

month, nothing like a breeze was experienced, either in the valley or on the mountains. On the 2nd and 3rd October, there was heavy rain with a good deal of thunder and lightning. On the 5th the North West branch of the Thompson was crossed, through a swampy country. On the 9th, Albreda Lake was reached. Beyond that the country was tolerably open, with rocky hills, gravel benches intersected by gullies, the old timber nearly all burnt, and patches of young poplar and spruce. Ascending, by several steep ascents, the road lay over a wide sandy flat, openly timbered with pine to the top of the descent, to Canoe river, 400 feet above that river. Crossing this river and ascending 100 feet a terrace or wide sand plateau, mostly covered with a thick growth of young pine and spruce, is reached, over which the road passes to the S. W. of Cranberry Lake. There is probably not more than 15 feet difference between the levels of Canoe river and the lake, the latter being higher. The soil on the west side is either peaty or a sandy loam, thickly covered with a light feathery grass, about a foot high. Beyond this the road lay through tolerably open pine forest, to Selwyn river, another tributary of the Fraser. Between this and the Fraser, at Tete Jaune Cache, the country is mostly sandy ridges, thinly clothed with pine, with a few bushes, and here and there tufts of dry wild grass. At Camp river, 4 or 5 miles above its junction with the Canoe, where there was abundance of timber and sufficient grass, the winter camp was formed for the railroad party, and Mr. Selwyn prepared to return to Kamloops. On the 28th Oct. they had to abandon their horses, from want of grass, and build canoes, which was accomplished in 4 days, and they reached Kamloops, on the 17th Nov., having travelled 535 miles, and been absent 90 days. The distance from Kamloops to the end of the journey was 267½ miles, and the elevation at the farthest point reached was about 3654 feet.

The soil of the great Central plateau is excellent, but owing to the great dryness of the climate, requires, in ordinary seasons, irrigation for successful cultivation. Wheat yields from 1500 to 2500 lbs. an acre. Barley the same; oats 2500 to 2700 lbs.; potatoes 20 to 35 tons; timothy grass 1½ to 3 tons an acre. By careful cultivation and irrigation, wheat crops have been brought to 3700 lbs. an acre. Cattle live out of doors all winter, and as a grazing country it could hardly be surpassed. Wild flax and hemp were observed growing luxuriantly. The Valley of the North Thompson, above clear water, is not generally favourable for settlement; but after passing the water shed at Albreda Lake, the valley widens out, and is seldom less than 3 or 4 miles wide, with but little timber, and abundant grasses. The Indians frequently winter their horses here, and find them in excellent condition in the Spring. On most of the mountains above the limit of the thick forest (from 4000 to 6000 feet) are considerable tracts of fine summer grazing country. Conspicuous among the plants of these alpine pastures is a blue lupine, which forms a very favourite food of both horses and cattle.

Birch is the only hardwood in the forests of the North Thompson & Fraser, but cedars of gigantic size, 100 to 150 feet high, and 10 to 18 ft. in circumference, are not uncommon, & hemlock, spruce, fir & pine, cotton wood of a very large size, and on

the flats bordering the river, willow, alder, poplar and aspen.

British Columbia is never likely to take a high place as an exporting agricultural country, but her forests, fisheries and mines are capable of almost unlimited development. Her gold fields, silver veins and coal mines are yet but in their infancy and there can be no doubt a prosperous future is in store for her.

COAL FIELDS OF THE E. COAST, VANCOUVER.

These were explored in the autumn of 1871, by Mr. James Richardson. A week was spent in the examination of the rocks about Nanaimo and Mr. Richardson then proceeded 70 miles to Comox Harbour. Coal is known to occur 16 miles further along the coast, but the reason was too advanced to go beyond Comox. Coal seams have also been met with towards the N. W. end, and on the N. E. side near Fort Rupert, on Queen Charlotte Sound on Quatsino Sound, and it appears not impossible that they may spread out into the centre of the sound. Along the Strait of Georgia, the coal seams seem to belong to a narrow trough extending from Cape Mudge on the N. W., to within 18 miles of Victoria on the S. E. a distance of 130 miles.

The surface is in some places rolling, no where more than 8 or 10 hundred feet high, in others comparatively level.

The soil is generally good, and offers great encouragement to agricultural industry.

The N. E. side of this trough lies beneath the waters of the Gulf of Georgia, on the S. W., it is limited by a range of very bold mountains running nearly parallel with the coast.

Coal seams are exposed in more than a dozen different places. About 5 miles from the shore on the S. W. side of Comox Harbour, there is an almost perpendicular cliff where there are four coal seams,--4 ft. 6 in., 5 ft. 4 in., 6 ft., and 10 ft. in depth. Coal seams said to resemble these occur at no very great distance in a N. W. direction, still further N. W., 16 miles from Comox Harbour, and close upon the coast there is a 4 feet coal seam. Coal seams are found in a number of places both S. E. and S. W. of Comox Harbour.

The general trough seems to be divided into two distinct basins; the Comox basin between Cape Mudge and N. W. Bay, 64 miles in length; with an average breadth of 7 miles exclusive of what may be under waters.

The productive area may be safely considered at least 300 square miles. Following the rule applied to coal fields in S. Wales, the Union Mine at Comox alone, would yield 16,000,000 tons per square mile, and the Baynes Sound Mine 7,680,000 tons. The other mines of this District have not been sufficiently examined to make any calculations of the yield.

The Second or Nanaimo Basin, is about 16 miles long with an average breadth of 6 miles. It is probable the seams will be found to extend still further to the S. E. The seams occur in varying thickness from an inch to 9 feet. The total thickness of the coal measures in the Nanaimo coal fields, may be safely estimated at 2,500 feet.

COUNTRY BETWEEN LAKE SUPERIOR AND ALBANY RIVER.

This part of the survey was made by Mr.