

The Great Mackenzie Basin.

Mr. Alexander Mackenzie, a native of Inverness, born in the year 1783, emigrated to Canada and entered the service of the North-West Fur Company, and was stationed at Fort Chipewyan, on the shore of Lake Athabasca (lat. 59 degrees N.). On the 3rd of July, 1789, he started upon an exploration along the Great Slave River and Lake, and down the river which bears his name to the Arctic Sea. He returned on the 4th of September, and in a second journey, commenced in October, 1793, started from Fort Chipewyan up the Peace River, across the Columbia River, and thence westward to the Pacific Ocean at Cape Menzies opposite Queen Charlotte's Island. The narrative of his expeditions was published in London in 1801, and he was rewarded with knighthood for his services.

From the period of Mackenzie's discoveries until quite recently no effort was made by the Imperial or Colonial Governments to obtain authentic information as to the resources of this vast region belonging to the British Crown. It remained in the undisturbed possession of the Indian trapper, the Hudson's Bay Fur traders, and the missionaries to the Red Man. The remarkable success which has followed the opening up for settlement of the North-West Territory led to the Parliament of the Dominion of Canada appointing in 1887 a Committee of the Senate to "inquire into and report upon the resources of the Great Mackenzie Basin." After taking a great mass of evidence from men with an extensive knowledge of the country, including Hudson's Bay Company's officials, the eminent geological professors, Messrs. Dawson, Bell, Saunders, Selwyn, and Macoun, missionaries, arctic explorers, the Hon. Mr. Dewdney late Governor of the North-West Territory, and others, issued an interim report, 1888, in which they say:—"That the scope of the committee's inquiry embraced 1,200,000 square miles of territory, and that there is a possible area of 650,000 square miles fitted for the growth of potatoes, 407,000 suitable for barley, and 316,000 suitable for wheat. That there is a pastoral area of 860,000 square miles, 26,000 of which is open prairie with occasional groves, 274,000 square miles, including the prairie, may be considered as arable land.

That throughout the arable and pastoral area latitude bears no direct relation to summer isotherms, the spring flowers, and buds of deciduous trees appear as early north of Great Slave Lake (latitude 63 degrees) as at Winnipeg, St. Paul, Kingston, or Ottawa, and earlier on the Peace and Liard and some minor waters where the climate resembles that of Western Ontario.

That on the head waters of the Peace, Liard, and Peel rivers there is from 150,000 to 200,000 square miles which may be considered auriferous, and that silver, copper, and other valuable minerals, abound in inexhaustible quantities.

That evidence submitted to the committee pointed to the existence in the Athabasca and Mackenzie valleys to the most extensive petroleum field in America if not in the whole world.

The committee recommend that the Dominion Government should reserve 40,000 square miles of the petroleum field, as it will probably reach,

in the near future, an enormous value, and rank among the chief assets of the Dominion.

There is an immense lignite (coal) formation covering an area of upwards of 100,000 square miles which is exposed on the banks of the rivers, showing seams of great thickness.

Wheat ripens as far north as Fort Simpson (lat. 63 deg.), and the lands in the valleys of the Peace, Peel, and Liard Rivers are said to be exceedingly fertile.

The region is fairly wooded, and will afford an ample supply of all the requirements necessary for the settlement of the country.

Fish and large and small game exist in boundless quantities.

Access to this immense region has become a matter of greatest ease by the construction of the Canadian Pacific Railway; passengers can now travel by railway without interruption from Halifax in Nova Scotia to Edmonton on the Saskatchewan River, from where there is a wagon-road of ninety miles to Athabasca Landing, on the Athabasca River, where the Hudson's Bay Company have a steamer navigating this river for nearly 300 miles. With the exception of two rapids, one on the Athabasca of sixty miles, and the other on the Great Slave River, of about ten miles, connection can be made with the Great Mackenzie River which runs uninterruptedly for 1,200 miles to the Arctic Sea. The committee say that evidence was given before them showing that the difficulties of these rapids can be overcome by the construction of tramways along the banks of the respective rivers.

