

in 1874 there was no frost from May 1st to Sept. 16th. On the 25th, a raft having been constructed, the party left Hudson's Hope for St. John, 87 miles distant. The character of the valley is very uniform; thickly wooded hills on the south, and on the north alternating patches of prairie and coppice of aspen, poplar, &c., rising in broken slopes 6 or 800 feet above the river. The broad terraces of sand and gravel are no longer seen, the banks being of soft clay shales. About 7 miles north-west of St. John is Little Lake—one of the sources of Pine River north. The country about this lake is level, or slightly undulating, covered with the richest herbage of astonishing luxuriance; the soil a rich loam, resting on gravel and sand, underlaid by dark shales of the cretaceous formation. A similar fine country extends many miles up and down the river and to Pine River north. From journals kept at St. John for a number of years, the ground was found to be fit for the plough from the middle of April to the first week in November. The winter is shorter than in Manitoba, and the autumn temperature milder than at Fort Garry, 1,200 miles south-east. Potatoes large and dry were dug on the 2nd August, and barley and oats ripe on the 12th. On the 31st Mr. Selwyn and Mr. Webster left St. John for the Pine River south, Prof. Macoun going to Dunvegan and Vermillion. The Pine River enters the Peace about 4 miles below St. John—is about 100 yards wide, narrowing gradually to 50 or 60, and with a strong current of from 3 to 5 miles an hour. The valley is from 1 to 1½ miles wide, generally pretty thickly wooded, with prairie patches occurring, as on Peace River, at the east and west bends on the slopes facing south. On the 3rd August, the Forks were reached, 55° 46' north. From this point, the valley appeared to be about S. W., magnetic, through the plateau. No high mountains were anywhere visible. The east branch trends south-easterly and appeared rather the larger of the two. Three and a half miles further up, in a deep rocky gorge, seams of good bright coal were found—6, 8, 24 and 6 inches thick in about 90 ft. of alternating beds of sandstone and shale. Here the boatmen refused to proceed further. On the 5th, Table Mountain was ascended, 3,400 feet above the sea. The view from the top gave an uninterrupted circuit from N. E. round by W. to S. E. To the left, the view was up (what appeared) a broad open valley, towards the upper end of which the mountains commenced to rise in snowy peaks nearly magnetic S. from Table Mountain, unquestionably the peaks of the Cascade Mountains near the head waters of the Homathco and Bella Cogli. In this latitude the Rocky Mountains only exist as a broad undulating, hilly watershed between the Parsnip and Pine Rivers. On the 7th the party returned to St. John, and on the 9th continued their course down the river, reaching Dunvegan, 70 miles distant, on the 11th. The valley was wider and there was more open prairie country than above St. John. On the 16th Mr. Selwyn started down the river to Smoky river. The main channel of the river is here 400 or 500 yards wide with a strong current, the banks 35 to 40 feet high, of coarse gravel and sand sloping to the water's edge. From the top a

nearly level well grassed plain extends back 250 yards to a series of rounding grassy hills rising 500 or 600 feet above the river, and stretching away in a vast rolling prairie. From Peace River to Jasper House, 10 days' by horse trail, the country is stated to be level throughout except at the crossings of the rivers, and lightly timbered. On the south shore the country is apparently thickly wooded pretty uniformly on all sides as far as the eye can reach. The Smoky river was ascended about 25 miles. From a plateau of 600 feet, the river valley could be seen 15 or 20 miles farther up; on all sides a perfectly level horizon of forest country. The river is not as wide at low water as Pine River, but the rise and fall are much greater. The valley is about 2 miles wide, the ascent from the river being over a series of great slides. The strata nearly all soft dark-blue and grey shales everywhere gypsiferous. No coal or lignite was to be seen. On the 23rd the return journey was commenced. Dunvegan was reached on the 25th and St. John on the 4th Sept. On the 30th August the first frost was seen. On the 9th they arrived at Hudson's Hope. On the 11th Mr. Selwyn and Mr. Webster went 15 miles from the S. shore to Moberly's Lake. The country was undulating with low, sandy or gravelly ridges covered with small pine, alternating with swampy land with spruce and tamarac and well grassed flats thinly wooded with aspen and willow. From a hill above the S. W. end of the lake, 2000 feet above Hudson's Hope, Table Mountain was recognized. The hills were richly grassed, especially the lower slopes, pea vine and various grasses standing above one's knees on horseback. There were large areas of open prairie land and more wooded with aspen, &c. Pine prevails on the higher slopes and spruce, tamarac and poplar on the lower. Berries of various kinds were abundant and very fine. The snow fall was said to be very light and horses left out through the winter do well. The thermometer at this time, the middle of September, had only once fallen to 32° and potato tops at Hudson's Hope were green. On the return from Hudson's Hope, the water being 15 feet lower, the canyon was explored. The cliffs were mostly massive brown-grey and whitish gritty sandstone. About 70 or 80 feet up, in a perpendicular cliff was a seam of coal about 6 inches thick. Fort McLeod was reached on the last day of September. The Parsnip River was very low on many of the gravel bars, there being barely water to float the boats. From Nation River up, large lumps of lignite coal were scattered along the beaches. On the first Oct., at 7 a. m., the thermometer stood at 46° the grass was quite green, and the frost had not injured the very fine cauliflowers in the garden at the fort. This was at 1900 feet above the sea level and 10 degrees north of Ottawa. From Fort McLeod the return journey was made by McLeod's Lake and Crooked River to Giscome Portage and thence by the Fraser River to Fort George. The lake is 16 or 17 miles long, with an average width of 2 miles. The shores are everywhere thickly wooded, rising abruptly on the west side to the level of the undulating country between McLeod's and Stewart's Lakes, and on the east to the hills, 1,200 or