbered. The surface rises gently from the water's edge, and at the top of the bank the rock is exposed; this continues, however, but a short distance, when it descends gradually, and for several miles to the eastward the soil is of good quality and deep, the surface rolling, and the timber fine and thrifty, maple, birch, cedar, elm and ash prevailing. Much good pine is also scattered through this section.

Westward of the river, or in rear of the Bruce Mines, the country is more broken and rugged. North and west from Desert Lake, the second of the chain, the coast is low and swampy for the distance of three-quarters of a mile, but in rear the surface rises gradually, and, though broken here and there by the rock ranges which form a marked feature in the topography of this country, affords a considerable extent of land fit for settlement, the soil being deep and rich, and the timber principally hard-wood.

North and east from Lake Deception, the third of the series, there are extensive tracts of excellent land, timbered chiefly with hard-wood; these tracts extend eastward to the Mississaga, and southward to within two miles of the coast of Lake Huron. The Mississaga River, entering Lake Huron about thirty miles eastward of Point Thessalon is, at its entrance into the lake, a fine broad stream, with a considerable depth of water, and its mouth being protected eastward by several islands affords a safe and commodious harbour. The navigation is, however, impeded four miles from its mouth, where a tock range, crossing the river, forms a fall of five feet.

At the mouth of the river the land is low and swampy, but the surface rises gradually, and at the distance of one and a-half miles from the lake the banks on both sides are high, and the soil and timber of good quality, the former being a rich red sand with a subsoil of blue clay, and the latter consisting of birch, hard and soft maple, cedar, poplar, spruce, balsam, black and white ash and elm.

Between the northerly limit of the Indian Reserve and Little White River, a south-west flowing tributary of the Mississaga, there is a tract of country of considerable extent fit for settlement. Northward of Little White River there is a fine block of land extending nearly to the Grand Portage, and stretching to the eastward for a considerable distance.

The Blind River, forming the eastern limit of the Indian Reserve, enters Lake Huron about four miles east of the Mississaga.

Serpent River empties into a deep bay or inlet of Lake Huron about twenty-five miles east of the Mississaga. The bay into which it empties is unsurpassed as a harbour. At the mouth of the river, on the westerly side, the land is of good quality, but low and level. Ascending the river the scene is rugged and rough, the rock ranges running close to the margin of the stream and parallel to it. In rear, however, on both sides some valleys of good hardwood land are met with, more particularly on the west, being a continuation of the valleys from the east bank of the Mississaga.

Spanish River, which is navigable for thirty miles to craft not drawing over five feet, falls into an extensive and beautiful bay, land-locked by islands and projecting points from the main land, the communication to the eastward being through a narrow but deep channel, called the Petit Detroit, between the southern extremity of the peninsula and the eastern end of Aird Island. From the Petit Detroit to La Cloche the outline of the coast is

irregular, being indented by deep bays and coves, which in some parts are perfectly landlocked by groups of long, low and narrow islands running parallel with the main shore, and affording excellent places of shelter for all classes of vessels under almost any circumstances.

The hills bordering on Spanish River seldom attain a height over three hundred feet, but the banks of the river itself are frequently bold, precipitous, and rocky. At the great fall a picturesque and imposing ruggedness prevails. A ridge of smoothly polished bare rock rises in rounded knolls, so steep in places as to be inaccessible, obstructing the south-eastern flow of the river and splitting it into two parts, of which one turns a little to the northward of east, while the other is deflected to a precisely opposite course. The latter, after running above a quarter of a mile, is thrown in a beautiful cascade over a precipice thirty feet high, and then turning abruptly to the eastward rushes violently for thirty chains in that direction, falling in a vertical sheet over three successive steps of five feet each, when it is again united to the other division of the stream in a wide pool of nearly still water.

Much of the country for some distance back from the north side of the river is flat or rolling land, and is almost everywhere covered with a luxuriant growth of red and white pine.

The extent and value of the pine forest in this region, the facility offered by the river for navigation, the water-power to be found on the main stream and all its tributaries, and the capabilities of the soil for raising most of the necessaries of life, all tend to indicate a probability that it is destined to become of commercial importance to the Province.

The White Fish River in its whole length, until within a mile or less of Lake Huron, consists of a long chain of lakes lying at short distances from one another, connected by short, small and sometimes rapid streams.

The valley of the Wahnapitael River contains many considerable tracts of flat land, much of which is of good quality, bearing hardwood and large white pine in abundance, but a great proportion of the flats are low, wet and swampy.

The Vermilion River is a fine broad stream with deep water and a rapid current, which, flowing generally south-westerly, empties into Vermilion Lake, and thence running southerly, joins the east branch of the Spanish River about five miles east of White Fish Lake. The banks of the Vermilion River present a very inviting appearance both as regards soil and timber, the former being a rich alluvial deposit with a subsoil of reddish blue clay, and the latter principally fine and thrifty hardwood. Inland for a considerable distance from its banks the same appearance prevails, white oak, elm, and white ash being abundant.

The river takes its rise near the Height of Land, and unlike most of the streams in this country, is unbroken save by the one lake above spoken of.

