

against Ministers in connection with it; Pacific Railway commenced; Extensive works on Dominion canals begun; Prince Edward's Island admitted into the Confederation, July

1st; Island of San Juan given to U. S. by Emperor William, as arbitrator; Fishery Commission met at Halifax, N. S. 1878

Geological Survey of Canada.

The work of the Geological Survey as presented in the Report for 1871-72, consisted of Explorations in British Columbia, by the Director, Alfred Geiwy, Esq.; Report on the Coal fields of the E. coast of Vancouver Island, by Mr. Jas. Richardson; Report of further Explorations and Surveys between Lake Superior and the Albany River, by Mr. Robert Bell; Exploration between Lake St. John and Lake Mistassini, by Mr. Walter McQuat; Progress of the Survey in the counties of Frontenac, Leeds and Lanark, by Mr. H. G. Vennor; Progress of Investigations in New Brunswick, by Prof. L. W. Huxley; and Summary of Statistics of Mines and Mineral Produce of the Dominion.

Besides these investigations and surveys, exploration was continued by Mr. Scott Barlow, in the coal fields of Nova Scotia. 80 miles of roads, rivers, streams and lines through the woods were measured, and the dip and mineral character of every rock exposure met with. About 60 square miles were thus measured. The last month of the season was spent in proving the outcrops of some of the coal seams by borings, and sinking small pits where points of importance were likely to be determined. The coming on of winter prevented the completion of the work, which Mr. Barlow was to resume on the opening of spring, and was likewise to prosecute the general exploration of the coal field.

The work of tracing and mapping the distribution of the Laurentian limestone bands on the upper waters of the Lièvre, Petite Nation and Rouge Rivers has been further advanced by Mr. James Lowe.

Mr. Robert Barlow and Mr. Arthur Webster were engaged on the map of the Eastern Townships and the North Shore of the St. Lawrence, between Montreal and Quebec, which it is hoped will be completed in 1878.

About 1200 specimens were added to the collection during the year.

BRITISH COLUMBIA EXPLORATIONS.

Unexpected delays, and difficulties in procuring men and necessary supplies, with other obstructions, render the result of this exploration less than might have been expected. But general knowledge of the physical character of the country has been obtained which will be very valuable in prosecuting more detailed investigations. The preparations in Victoria were not completed till the 21st July. The first camp in British Columbia, on the 28th July, was 13 miles from Yale, the head of navigation, on the Fraser river. On the 31st July the party reached Lytton, 57 miles above Yale; on the 2nd August, Spence's Bridge, 23 miles up the valley of the Thompson was reached.

Along the valley of the Fraser and the Thompson to Spence's Bridge, there is scarcely any land that is suitable for farms. There are limited patches capable of garden

cultivation on the gravel terraces, and the narrow alluvial flats occasionally bordering the river. At the Mountain House, 36 miles from Yale, there are a few hundred acres of tolerably level land with a light sandy loam soil. The character of the valley of the Fraser and of the Thompson, its tributary, is that of a deep gorge cut obliquely through the eastern flank of the Cascade mountains, which rise in precipitous ridges from 2 to 7,000 feet high, almost from the water's edge. These are for the most part clothed with pine and fir. Except a birch now and then there are no hard wood trees. At Spence's Bridge, the Thompson is 213 yards wide, with a strong rapid current. About one mile above it the Nicola joins the Thompson. This river drains a wide section of country, eastward and southward, and is stated to be a fine grazing and farming district. A seam of coal has also been discovered in the Nicola valley. The country for 83 miles from Spence's Bridge to Kamloops is of the same character as in the Nicola valley. The soil is of the richest description, and there are quite a number of large well cultivated farms. The valley of the North Thompson for 75 miles above Kamloops, though not probably a grazing more than a mile in breadth, presents some considerable areas of farming land. The grass is most luxuriant, and would outcrop from 2 to 3 tons an acre. There are no white settlements after the first 15 miles from Kamloops. For more than 80 miles above Kamloops the country is tolerably open, but beyond that the forest is very thick. About 100 miles from Kamloops is an open grassy flat, known as "The Little Paddock" where is the last good feeding ground for horses for many miles up the river. The soil is a rich dark loam, well covered with grass and bushes with a few scattered pine and poplar trees.

On the 5th September, the watershed to the north was reached, composed of swampy and moss covered meadows. The next day, after about two miles of thick forest, the country again opened into long meadows, bordered by woods and narrow belts of timber. The grass was already brown from frost, and the next night there was ice on the pools. The day's journey was on a general northerly course through an undulating forest country interspersed with open swampy meadows. On the 8th the course was up a steep, thickly timbered range. At 5,700 feet above sea-level the party found themselves on open, grassy hills, above the valley of the Blue river, a large tributary of the Thompson. The scenery was grandly picturesque. The descent to the valley was again through a thick forest of large timber, hemlock, spruce, fir and cedar. The ground was covered with moss. The country constantly became more difficult, the road being altogether through dense forests, alternating with boggy creek- and steep sliding hills. The absence of wind was remarkable. For more than a