

Grand Trunk Pacific Railway between Fort George and Telkwa.

Mr. S. E. Slipper, in addition to completing the geological field work for the special map of the Sheep Creek area, Alberta, will make an investigation of the underground waters of an area in southern Alberta in the vicinity of Lethbridge, and will continue the collection of boring records in the oil and gas areas.

Further investigations into the coal resources of the western provinces and of the oil prospects will be made by Mr. D. B. Dowling.

Dr. Bruce Rose will study the geology of the Flathead and Crowsnest coal areas, mapping the productive coal measures and inquiring into the prospects for oil. An examination will also be made by Mr. F. H. McLean of sections of the Benton, Kootenay, Fernie and Blairmore formations of these areas, and fossils will be collected. Mr. J. S. Stewart will also have charge of a party under Dr. Rose's supervision studying the structure of the disturbed belt of the foot-hills south of the Oldman river.

Dr. S. J. Schofield, after completing the investigation of the silver-lead and zinc deposits of Ainsworth and the geological mapping of the country between Kootenay lake and Cranbrook, will start mapping the geology of the Windermere area.

Mr. O. E. Le Roy will be occupied with work entailed by his appointment as a member of the commission named to investigate the iron resources of Canada. Should time permit the mapping of the Slocan area will be completed.

Dr. C. W. Drysdale will map the Lillooet area on a scale of 2 miles to 1 inch and make an examination of the ore deposits.

Mr. J. D. McKenzie will study the geology of the Hazelton-Aldermere area, paying particular attention to mineral deposits.

A geological examination of an area on Stewart river, Yukon, will be made by Dr. D. D. Cairnes, special examinations being made of the gold-bearing quartz in Dublin gulch, McQuestion river, and of silver-lead deposits in the vicinity of Mayo lake.

Dr. E. M. Kindle will carry on stratigraphical and palaeontological investigations in Rocky Mountain park, and Mr. E. L. Burling will examine geological sections along the main lines of the Canadian Pacific and Grand Trunk Pacific Railways.

Mr. C. H. Sternberg will collect dinosaurian and other reptilian remains from the vicinity of the Canadian portions of Milk river and its tributaries, and will explore this region to locate the most promising areas for fossil collecting. Mr. Geo. F. Sternberg will collect reptilian remains from the Edmonton formation on Red Deer river. Both of these parties will also make careful search for fossils of primitive mammals.

Topographical work will be carried on at a number of points. Mr. B. R. McKay will complete the survey of Lake Athabaska; Mr. C. H. Freeman will complete the map of the Sheep Creek section of Alberta; Mr. S. C. McLean will carry on triangulation in coal areas of the Rocky mountains; Mr. D. A. Nichols will make a topographic map of the coal area of Highwood river; Mr. F. S. Falconer will continue the mapping of the district to the north of Revelstoke, and Mr. A. G. Haultain will make a topographic map of the Mayo district, Stewart river, Yukon.

Professor John Macoun and James Macoun will conduct botanical investigations on the islands in the

Gulf of Georgia and on the east side of Vancouver island.

Mr. J. A. Teit will make ethnological studies among the Athabaskan tribes of northern British Columbia. Mr. Christian Leden is collecting anthropological specimens among the Eskimos of the west coast of Hudson bay.

Archaeological investigations will be carried on by Mr. H. I. Smith in the vicinity of Fort Fraser and Hazelton on the Grand Trunk Pacific Railway, and by Mr. W. B. Nickerson in Manitoba.

MINING IN NORTHERN BRITISH COLUMBIA.

The sixth annual report of the Board of Trade of Prince Rupert, British Columbia, has been published in pamphlet form. It contains much information relative to activities of the board and the industries and progress of the sea-port city the large area of country for which it is the chief distributing place. In a sense, though, the report is misleading; not that there is any improper attempt at deception, but that the proportion of the immense area of territory that may correctly be designated "Northern British Columbia" included within the scope of the commendable efforts of the board is comparatively small. That this is so may be at once recognized if a map of the province be taken and the extent of the country included in the board's review be compared with the large area of Northern British Columbia as a whole. However, allowance may be made for the natural enthusiasm and optimism that seem to characterize the members of the Prince Rupert Board of Trade responsible for the publication of the pamphlet above referred to, for their home sea-port city is certainly the most populous and important commercial and industrial centre in the British Columbia coast north of Vancouver, which probably accounts for the failure to keep in mind that years before the city of Prince Rupert was thought of gold-mining was important much farther north in British Columbia, the total value of the output of gold from Atlin mining division alone having to date exceeded \$6,000,000.

Concerning mining in the district tributary to Prince Rupert, the board's sixth annual report which was presented last January, says:

"Steady progress in development work has been the feature of 1914, although the existing crises have considerably retarded further growth in development. The outstanding feature of the war has been the blowing in of the smelter at Anyox and the consequent completion of the development part of the work undertaken by the Granby Consolidated Mining, Smelting, and Power Co., Ltd. This company expended close on \$3,000,000 in purchasing and developing its mines at Hidden Creek and in building and equipping its smelting works at Anyox. The quantity of ore developed is estimated at 12,000,000 tons containing 2.2 per cent. of copper with a small additional value in gold and silver. At 14 1/2 cents a lb. for copper the gross production from this mine will amount to \$78,000,000. It is probable that about 75 per cent. of the gross value will be spent for labor and supplies, and it is certain that a large proportion of this amount will find its way to Prince Rupert.

"In the Hazelton district development work has proceeded steadily and several of the mines in that district are beginning to show up very favorably. Proved mines have been made of several prospects and others are in a fair way to prove that they are worthy of taking a place among the producing mines of British Columbia.