Vermilion Lake is a long, narrow sheet of water timbered to the water's edge with birch, poplar, maple and oak, and takes its name from the peculiarly beautiful colour of the foliage in the autumn. Grain, root crops and Indian corn flourish here to perfection.

On the south side of the Height of Land, and coming down in some places to within a few miles of Lake Huron, the country, as before remarked, like that for a considerable distance north, is full of lakes. These are not generally very deep, one result of which is that the water, heated by the sun's rays, becomes much warmer throughout than the water of Lakes Huron and Superior. The climate of a wide belt of territory is so tempered and modified by the warm waters of the numerous small and shallow lakes, which cover probably one-third of the country, as to admit of the cultivation of many of the most valuable kinds of fruit.

East of the Bruce Mines, in the valleys of the Thessalon and Mississaga Rivers, all kinds of crops flourish well. Spring wheat grows from four to five feet high and thick on the ground, yielding from twenty-five to thirty bushels to the acre. The oat crop is remarkably good, and yields from fifty to seventy bushels per acre. In this section of the country there is a good opening for stockraising, and stock farms with large clearances can be had at reasonable rates.

# LAKE HURON AND THE MANITOULIN ISLANDS.

A ridge of land which, proceeding from the vicinity of the Falls of Niagara, sweeps round the upper extremity of Lake Ontario and running thence into the promontory of Cape Hurd and Cabot's Head, is represented in continuation by the Manitoulin Islands, divides Lake Huron into two parts, which may be called the south and the north. The south part, constituting the great body of the lake with a circumference exceeding seven hundred and twenty lineal miles, has an area of about fourteen thousand square miles; the north portion is again divided into two parts, the east and the west, the former of which called the Georgian Bay, extending from Nottawasaga to Shebanahning and the eastern extremity of the Grand Manitoulin Island, with a length of one hundred and twenty miles and a breadth of fifty, has an area of about six thousand square miles; while the remainder, called the north channel, gradually narrowing as it proceeds westward, presents a surface, exclusive of the various islands with which it is studded, particularly in the eastern end, of one thousand seven hundred square miles. The whole area of the water of the lake would thus appear to be twenty-one thousand square miles.

Only four of the islands which serve to divide the lake go under the denomination of the Manitoulins. These are Drummond (belonging to the United States), Cockburn, Grand Manitoulin, and Fitzwilliam. They belong geologically to the fossiliferous series, exhibiting the Trenton limestone, Niagara limestone, and Utica slates. The Manitoulin Islands were covered with dense forests of the description usually indicating a rich and fertile soil. On them, and on St. Joseph Island further west, there are extensive tracts of land almost exclusively growing maple, elm, oak, ash, birch and basswood, of such character in point of size as not to be greatly surpassed by the produce of the justly celebrated hard timber lands of Ontario. St. Joseph Island abounds in limestone, affording good material for either burning or building.

The Grand Manitoulin is a very important and very beautiful island. Its length is eighty and its average breadth twenty miles. The forty-sixth parallel of north latitude passes three of its most northern points, and the eighty-second and eighty-third meridians



of west longitude are at about equal distances from its east and west ends. The whole area of the island, exclusive of its numerous bays and inlets, cannot be less than one thousand six hundred square miles. Its most elevated points do not exceed three hundred and fifty feet over the level of Lake Huron. The amount of moisture which falls in this area must be considerable, as the interior of the island is well supplied with streams and lakes.

### NORTH OF LAKE SUPERIOR.

Between Salter's Lake Huron base line and the Goulais River, a distance of ten miles, there is a large proportion of good rolling land, occasionally broken by hills of trap rocks, heavily timbered with maple, birch, balsam, spruce and some pine. The soil is a sandy loam, changing to rich clay loam in the valleys.

The Goulais River flows in a south-westerly direction through a valley varying from one and a-half to three miles in width, and empties itself into the bay of the same name. It is navigable for small boats for about twenty miles. For the first twelve or fifteen miles from its mouth the banks vary from five to twelve feet in height, and are in general of clay or gravel. The soil in the valley of the river is of excellent quality, giving growth to large maple, birch, elm, ash, and soft-wood trees.

Leaving the Goulais River and proceeding north, the country for some miles resembles that just described. Hills are seen in some places from three hundred to six hundred feet in height, with green stone, trap and gneiss appearing on their summits in ragged cliffs; while their flanks and the intervening valleys show good loamy, well-timbered soil.

On approaching Lake Superior, the country, generally, is mountainous and barren. Between Point Corbeau, on the north shore of Batchawaung Bay and Mamainse, there is a fine tract of richly-wooded land of some miles in width, and of a rich productive loam, giving growth to large maple, birch, oak, etc. Batchawaung Bay affords a constant supply of the finest trout and white fish.

The surface of the country between Batchawaung Bay and Montreal River, though a good deal broken, contains in some places low hills, and valleys of good soil. The timber consists of spruce, balsam, maple, and birch, with some pine and tamarack. Iron is largely distributed over this district.

The Montreal, a clear rapid river, flows through several small lakes, and between high hills of granite and trap rocks, in a direction a little south of west. In the first ten miles from its mouth there is a succession of wild rapids and falls, varying from ten to one hundred and fifty feet in height, flowing through narrow gorges and openings in the rock.

