

ed sparsely with pine trees. The Nechacco flows N.E. & N., the soil improving and timber more heavy to the second great bend, when, for about 5 miles, it flows through a broken, hilly region, and thence in a low level, thickly timbered region to Fraser Lake. The country about Tackuck Lake west to Frazer Lake and east down the Nechacco, is level, or gently undulating, and more fertile in appearance than any other on the route. François and Fraser Lakes occupy the W. portion of a depression nearly coinciding with the 56th parallel of latitude. The upper part of the Nechacco reaches this from the south, and receiving the stream from the two Lakes flows eastward to the Fraser at Fort George. Fraser Lake is 12 miles long, 2,225 feet above sea level. The Douglas fir again appears in some abundance on the hills about it. François Lake is 5½ miles long, about 1½ wide, at an elevation of 2,350 feet, lying nearly E. and W. Its depth must be great, and the Indians say in mild winters it does not freeze across. The north shore is generally low, and the soil appears to be fertile. The south shore is rougher and pretty heavily timbered, but beyond, the country is less thickly wooded, and presents a fertile and attractive appearance. Judging from the flora it would be suited to the growth of barley, oats and roots, and to the support of stock. Between Fort Fraser and Stewart Lake, little land suited to agriculture occurs on the trail, but the low country to the east is very extensive and appears fertile. At Stuart's Lake fine cabbages and other vegetables were growing in Mr. Hamilton's garden, and barley and potatoes for the use of the Fort. At Fort George, at the confluence of the Nechacco with the Fraser, wheat and grain of all kinds can be grown.

The Chilacoo Valley forms a great trough in the generally level surface of the country, about a mile wide, margined by abrupt slopes, and with a very fertile soil. The plants indicate a greater rain fall than usual in the interior. The region examined lies between 52° 3' and 54° 1' N. Lat., and 122° 5' and 126° 40' W. Long., covering some 15,000 square miles of surface.

There is scarcely a stream of any importance in British Columbia that does not yield gold. The probability is, that as the country is opened up, and the cost of labour and supplies reduced, the whole of the Province will be found gold-bearing to some extent, and it will take the first place as the "winning Province of the Dominion." Silver, copper and galena are also found. Coal is also found over a large portion of the Province. Iron, copper and mercury have been found in various places. Building stone is in unlimited supply, and marble of good quality has been found in various places; but as yet the knowledge of the resources of British Columbia is in its infancy.

Mr. Robert Bell during the season of 1876, was examining the country north of Lake Huron, and east of Lake Superior. The north-east shore of the Georgian Bay was examined in detail. The general outline of the coast represents a comparatively abrupt descent from a plateau in the country behind, to the bottom of the Bay in front. The rocks along the

coast belong to the Laurentian series, and consist principally of varieties of gneiss. There is a wide broken margin of land and water of very rocky character, and not much good land found near the shore. But the country improves constantly from the Bay towards Lake Nipissing, and there is much good land around Muskoka Lakes and Parry Sound. Five bands of crystalline limestone were traced between the Bay and Lake Nipissing.

Going west, the Huronian rocks were first met at Shibanaoning. About three miles north-west of this place was found a promising deposit of magnetic iron ore. Copper, magnetic iron, antimony and galena were found in the neighbourhood of Kcho Lake. The Victoria mine, 8 miles from the mouth of Garden River was visited. Assays of galena ore from this mine gave one, 168½ oz. of silver to the ton, one, twelve two fifths oz., and one, two-sixth oz. The east shore of Lake Superior was followed in detail by boat from Batchawana Bay to Michipicoten. Three or four miles west of this river two exposures of hematite occur.

THE GODERICH SALT REGION.

was explored in 1876 more fully than before, by boring with a diamond drill, by Henry Attrill, New York. The boring was carried to a depth of 1,517 feet. The salt bearing strata were found to be nearly horizontal. Examination of the sections was made by Prof. T. S. Hunt, and six beds of rock salt were found in the depth bored, from 6 to 34 feet thick. The total thickness of the layers of salt is 126 feet, without counting the thin layers and veins in the intervening rocks. The second and third beds are only 7 feet apart, are remarkably pure, and may be regarded as one great workable mass of rock salt. The analysis only showed foreign matter in one portion of it of less than one-fourth of one per cent. A layer of rock-salt one foot thick, is estimated to yield for each acre 2,873 tons of 2,000 lbs. In place of the comparatively costly process of the manufacture from brines, a deposit is here offered almost inexhaustible in extent, and much of it of exceptional purity. No rock salt has as yet been discovered in the saline formation in New York, but on Saginaw Bay in Michigan it has been found at the depth of 2,085 feet.

Mr. Vennor spent the season of 1876 in the counties of Pontiac and Ottawa, Que., in 1875 in Renfrew Co. in Ontario. The crystalline limestones of that country were found to go up the Ottawa from Arnprior to Fitzroy Harbour and then across that river to Bristol. A synclinal of the limestones extends westward up the Madawaska. The trough or depression is found to be continuous from Madoc to Arnprior, and joins the Hastings series. Another great basin or synclinal of crystalline limestone runs inland from the Ottawa valley in Horton along the Bonnehère River for 53 miles. The thickness of the limestone was found the same as in Lanark Co., from 2 to 6,000 feet. But three gr- at divisions or groups of rocks are found to exist in Eastern Ontario: 1. A great gneissic and syenitic series without limestones. 2. A thinner gneiss-