For many years to come the Canadian Pacific Railway, by being extended from Edmonton to Athabasca Landing, will afford an ample outlet for the produce of the petroleum fields in the Athabasca Valley. By this line (the Canadian Pacific) petroleum can be sent west to the Pacific coast and east over the whole prairie region. The evidence given before the committee by Professors Dawson, Bell, and others, was that the petroleum existing in the Athabasca and Mackenzie Valleys is practically inexhaustible, and that gold miners on the Peace River are making from fifteen to twenty dollars per day by washing the sand. Further evidence by way of supplement to the committee's interim report has lately been issued by the Dominion Government, which confirms in all essential particulars the evidence given in the report of 1888. All the witnesses concur in describing the country as exceeding healthy, some describing it as a veritable paradise, and others as the finest climate in the world.

The summer route from England to this great and interesting region can be accomplished with great ease and pleasure in about sixteen days, and at a moderate cost, by taking steamer from Liverpool to Montreal, thence by railway to Lake Huron, thence by steamer to Port Arthur, thence by the Canadian Pacific Railway to Winnipeg, Calgary and Edmonton, thence by coach to Athabasca Landing. Excellent refreshments can be had either on board the railways or the steamers, and at the various stations along the lines of railway. A more interesting and healthy summer tour is not to be found in the whole world.

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Ontario's Agricultural College and Experimental Farm.

Some time ago THE COLONIST received from the Ontario Department of Agriculture a copy of the "Seventeenth Annual Report of the Ontario Agricultural College and Experimental Farm," which was for the year 1891. It has been carefully read and all the important points noted and we now propose to give a few extracts, for the benefit of our readers, from some of the most interesting parts. The report as a whole is well arranged, and in its details shows that great care must have been taken in the preparation of the matter. Part 1 contains the report of the President; Part 2 the report of the Professor of Natural History and Geology; Part 3 the report of the Professor of Chemistry and of the former Professor of Chemistry; Part 4 the report of the Professor of Veterinary Science; Part 5 the report of the foreman of the Horticultural department; Part 6 the report of the College Physician; Part 7 the report of the Professor of Agriculture and Farm Superintendent, of the Experimental department, of the Farm foreman, and of the Mechanical foreman; and Part 8 the report of the Professor of Dairying. A supplementary report of the twelfth and thirteenth annual meetings of the Agricultural and Experimental Union is also given.

The report of the President embraces all the points which we wish to bring out so we will confine ourselves to it. He opens by paying tribute to the enterprise and liberality of the Minister of Agriculture and says that in consequence of it the management have been able to take several distinct steps in advance. Large additions to the equipment of the college, the Dairy and the Horticultural Departments have been made. By the purchase of the Notman collection of minerals the college came into possession of one of the best collections of fossils, minerals and rock specimens to be found anywhere outside of the large university cabinets and museums.

In the Horticultural Department the work is heavy and demands very close attention. This work embraces the care of a twenty-three acre lawn; a large collection of ornamental trees and shrubs; a four acre kitchen garden; a small nursery; a fair-sized orchard; a great variety of flower-beds, and several forest tree clumps; all needing constant attention and much labor to keep them in presentable shape.

In the Experimental Dairy department a very satisfactory year's work was done. For several years past the greater part of the building occupied by this department has been used as a creamery, which was run on the cream gathering plan, in order to ascertain whether butter making could be successfully carried on in a stock-raising district. The experiment has been quite satisfactory. Manitobans should note what the report says of this experiment. Here is the sentence: "It has been shown that even in a neighborhood which gives its attention very largely to the breeding and feeding of beef cattle—that even in such a neighborhood a creamery can be operated so as to give the butter maker fair wages for his services and pay the farmer a little more for his butter than he can get in the local markets, while it relieves his wife and family of some care and a large amount of labor." After th