The tract between the Montreal and Agawa Rivers is for the most part hilly, though valleys of good soil are sometimes met with. Maple begins to grow scarce in this latitude, the prevailing timber being spruce, birch and balsam.

The Agawa, a clear gravelly river, abounding in speckled trout, flows between high perpendicular cliffs of granite and greenstone in a direction a little west of south into Lake Superior, about six miles to the north of Montreal River. The smaller streams of the country through which it flows, pour their contents in many cases, directly over cliffs one hundred and fifty feet in height into this river

From the Agawa to the Michipicoten River there is little change in the appearance of the country, or in the quality of the soil. Here, as well as in every other part of the Lake Superior district, the country is well watered by streams and lakes which contain many varieties of excellent fish.

The second river in point of size, on the north shore of Lake Superior, is the Michipicoten. It is a large, clear, rapid river, and takes its rise far in the interior. It has been for many years the route taken by the Hudson's Bay Company's canoes in travelling to and from Hudson's Bay, and the principal trading establishment of the Company is at its mouth.

The Hudson's Bay Company's winter mail route to Sault Ste. Marie connects in a nearly direct line the mouths of the Michipicoten and Agawa Rivers, and passes through a fine rolling country, well timbered with maple, birch, balsam and spruce, and watered by numerous streams and lakes.

The Pic River flows in a southerly direction for many miles, with a gentle current through a valley from one to three miles in width. The banks which are generally of clay, and low, rise in some places to seventy or eighty feet. There are many points on

## SKETCHES OF THE COUNTRY.

this river of rich clay soil, giving growth to elm, birch, poplar, and black ash of large size. All along the river blue clay of the finest description, well adapted for the manufacture of bricks or fine pottery, may be got in abundance.

The Neepigon River, the largest on the north shore of Lake Superior, takes its rise in Lake Neepigon, flows through several smaller lakes, and empties itself through a wide, deep channel into Neepigon Bay. At the eastern side of its entrance, bold, precipitous greenstone cliffs, several hundred feet in height, overlie a red soft



SCENE ON LAKE NEEPIGON.

rock of a soapy structure, which is used in the manufacture of pipes. - In the valleys between these cliffs and on the west side of the river, there is excellent soil heavily timbered. The water of this river is beautifully clear, and swarms with speckled trout, weighing from one to twelve pounds. About thirty miles up, Lake Neepigon is reached. This lake is one hundred and twenty miles in length and sixty in breadth. Its surface is dotted with numerous islands, its waters are deep, and contains in abundance fish of every variety taken in Lake Superior.

In the Neepigon country the largest tract of good land appears to be on the south-western side of the lake. From the Nonwaten River, northward to the Pagitchigama, a distance of fifty miles, the country is comparatively level, and the soil generally fertile. This tract is represented as continuing nearly to the River Winnipeg, and becoming more generally level in receding from Lake Neepigon. The rivers entering in this part of Lake Neepigon, as far as examined, were found to flow with tortuous courses between muddy banks of clay, overspread with fine sand.

There is a considerable area of good land around the bottom of South and McIntyre's Bay, and on the peninsulas east of the latter bay, and Gull Bay. From the mouth to the first rapid on the Poshkokagan, the loamy banks of the river are from twenty to thirty feet high. The River Kabitotiquia is so crooked that by following its windings from the mouth to the portage leading to Chief's Bays, the distance is estimated to be fully thirty miles, although it is only nine miles in a straight course. On both sides the country is level, and the soil sandy, supporting a growth of grass and bushes, the timber having been burnt off by repeated fires. The land is free from stones, and very little labour would be necessary to make it ready for the plough.

The Kaministiquia, the only river on the Canadian side of Lake Superior navigable for large vessels for any distance from its mouth, flows into Thunder Bay at Fort William. For the last fifteen miles of its course it winds through a rich valley of alluvial soil, in the centre of the townships of Neebing and Paipoonge, between banks varying from five to forty feet in height, crowned with large elm, ash, poplar, birch, spruce and pine, with a thick underbrush of flowering shrubs.

Between its mouth and the Kakabeka Falls, which are scarcely inferior in grandeur to the Falls of Niagara, there is nothing in the flora to lead one to doubt the feasibility of raising all the cereals.

An exploratory survey, north of Lake Superior, made in 1870, shows a large tract of country fit for settlement, lying between the Michipicoten and Shequamka Rivers on the east and Pic River on the west.

In this region, the country near Lake Superior is generally rough and broken, with ranges of rocky hills, except in the valleys

of the Michipicoten and Magpie Rivers and between Michipicoten River and Lake Wawangonk, where the land is level, and of good alluvial sandy loam, in some places prairie land cleared by fire. There is good level land also in the valley of the Shequamka River and Lake.

Between Lake Superior and Lake Matagoming, and the upper valley of the Magpie River, the land is generally undulating and rocky, but beyond that, it is comparatively level, with a soil of alluvial clay and sandy loam. The timber is generally white spruce, red pine, birch, poplar and cedar.

In the upper Magpie and Lake Esnogaming district there is good level land, of a rich alluvial clay loam, well wooded.

