

FIELD WORK OF THE GEOLOGICAL SURVEY DURING 1914

Geology.

Under the direction of O. E. LeRoy, who is in charge of field work in geology, a large number of parties will be carrying on detailed geological investigations, reconnaissance and exploratory work throughout the country.

The examination and areal mapping of the gold-bearing series of Nova Scotia as developed in portions of Queens and Shelburne counties will be continued by E. R. Faribault. W. A. Bell will complete the investigation and areal mapping of the Windsor and Horton series in the vicinity of Windsor, Nova Scotia and a palaeontological study of the Windsor and Point Edward series between St. Ann Harbor and Glace Bay, will be carried on by J. E. Hyde. J. W. Goldthwait will continue a physiographical survey of Nova Scotia, giving particular attention to problems arising from glaciation. F. H. McLearn will complete a field study of the Silurian system at Arisaig.

In New Brunswick, A. O. Hayes will complete his work in the St. John area, making a special study of materials suitable for building stone and road metal. The mapping of the Moncton area will be completed by W. J. Wright, who will investigate the geological relations of the oil shales and make a study of the gas and oil fields. Palaeontological investigations will be conducted in the Maritime Provinces, Quebec and Ontario by E. M. Kindle, and in Quebec and New Brunswick by L. D. Burling.

In Quebec both exploratory and detailed work will be carried on. H. C. Cooke will explore Broadback river from Evans lake to James bay, including the route between Evans and Gull lakes. R. Harvie will complete a geological section across Brome county and make a general reconnaissance of the serpentine belt of the Eastern Townships. M. E. Wilson will continue the study of the geology of the Buckingham district, giving special attention to the deposits of graphite, apatite and mica. The geology of Mount Royal tunnel will be further studied by J. A. Bancroft. The economic possibilities of the granites of the south-eastern part of the Eastern Townships will be investigated by A. Mailhiot and a geological reconnaissance of a part of the Harricaw basin will be made by T. L. Tanton.

In Ontario an examination will be made of the iron deposits of the township of Lount by W. H. Collins, who will also make a study of the Pre-Cambrian formations between Sudbury and Lake Huron. W. A. Johnston will complete the mapping of the Lake Simcoe district and of the calcareous drift areas between Rainy lake and Lake of the Woods. J. Keele and N. B. Davies will carry on investigations of the clay and shale deposits of Ontario with relation to the industries based upon these. The investigation of materials suitable for road metal will be in charge of L. Reinecke, who will confine his attention this year principally to occurrences in Ontario and Quebec. M. Y. Williams will continue a study of the Silurian rocks of south-western Ontario, giving special attention to those formations important in the manufacture of cement, lime, building stone and road metal. Certain mineral areas of Ontario, Quebec and the Maritime Provinces will be examined by S. Brunton and C. W. Robinson, and search will be made for radioactive minerals.

Exploratory reconnaissance and detailed work will be conducted in the prairie Provinces. C. Camsell will make an exploratory geological traverse between Black bay on Lake Athabaska and Christie bay on Great Slave lake. D. B. Dowling will make general examinations of the coal deposits of western Canada, while B. Rose will study the coal deposits, the clays and the sands of southern Saskatchewan. A geological reconnaissance of a belt along the north shore of Lake Athabaska will be made by F. J. Alcock, and special attention will be devoted to areas of probable economic importance. The area of the reported gold discoveries in the vicinity of Lake Amisk will be examined by E. L. Bruce, who will make a reconnaissance of the belt of country extending east from Lake Amisk to the Hudson Bay Railway. A. MacLean will map the Pembina mountain area in south-western Manitoba, while R. C. Wallace will complete his investigation of the gypsum deposits and associated minerals and springs of this Province. Geological investigations have been carried on for some time by S. E. Slipper in the Sheep River area south-west of Calgary, where boring operations are being actively prosecuted. These investigations will be continued and areal mapping undertaken. Charles H. Sternberg and his sons, collectors and preparators in vertebrate palaeontology, will be collecting vertebrate fossils again this year, probably from the Belly river formation on Red Deer river.

J. A. Allan will complete geological field work in the Rocky Mountain park and along the main line of the Canadian Pacific Railway between Banff and Golden. A general geological reconnaissance in Yukon territory, between Dalton Post and Canyon City, including the Lake Aishilik country will be made by D. D. Cairnes, and a more detailed examination will be made of all promising mineral localities. C. W. Drysdale will study the ore deposits of Ymir camp and do some preliminary work in the silver-lead area of the Windermere district. The investigation of the coal deposits of Graham island will be completed by J. D. MacKenzie, who will also map the Flathead coal basin. R. G. McConnell will be engaged in mapping and conducting geological investigations along the Grand Trunk Pacific Railway in the Hazelton-Aldermere district. A detailed examination of the Mesozoic formations along the Crowsnest branch of the Canadian Pacific Railway will be made by F. H. MacLearn. S. J. Schofield will complete the mapping of the area between the Cranbrook map and Kootenay lake, and will study the silver-lead ore bodies at Ainsworth and the recently discovered tin deposit in the Lardeau district. J. S. Stewart will map the coal-bearing formations comprised in the Flathead and Crowsnest map sheets.

Topography.

Under the direction of W. H. Boyd, chief topographer, topographical mapping will be carried on at various points throughout the country.

Certain pieces of work that were initiated last year will be carried to completion. These are the New Glasgow map sheet, by B. R. MacKay, on a scale of 2,000 ft. to 1 in. and a contour interval of 10 ft.; the Thetford map sheet, by D. A. Nichols, on a scale of 1 mile to 1 in. and a contour interval of 20 ft.; and the Flathead sheet, by A. C. T. Sheppard. S. C. McLean