

on Mines. There is evidence in Cape Breton island that oil and gas at one time were present. In some parts, structure and other factors give reason to hope that commercial quantities of oil may exist. A program of preliminary drilling to locate favourable structure must first be made before deep holes are projected.

Peat.—An examination of peat bogs in southwestern British Columbia,¹ made by A. Anrep, revealed a number in the vicinity of Vancouver suitable for the manufacture of peat litter and mull.

Vaino Auer discussed some of the problems of peat bog investigation in Canada.¹ He stated that peat bogs in the Dominion should be examined and classified from a number of different points of view, *i.e.*, peat as a fuel, peat as litter, and reclaiming bogs for agriculture and reforestation.

Phosphate.—J. A. Allan, in the Report of the Scientific and Industrial Research Council of Alberta, reports upon an investigation of the possible occurrence, in the Jasper Park area, of phosphate and other minerals that are known to occur in rocks of the same age in other parts of the mountains and on the south shore of Great Slave lake. Some shale beds are distinctly phosphate, but no high grade horizons were observed.

Silver-Gold.—The Horn silver mine,¹ Similkameen district, British Columbia, was examined by H. S. Bostock. Metamorphosed sediments consisting of phyllites, mica schist and quartzite are intruded by a large body of alkali syenite. Several bodies of hornblende and various dykes of rock types allied to the alkali syenite are found. The ore deposits are apparently embodied in one main fissure vein cutting through the country rock. The vein may be pictured as a sloping sheet, gently warped, and divided into numerous slabs by faults which offset them in irregular, step like manner. The vein consists of a gangue of quartz in which pyrite, sphalerite, chalcopyrite, galena, tetrahedrite, hæmatite, native silver, calcite, and sometimes arsenopyrite are disseminated in variable amounts. Gold values are also present in the ore.

Tin.—The Snowflake tin-silver vein,⁴ Big Bend area, Revelstoke mining division, British Columbia, was described by V. Dolmage. Precambrian metamorphosed sediments and volcanics are intruded by Mesozoic granite and associated rocks. The veins occur in black, highly carbonaceous (in places graphitic) argillites. Stannite occurs in a quartz gangue associated with pyrite, galena, zinc blende, tetrahedrite, scheelite, wolframite, ruby silver, chalcopyrite and native silver.

Zinc.—The staff of the British Metal Corporation (Canada), Limited, outlined the geology, and mining and milling practice at the Tetreault mine,⁵ Montauban Township, Portneuf County, Quebec. Grenville quartzites, gneisses and dolomitic limestone are intruded by amphibolite and granite. The ore consisting of an intimate mixture of sphalerite, galena, pyrrhotite, pyrite and a little chalcopyrite, carrying silver and gold values, is confined to altered limestone and occurs along the footwall contact with a gradual dissemination to the hanging wall.

SOURCES OF REPORTS AND ARTICLES REFERRED TO IN THE TEXT.

¹ Geological Survey, Department of Mines, Ottawa; ² Mines Branch, Department of Mines, Ottawa; ³ Department of Mines, Toronto, Ont.; ⁴ Canadian Mining Journal, Gardenvale, Quebec; ⁵ Canadian Institute of Mining and Metallurgy, Drummond Building, Montreal; ⁶ Engineering and Mining Journal, New York; ⁷ Economic Geology, New Haven, Conn.