From Lake Esnogaming, westerly to White Lake, the land is generally level, with a soil of sandy loam, and in some places undulating and rocky.

In the White River valley there is excellent farming land, the soil being a rich alluvial deposit, well wooded with white spruce, red pine and large cedars. White Lake through which White River flows, lies in a level region, well wooded, the soil being an alluvial sandy loam. This lake is five hundred and fifteen feet above the level of Lake Superior.

In the valley of the Black River, which flows into Pic River near Lake Superior, and connects with White Lake, the land is generally level, consisting of an alluvial loam, generally a rich clay loam, well wooded with large white spruce, poplar and cedar, with occasional exposures of gneiss, micaceous slate, etc.

North of the Black River, the soil is clay loam, level and well wooded. About eight miles above the Black River, a tract of most excellent farming land begins; the soil is a rich alluvial clay loam, supporting a luxuriant growth of timber, as well as, in many places, a fine growth of long prairie grass.

This fine tract of country, with its fertile soil, continues upwards of fifty miles into the interior, where a wide extent of country that has been burned off, with the same good land, stretches easterly and towards White Lake for a distance of about thirty miles. The numerous lakes and rivers here abound in excellent fish of many kinds.

The climate of this region is very favourable. From observations made at the Pic River, by Mr. Ironside of the Hudson's Bay

Company, with a standard thermometer, the mean temperature was found to be—in July,  $62^{\circ} 88'$ ; August,  $63^{\circ} 54'$ ; September,  $64^{\circ} 19'$ ; and October,  $56^{\circ} 02'$ , with very fine weather during these months. Thus, although nearly five degrees of latitude north of Toronto, the temperature was nearly the same as at Toronto during July and August, and a few degrees warmer during September and October, taking the average of twenty-nine years.

In a general way it may be said that the whole country which has been examined, north of the hilly region around Lake Superior, between the Pic River and Lake Neepigon, is comparatively level, with a sandy soil, generally dry, but in places interrupted by shallow swamps and low rocky ridges. The sand is underlaid by a light coloured clay which occasionally comes to the surface.

The drift, which has come from the north eastward, is rich in pebbles and boulders of the paleozoic limestone, which occur *in situ* in that direction. These are washed out and exposed in the banks of lakes, and along rivers and brooks, especially at rapids, and will prove valuable for burning into lime. The fossils which they contain are mostly silicified and indicate the Niagara formation.

In going from Lake Superior, through this country, to the valley of the Albany River, no difference is observed in the character of the vegetation, which may be accounted for by the greater elevation of the southern part, together with the cooling influence which Lake Superior exerts upon it. Oats and barley are successfully cultivated at Long Lake House; while hay, potatoes, and all the ordinary vegetables thrive remarkably well. The potato-tops, as a rule, are not touched by frost up to the time of harvesting, which is during the first week in October.

RAINY RIVER AND LAKE, LAKE OF THE WOODS, AND RAT PORTAGE.

This most important section of the Province lies between the Height of Land west of Lake Superior and the Winnipeg River. In its general aspect it is a hilly and broken country, intersected by rapid rivers and wide-spread lakes. The hills, however, do not rise to any great elevation, and there are several fine alluvial valleys, the most extensive of which is that of Rainy River.

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The lakes and rivers present long reaches of navigable water, the principal of which, extending from Fort Frances to the western extremity of Lac Plat, is one hundred and fifty-eight miles in length. Dense forests are seen in various places and in considerable quantities, covering the whole of this region, and the most valuable kinds



RAPIDS ON RAINY RIVER.

of elm are found on Rainy River, and white pine is abundant on the waters which flow towards Rainy Lake. On the Sageinaga River, and on the Seine and Maligne, there are extensive forests of red and white pine. Occasional white pine appears in the beautiful valley of Rainy River, and on the islands in the Lake of the Woods.

The approach to Fort Frances is very beautiful. As we near the outlet of Rainy Lake, and enter Rainy River, the right bank appears very much like a park, the trees standing far apart, and having the rounded tops of those seen in open grounds. Blue oak and balsam poplar, with a few aspen, are the principal forest trees. These line the bank, and for two miles after leaving the lake, we glide down between walls of living green, until we reach the Fort, which is beautifully situated on the right bank of Rainy River, immediately below the falls. All sorts of grain can be raised here, as well as all kinds of garden vegetables. Barley three feet high. and oats over that, show there is nothing in the climate or soil to prevent a luxuriant growth. The length of the river is about eighty miles. The right, or Canadian bank, for the whole distance, is covered with a heavy growth of forest trees, shrubs, climbing vines and beautiful flowers. The forest trees consist of oak, elm, ash, birch, basswood, balsam, spruce, aspen, balsam poplar, and white and red pine near the Lake of the Woods. The whole flora of this region indicates a climate very like that of the old settled parts of Ontario, and the luxuriance of the vegetation shows that the soil is of the very best quality. The name of Alberton has been given to the settlement at Fort Frances.

