

to cover other areas which could not be cultivated, it leaves an area of the Peace River Valley, with soil suited to agriculture, of 23,500 square miles.

Q. You are speaking of the whole district, or only that in British Columbia?—I have spoken of the whole district, because that part in British Columbia—between 5,000 and 6,000 square miles of agricultural land—is similar—I speak only of that part of the Peace River country south of the 59th parallel. I do not refer to that to the north, because I have never been there myself and could only speak of it from report. To give some idea of the value of this region as an agricultural country, taking the area I have given, and supposing as a measure of its capacity—merely, of course, as an empirical supposition for the purpose of estimating its value—that the whole were sown in wheat, at twenty bushels to the acre, it would produce over 470,000,000 bushels of wheat annually. I believe that the whole of this area will eventually be cultivated. I am not quite sure that over every part of it wheat will ripen and be a sure crop, but, as far as we can judge of the climate, it is as good as, or better than, that of Edmonton on the Saskatchewan River, and where wheat has been tried in the Peace River district, as a matter of fact, it succeeds, as well as other crops such as oats and barley. We have, therefore, every reason to believe that over the greater part of this area wheat will be a satisfactory and a sure crop. If only the estimated prairie area be taken as immediately susceptible of cultivation, its yield, at the rate above annexed, would be 38,400,000 bushels.

By Mr. Trow:—Q. Do you think it is subject to summer frosts?—Summer frosts occur but I do not think they are of sufficient severity to affect wheat as a rule over the country; my personal experience is that of one season. The early frosts in the autumn cut down the potato tops before they were quite dead in the latter part of August in that year, but the wheat and other grain were not affected. In fact they would have been cut but for a week of rain which delayed the complete ripening.

Q. Whose report are you referring to?—To my own. I did not bring the map of the Peace River country, by the Geological Survey in the report of 1879-80, because it is a very large one.

Q. In a country of such extent, passing through once or twice, is it possible for any one person to know much except in general terms?—Of course one's knowledge is of a general character. I travelled over a great portion of the district. I did not merely pass through it once, but spent six weeks examining different portions, and my assistant travelled through other parts of it and reported on them. Of course, a great part, as has been stated, is wooded, and, therefore, difficult to investigate thoroughly. I know the character of the soil from the parts I have examined, and there is every reason to believe that the remainder of the district with similar elevation, and forming part of the same old lake basin in which the rich silty soils were laid down, possesses the same character. From some of the higher points you can see almost over the whole country. Of course, a more detailed exploration is to be desired, and particularly experiments with various crops of a crucial kind in certain localities, especially those at considerable elevations, for the purpose of defining the limit in altitude of cultivation.

By Mr. McCraney:—Q. Do the warm winds from the Pacific coast reach that part of Peace River Val-

ley in British Columbia?—Yes; the so-called Chinook winds have an effect south of the 49th parallel for some distance, and thence along the mountains to the Peace River and northward. Their greatest effect is within 100 miles from the foot of the Rocky Mountains. East of that they lose their character. Their occurrence in the Peace River country is well marked. When they set in in winter an immediate thaw occurs and the snow goes. The snow fall is deeper, however, in this country than in the Bow River and Belly River district to the west. The southern country is dry and therefore a prairie country. The northern is, to a large extent, wooded and the natural precipitation of moisture is ample for agricultural purposes.

By Mr. McNeil:—Q. Have you any reason to suppose the summer frost, the year you were there, was any less severe than usual?—No; as far as I could gather it was unusually severe, yet it did not affect the wheat crop. I collected excellent specimens of wheat from the Hudson Bay post. In fact the crops of that year were later than usual on account of this period of a week or ten days of wet weather just before harvest, which delayed the complete ripening of the grain.

By Mr. Trow:—Q. At what station of the Hudson's Bay post was that wheat grown?—I spoke especially of Dunvegan, but besides that we know that wheat thrives at Lesser Slave Lake post. I saw barley, ripe and with fine heads, grown by the Cree Indians at Sturgeon Lake on the plateau and at Fort St. John, further up the Peace River and considerably nearer the mountains, barley and oats are known to have been ripe on August 12th, in 1875, though at the same place, in 1879, wheat was a failure. Fort St. John is near the western edge of the country I consider of agricultural value. Of course, I quite agree in the statement that it is very desirable to have further experiments in a few chosen localities—chosen as being the most unfavorable—to show the best and worst that can be said of the country.

By the Chairman:—Q. Can you say anything in regard to the mineral resources of that particular portion of the country?—The mineral resources of the Peace River country may be treated of comparatively briefly. They consist in gold and coal. Gold is found in the principal streams, but chiefly in the Peace River, and no very rich deposits have been discovered here, though sufficient to attract a few miners who have made good wages out of it. I do not think that, except in the Rocky Mountains, west of the Peace River country proper, there is a chance of very extensive gold mining here.

Q. Have the gold deposits you speak of been brought down from the Rocky Mountains?—Partly so and partly from the east, I believe. I think Dr. Selwyn spoke before of the fact that gold deposits of the great plains to the south have been derived from the east. In the Peace River country it is not quite the same, because the Peace River flows right through the Rocky Mountains, and the gold-bearing schist on its head waters is the northern extension of that of Cariboo. The result is that the Peace River carries with it through its whole course a considerable quantity of comparatively fine gold, and how much has come in that way and how much with the glacial drift from the east, it is difficult or indeed impossible to determine in this district. The coal resources give every promise of being very extensive. So far they have been examined only in a few places, and most