Of the lakes in this section, the Lake of the Woods is the most extensive. From Lac Plat, which may be regarded as its western extremity, to White Fish Lake, which is a somewhat similar extension in an opposite direction, the distance is not far short of one hundred miles, and from the mouth of Rainy River, at the entrance of the lake, to its outlet at Rat Portage, in latitude 49° 47' north, and longitude 94° 44' west, the distance is about seventy miles, so that altogether it occupies an area of about sixteen hundred square miles. This extensive sheet of water, like all the other lakes on the line of route, is interspersed with islands, on some of which the Indians have grown maize from time immemorial, and have never known it fail. It would be difficult to conceive anything more beautiful of its kind than the scenery of this lake. Islands rise in continuous clusters, and in every variety of form. Sometimes in passing through them the prospect seems entirely shut in; soon again it opens out, and through long vistas a glance is obtained of an ocean like expanse, where the waters meet the horizon.

From the mouth of Ramy River, for a distance of fifty miles northwards, the rocks found on the islands of the Lake of the Woods and points of mainland, are principally composed of granite and gneiss. The granite is of a reddish colour, and of excellent quality. Quarries are found here easy of access, where blocks can be got of any size, and columns of any length that may be desired.

From the end of Whitefish Bay at Turtle Portage, the formation changes, and from that point to a short distance north of Rat Portage the rocks are of Huroman formation, and are composed largely of argillaceous, silicious, chloritic, dioritic, talcose and green stone slates, schist, trap and hornblende. This formation covers a great part of the islands of the Lake of the Woods, Petamugan Bay and Shoal Lake, and continues in a north easterly direction across the line of the Canadian Pacific Railway. In this broad belt, at least twenty miles in width, there have been a great number of quartz veins discovered, containing gold, and silver, galena, copper and iron pyrites; several hundred locations have been surveyed, all of which bear indications of gold or silver. In many of these veins, gold can be seen with the naked eye, but it is usually distributed through the rock in fine particles, and can be taken out by grinding and washing.

The waters of the Winnipeg River flow out of the Lake of the Woods by two channels through a narrow wall of rocks, with a fall of upward of seventeen feet, and form a bay below, where they unite. Beside the two channels that form the Winnipeg River, there are a number of openings in the rock which have been the beds of rivers at a period when the waters of the lake were higher than they are now. These channels cross the line of the Canadian Pacific Railway, and extend for a distance of upwards of three miles westward from Rat Portage at the most easterly outlet of the lake. They can be opened out and converted into mill races at comparatively little expense. No dams are required, and no flood can ever break through the embankment to do injury. The power that can be obtained here is unlimited, and the supply of water endless. The value of these water privileges is enhanced by the railway crossing at the very point where mills can be erected adjoining the track. There is no other point on the continent of

America possessing water power of such magnitude; situated so advantageously on the great thoroughfare between the Pacific and Atlantic Oceans, and lying immediately east of the grain-growing region of the western prairie, and on the direct route to a European market.

The more this part of the country is explored, the higher the estimate formed of its value. That it is rich in minerals cannot be



PORTAGING ON WINNIPEG RIVER.

questioned; its forests are of immense value, affording fuel, building timber, railway ties, bridge timber, telegraph poles, fence posts and rails.

Its lakes and rivers abound with a superior quality of fish; whitefish, sturgeon, lake trout, pickerel, suckers, pike, gold eyes, tuleby, maskinonge, catfish, and perch, which can be shipped to points where the supply is not equal to the demand.

#### NORTH OF THE HEIGHT OF LAND.

Throughout the whole of the region from Lake Nipissing to the Lake of the Woods, the depth of snow is generally less on an average than it is at the city of Ottawa. Only in one locality between these two points is the snow found generally so deep as at this city, namely, in the immediate neighbourhood of Lake Superior, where the lake appears to have a local influence on the humidity of the atmosphere, and, in consequence, on the amount of snow-fall.

The climate of the territory north of the Height of Land is one of extremes. The winters are cold—the temperature falling sometimes as low as forty degrees below zero of Fahrenheit's thermometer, and occasionally rising in summer to ninety degrees in the shade on the coast of James' Bay. The mean temperature of the summer at Moose Factory is about sixty degrees.

In going northward, from the Height of Land towards James' Bay, the climate does not appear to get worse, but rather better. This may be due to the constant diminution in the elevation, more than counterbalancing for the increased latitude, since in these northern regions a change in altitude affects the climate much more than the same amount of change would affect it in places further south. The water of James' Bay may also exert a favourable influence, the bulk of it being made up in the summer time, of warm river water, which accumulates in the head of the bay, and pushes the cold sea-water further north. The greater proportion of day to night during the summer months may be another cause of the comparative warmth of this region.

The rain-fall at Moose Factory forms no criterion as to what it is on the southern highland, where, without being too wet, there is sufficient rain and dew to support the most luxuriant vegetation. The snow-fall at Moose Factory is not nearly as heavy as it is south of Lake Nipissing and the French River.

Agricultural operations have been very limited north of the Height of Land. It is only at the fur-trading posts of the Hudson's Bay Company that any attempt has been made to cultivate the soil.

Farming and gardening have been successfully carried on by the officers of the company at their posts on Lakes Mattagami and

Missinibi. At the latter, spring wheat has been found to ripen well. At Moose Factory, although the soil is a cold, wet clay, with a level, undrained surface, farm and garden produce, in considerable variety, are raised every year. Oats, barley, beans, peas, turnips, beets, carrots, cabbage, onions, tomatoes, etc., are grown without any more care than is required in other parts of Canada.

Wheat may be successfully grown where the soil is suitable in all that part of this territory lying to the south of the fiftieth parallel of latitude. The mean temperature of the summer south of that parallel is sufficient to ripen this cereal. Indeed wheat has been grown at Abbitibbe House, Flying Post, and New Brunswick, on or about the forty-ninth parallel, and at Lac Seul, between the fiftieth and fifty-first parallel. Indian corn, a more delicate plant than wheat, has come to maturity at Osnaburgh House, on Lake St. Joseph, north of the fifty-first parallel.

Barley, oats, rye, peas and beans succeed well. The invariable excellence of the crops of the Windsor bean and the kidney-bean at Moose Factory is surprising. The vetch grows wild everywhere, but nowhere is it so abundant as on the coast of James' Bay.

There is probably no food plant that is likely to be of more importance to the inhabitants of this territory than the potato. There is none the cultivation of which has been so successful in every part. The fitness both of soil and climate for its growth has been established beyond dispute. Whether viewed in reference to size, quantity or quality, the crops at Moose Factory and Matawagamingue (two hundred and sixty miles further south), will compare favourably with those in the best potato-growing districts in Ontario. Peaty soil is particularly well suited to the growth of potatoes. There are millions of acres of peat mosses in this territory, very extensive areas of which can be easily reclaimed, and when the country is settled and means of transport provided, hundreds of thousands of tons of potatoes may be grown and sent away to supply the wants of other countries.

The fitness of the soil and climate for the growth of root crops will make the breeding of cattle and dairy husbandry important resources of this territory. Among these crops the turnip is entitled to a place in the front rank. The carrot, beet and parsnip can also be grown.

Cabbages, spinach, lettuce, mustard, cress, and radishes are grown without any difficulty. Rhubarb also grows well. The cauliflower appears to be one of the surest crops at Moose Factory, and is sometimes ready for the table as early as the first of August.

Whatever doubts exist as to the agricultural value of the country north of the Height of Land in respect to its grain-growing capabilities, there can be none in regard to its fitness to produce the more important roots and grasses. From the Height of Land northward to the coast of James' Bay, nothing on the north shores of Lakes Huron or Superior can exceed the luxuriance of the native grasses. Cows and oxen are kept at all the principal Posts, and they are invariably found to be healthy and in fine condition; a good evidence of the salubrity of the climate, and excellence of the pasture. At Moose Factory where some sixty head are constantly kept, a certain number are slaughtered every fall, and are quite fat, although then taken straight from the grass.

The only fruits that appear to be cultivated in the garden are the red and the black currant and raspberry. The red currant is remarkably prolific. The strawberry and gooseberry might be raised with little trouble, for they are found growing wild in many places, and nowhere more plentiful or of finer quality than on the coast. The huckleberry, or blueberry, is found in great profusion from the long portages to the Height of Land. Indeed it may be said to abound from the coast of Hudson's Bay to the shores of Lakes Huron and Superior.

There is another wild fruit which may be noticed. This is a bush or tree not unlike the wild cherry in appearance. North of the Height of Land, it attains a height in some places of ten or twelve feet, but is generally about six feet. The fruit grows singly, not in bunches or clusters on the tree. It is an oblong or pear-shape, larger than the blueberry, but smaller than the grape. When ripe it is of a purple or blue colour. It is sweeter and has more flavour than the huckleberry, and is preferred by the natives to it. It is to be found all the way from James' Bay to Lake Huron, but nowhere in greater perfection than on the Mattagami River. The fruit is not only pleasant and wholesome, but the juice would make an excellent wine, and the tree is worthy of cultivation and a place in our orchards and gardens.







## CHAPTER XII.

## FREE GRANTS AND HOMESTEADS.



HE following information is given in reference to the manner of acquiring title to Public Lands in this Province under the "Free Grants and Homesteads Act." I. By the "Free Grants and Homesteads Act,"

Public Lands which have been surveyed, and are considered suitable for settlement and cultivation, and not valuable chiefly for minerals or pine timber, may

be appropriated as Free Grants; but such appropriations are to be confined to lands within the Districts of Algoma and Nipissing, and that tract of territory lying between the Ottawa River and Georgian Bay, and comprising the northerly portions of the counties of Renfrew, Frontenac, Addington, Hastings, Peterborough, Victoria and Simcoe, and the Districts of Muskoka and Parry Sound.

2. To obtain a Free Grant, the applicant must make application to the Local Crown Land Agent, in whose agency the land desired is situated, and deposit with him the necessary affidavits. Although no fees are charged by the Department, or allowed to the land agents for locating, yet if required to prepare the necessary affidavits, the agents may make a reasonable charge for so doing.

3. Two hundred acres is the limit of the Act, consequently no individual can obtain more than that quantity as a Free Grant, and if the land selected exceeds the two hundred acres, the applicant must pay for the overplus at the price fixed by the Regulations. A single man over eighteen years of age, or a married man with out children under eighteen residing with him, is entitled to a grant of one hundred acres. But in case it shall be shown by satisfactory evidence that a considerable proportion of the land selected by an applicant who comes under either of these headings, cannot be made available for farming purposes on account of rock, swamp or lake, the Commissioner of Crown Lands may make an allowance for such waste land, and may increase the quantity of land located to such applicant to any number of acres not exceeding in the whole two hundred acres. The male head of a family, or the sole female head of a family, having a child or children under eighteen years of age residing with him or her, may be located for two hundred acres as a Free Grant; and may also purchase an additional one hundred acres at the rate of fifty cents per acre, cash.

In certain townships, however, situated in the Districts of Algoma and Thunder Bay and which are subdivided into sections and quarter-sections, or into lots containing one hundred and sixty or three hundred and twenty acres each, the locatee, whether he be a single man over eighteen, or the head of a family with children, is entitled to one hundred and sixty acres only; that is, a full quarter-section, or a half lot, as the case may be; and he may purchase an additional one hundred and sixty acres at the rate of fifty cents per acre, cash.

Upon receipt of the necessary affidavits, the agent will, if the land selected be open for location, and there be no adverse claim thereto, enter the locatee for it on the records of his office, and at the end of the current month he will return the location to the Department of Crown Lands.

In case a party has settled on Government land before the township has been surveyed, or appropriated under the Free Grants Act, he should, immediately after it is opened for location, apply to the local agent and get located, as he will have no recognized title, and his occupation of the land will not count until this action has been taken.

4. Upon completion of his location, the locatee may enter upon and occupy his land, and may commence his improvements; and the regulations require him to do so within one month.

5. The locatee will not be entitled to his patent untill the expiration of five years from the date of location, and he must then make proof that the settlement duties have been fully completed. The settlement duties required on each location are as follows, viz.:

(1) To have at least fifteen acres cleared and had under cultiva-

tion, of which two acres at least are to be cleared and cultivated annually during the five years.

(2) To have built a habitable house, at least sixteen by twenty feet in size.

(3) And to have actually and continuously resided upon and cultivated the land for five years after location.

A locatee is not bound to remain on the land all the time during the five years; but may be absent on business or at work for, in all, not more than six months in any one year. He must, however, make it his home, and clear and cultivate the quantity of land required (two acres at least) each year.

Where a locatee holds two lots (two hundred acres) he may make the requisite improvements on either one or both, as he finds it most convenient.

A locatee who purchases an additional one hundred acres under the Regulations must, within five years from the date of sale, clear fifteen acres thereon, and cultivate the same, before he will  $b_2$  entitled to the patent; but he is not required to build a house or reside on the purchased lot, where he holds it in connection with a Free Grant.

The proof of the performance of the settlement duties must be the affidavit of the locatee himself, supported by the testimony of at least two disinterested parties, which affidavits are to be filed with the local agent—who, if satisfied as to the correctness of the statements contained therein, recommends the issue of the patent, and transmits the application to the Department.

6. In case the locatee fails to perform the settlement duties required by law, his location is liable to forfeiture, and may be cancelled by the Commissioner of Crown Lands. Applications for cancellation must be made through the local agent, and be supported by the affidavits of the applicant and at least two credible witnesses, who will show what the present position of the lot is: whether the locatee ever occupied or improved, and, if so, to what extent, and the value of the improvements; when he ceased to occupy; and his address, if known. Upon receipt of this evidence the agent will, if he can ascertain the address of the locatee, notify him of the application, and call upon him to disprove the allegations, or show cause why his location should not be cancelled, within thirty

days. At the expiration of that time the agent will transmit the evidence, with anything he may have received from the locatee in reply, and his own report to the Department.

7. The assignment or mortgage of a homestead from a locatee to another party before the issue of his patent is invalid, and cannot be recognized by the Department. This does not, however, apply to the devise of a Free Grant lot by will, nor to transfers of land by a locatee for church, cemetery or school purposes, or the right of way of railroads.

8. All pine trees and minerals on land located or sold under the Free Grants Act are reserved from the location or sale, and are the property of the Crown; and the Commissioner of Crown Lands may at any time issue a license to cut the pine on such land. The locatee may, however, cut and use such pine trees as he requires for building and fencing on his land, and may also cut and dispose of any pine trees he meets with in the actual process of clearing his land for cultivation; but any trees so disposed of are subject to the payment of the same dues as are payable by license-holders.

Holders of timber licenses have the right to haul their timber over the uncleared portion of any land located or sold, and to make such roads as may be necessary for the purpose, and to use all slides, portages and roads, and to have free access to all streams and lakes.

9. The Crown reserves the right to construct on any land located or sold, any Colonization Road, or deviation from the Government allowance for road; and to take from such land, without compensation, any timber, gravel or material required for the construction or improvement of any such road.

10. Any conveyance, mortgage or alienation (except a will) of the land located, by a locatee after the issue of patent, and within twenty years from location, will be invalid unless it be by deed in which his wife is one of the grantors, and unless it be duly executed by her.

11. The land, while owned by the locatee, his widow or heirs, shall be exempt from liability for debt during twenty years from the date of location. This exemption does not, however, extend to a sale for taxes legally imposed.

12. Where a Free Grant locatee dies before the completion of

his title, the widow, devisee or heirs, may continue the settlement duties and obtain a patent at the proper time, upon filing the requisite proof. If the locatee made a will, it should be forwarded to the Department, with evidence showing the time of his death; and, if married, the name of his widow. In case he made no will, the fact must be shown by evidence, and also the time of his death; if married, the name of his widow, and the names and ages, residences and occupations of all the children he left, must be set out in full. If he left no widow or childen, the name, place of residence and occupation of his heir or next of kin must be given.

Where a locatee dies, whether before or after issue of patent, leaving a widow, she is entitled to the land during her widowhood in lieu of dower, unless she prefers to take her dower instead.

13. In making application for land, and in filing proof in support of applications for cancellation of a location, or for issue of patent, the applicant will save time and unnecessary trouble by filing his papers with, or mailing them to, the Crown Land Agent in whose agency the land is situated, as, on account of the agent's local knowledge of the lands he has to deal with, the Department requires that his certificate be attached to all such applications.

r4. Lands located or sold under the Free Grants and Homesteads Act, or the regulations made thereunder, are liable to taxation from the date of such location or sale, and where taxes, assessed on such lands, are in arrears for three years, the interest of the locatee or purchaser may be sold in the manner prescribed by law. When the tax-purchaser receives his deed, unless legal proceedings be taken to question it by some person interested within two years from the date of sale, he acquires the right and interest of the locatee or puchaser, and may obtain a patent on completion of the original conditions of location or sale.

In order to have his claim recognized, a tax-purchaser should file his deed in the Department, and two years after the date of sale for taxes, should file evidence showing that no action has been taken to question his title, that there is no adverse claim on the ground of occupation or improvements, and that all arrears of taxes have been paid since he purchased.

Nearly all of the townships (one hundred and twelve out of the one hundred and twenty-three) which are now open under the Free

Grants Act are situated within what is known as the Huron and Ottawa Territory, or that territory lying between the Ottawa River and the Georgian Bay. This territory contains about 9,000,000 acres of land, and about 7.500,000 acres of it are surveyed. The one hundred and twelve townships within it, which are open for location, contain about 4.883,000 acres, and about 2,100,000 acres have already been disposed of, leaving about 2,883,000 acres still unlocated. As new townships are required for settlement they will no doubt be placed in the market.

The construction of the Canadian Pacific Railway is one of the great events of the age. Barely seven years have passed away since the work was begun; and it is a marvel that so gigantic an undertaking could have been completed in so short a time. Already through trains, with parlour, sleeping and dining coaches—luxurious in all their appointments—are now running from ocean to ocean within Canadian territory. The scenery of this route is unsurpassed. The beautiful Ottawa River; the picturesque north shore of Lake Superior; the unique lake, river and forest scenery of the country between Port Arthur and Winnipeg; the waving grain fields of the Prairie Province and the North-West; the sub-lime grandeur of the Rocky Mountains, unrivalled even in Switzerland; and the delightful landscapes of the Pacific slope—may all be seen by taking this route.

The mining regions mentioned in the foregoing pages can most easily—indeed, we might say, can only—be reached by the Canadian Pacific Railway, which traverses the richest mineral-bearing lands, as well as the most heavily timbered forest districts in Ontario. The Canadian Pacific Railway Company has under its control 4,850 miles of railway; and the completion of their line promises to revolutionize the trans-continental trade, making the Dominion of Canada the highway for the immense export business of India, China and Japan.

The "Queen's" is one of the largest and most comfortable hotels in the Dominion of Canada, and being adjacent to the lake commands a splendid view of Toronto Bay and Lake Ontario.

It is well known as one of the coolest houses in Canada, and is elegantly furnished throughout; rooms *en suite*, with bath-rooms, etc., attached, on every floor.

In 1871, apartments were occupied by His Royal Highness the Grand Duke Alexis of Russia. In May, 1880, their Royal Highnesses the late Prince Leopold, K.G., etc., and Princess Louise, occupied a suite of apartments at the "Queen's." His Excellency the Earl of Dufferin, K.P., etc., etc., ex-Governor-General of Canada, and the Countess of Dufferin, on the occasion of each visit to Toronto, engaged apartments at the "Queen's." His Excellency Lord Lorne and H. R. H. Princess Louise, on each visit to Toronto, occupied the handsomely furnished apartments known as the "Royal Suite" at this popular hotel.

The beautiful grounds about it being both spacious and airy, with croquet and chevalier lawns, render it one of the most pleasant and desirable hotels for business men, pleasure seekers and the travelling public. The "Queen's" is furnished with all the latest modern improvements. Handsome passenger elevator, electric bells, etc.

From the illustration in advertisement given elsewhere it will be seen that the "Queen's" is but three stories high, covering a large area of ground, used exclusively for hotel purposes, and having lawns on either sides with means of exit from the house in addition to those in front and rear, rendering it almost impossible for any accident to take place from fire; consequently the "Queen's" is looked upon as the safest hotel in the Dominion of Canada.



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